

# Abstract

This paper discusses the concept of environmental liability and offers some recommendations on how the same can be enhanced in the context of the Kenyan environmental liability regime with the aim of achieving the country's goals on sustainable development. The paper argues that there is a need to adopt a more preventive or precautionary approach that is participatory rather than concentrating on a reactive one that seeks restoration of damaged environmental resources.

#### 1. Introduction

This paper critically discusses the environmental liability regime in Kenya and offers some thoughts on how the same can be made more effective as a way of fast tracking the realisation of the sustainable development agenda in the country.

Environmental liability may be defined as an obligation which may result in future payments for the enterprise, due to past events or to compensate a third party harmed by environmental damage by the company. Liabilities incurred can be derived from either legal obligations, such as rehabilitation of land, a fine or compensation as a result of court decision, or from contractual obligations arising out of company's internal commitment to environmental safeguards. <sup>2</sup>

The Report of the World Commission on Environment and Development, *Our Common Future*, asserted that economic growth always brings risk of environmental damage, as it puts increased pressure on environmental resources.<sup>3</sup> This risk is ever increasing especially in the era of the growing desire by various states especially in the developing world to achieve economic development. The sustainable development agenda has however brought to the fore the need for consideration and incorporation of environmental protection and conservation measures in all development plans. As a result of this, environmental liability stems from the states' desire and responsibility to not only ensure the protection of the right to clean and healthy environment but also the fact that the environment is considered to be the main reservoir for most of the resources

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<sup>&</sup>lt;sup>1</sup> Nuta, F. M., & Nuta, A. C., "Environmental Liabilities Accounting: A Review Of Some Standards And Guidelines," *Journal of Public Administration, Finance and Law* 2, no. 2 (2012): 47-51, at p.47.

<sup>2</sup> Ibid at p.47.

<sup>&</sup>lt;sup>3</sup> Report of the World Commission on Environment and Development, *Our Common Future*, op cit., para. 50.

necessary for realisation of economic and social rights.<sup>4</sup> Environmental protection is considered to be the existential right of man and is a necessary condition for the survival of mankind.<sup>5</sup>

On a general scale, it is believed that environmental hazards are responsible for an estimated 25% of the total burden of disease worldwide, and nearly 35% in regions such as sub-Saharan Africa.<sup>6</sup> In this regard, it has been argued that addressing the effects of the environment on human health is essential if we are to achieve the goal of health for all.<sup>7</sup> Human health is believed to be connected to environmental health and that the two are mutually dependent.<sup>8</sup>

According to the World Health Organization (WHO), environmental health is concerned with all the physical, chemical, and biological factors external to a person, and all the related factors impacting behaviours. It encompasses the assessment and control of those environmental factors that can potentially affect health. Health is defined as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. Health has asserted that more than three million children under five die each year from environment-related causes and conditions. This thus, makes the environment one of the most critical contributors to the global toll of more than ten million child deaths annually-as well as a very important factor in the health and well-being of their mothers. The WHO observes that polluted indoor and outdoor air, contaminated water, lack of adequate sanitation, toxic hazards, disease vectors, ultraviolet radiation, and degraded ecosystems are all important environmental risk factors for children, and in most cases for their mothers as well.

Human rights and the environment are said to be inherently interlinked, as the life and the personal integrity of each human being depends on protecting the environment as the resource

http://www.who.int/topics/environmental\_health/en/ [Accessed on 13/4/2019].

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<sup>&</sup>lt;sup>4</sup> See generally, Muigua, K., *Reconceptualising the Right to Clean and Healthy Environment in Kenya*, Paper Presented at the side event at the 3rd United Nations Environment Assembly held in Nairobi, organized by the UoN School of Law & the Centre International de Droit Comparé de l'Environnement (CIDCE), at the UoN School of Law on Friday 1<sup>st</sup> December 2017.

<sup>&</sup>lt;sup>5</sup> Krstinić, D., Bingulac, N., & Dragojlović, J., "Criminal and civil liability for environmental damage." *Economics of Agriculture* 64, no. 3 (2017): 1161-1176, at p. 1162.

<sup>&</sup>lt;sup>6</sup> Health and Environment Linkages Initiative – HELI, *Health and Environment Linkages Initiative*, available at <a href="http://www.who.int/heli/en/">http://www.who.int/heli/en/</a> [Accessed on 13/4/2019].

<sup>&</sup>lt;sup>7</sup> Higenbottam, N., 'Nurse's Role as an Environmental Activist,' p.2. Available at

http://www.theluminaryproject.org/downloads/Essay%20Contest%20Higenbottam.pdf [Accessed on 13/4/2019].

<sup>&</sup>lt;sup>8</sup> World Health Organization, *Human health under threat from ecosystem degradation*, 9 December 2005, available at

http://www.who.int/mediacentre/news/releases/2005/pr67/en/ [Accessed on 13/4/2019]. s

<sup>&</sup>lt;sup>9</sup> World Health Organization, *Environmental Health*, available at

World Health Organization, '1948 WHO definition of health,' Constitution of World Health Organization. Available at <a href="https://www.who.int/governance/eb/who\_constitution\_en.pdf">https://www.who.int/governance/eb/who\_constitution\_en.pdf</a>

<sup>&</sup>lt;sup>11</sup> World Health Organization, Children's environmental health: The environment and health for children and their mothers,' available at

http://www.who.int/ceh/publications/factsheets/fs284/en/ [Accessed on 13/4/2019]. <sup>12</sup> Ibid.

base for all life. 13 A degraded environment leads to a scramble for scarce resources and may culminate in poverty and even conflict.<sup>14</sup>

Despite the progressive Kenyan Constitution making great strides in promoting environmental conservation and protection<sup>15</sup>, there is still no evidence of strict environmental culpability in cases of environmental damage, with many of the environmental restoration and protection initiatives being left to the state. 16 Some of the existing tools on environmental liability have been used as a mere formality to satisfy statutory requirements, unless the courts and tribunals intervene.

It is against this background that this paper examines the status of the environmental liability regime in Kenya and makes some recommendations on how enforcement and compliance with environmental standards can be enhanced as a step towards realising sustainable development in the country.

# 2. Environmental Liability under the International and Regional Environmental Legal Framework

Internationally and regionally, there are a number of instruments that strive to facilitate enforcement and compliance with environmental laws and regulations. Some of these instruments have also made attempts to apportion blame in environmental degradation.

Article 2 (1) of the Vienna Convention for the Protection of the Ozone Layer <sup>17</sup> outlines some of the States' general obligations towards the ozone layer. The Parties to the Convention are required to take appropriate measures in accordance with the provisions of the Convention and of those protocols in force to which they are party to protect human health and the environment against adverse effects resulting or likely to result from human activities which modify or are likely to modify the ozone layer. This Convention mainly advocates for preventive and control measures by States implemented through cooperation.

The 1972 Stockholm Declaration of the United Nations Conference on the Human Environment under Principle 13 deals with the issue of compensation for damage to victims of environmental

<sup>&</sup>lt;sup>13</sup> F.X., Perrez, 'Key questions concerning the human rights and environment debate: An introduction,' in *Human* Rights and the Environment: Proceedings of a Geneva Environment Network roundtable, (United Nations Environment Programme for the Geneva Environment Network, 2004), p.4.

<sup>14 &#</sup>x27;Wangari Maathai-an excerpt from the Nobel Peace Prize winner's Acceptance Speech,' Earth Island Journal. Available at

http://www.earthisland.org/journal/index.php/eij/Art./wangari\_maathai\_an\_excerpt\_from\_the\_nobel\_peace\_prize winners acceptance sp/[Accessed on 12/4/2019].

<sup>&</sup>lt;sup>15</sup> See Chapter Five of the Constitution, Part 2 (Articles 69-72).

<sup>&</sup>lt;sup>16</sup> Article 69 of the Constitution of Kenya 2010 outlines the obligations of the State in respect to the environment with individual persons only having a corresponding duty to cooperate with the State. This is based on the presumption that the State will take up its obligations.

<sup>&</sup>lt;sup>17</sup> United Nations, Vienna Convention for the Protection of the Ozone Layer, Vienna, 22 March 1985, United Nations, Treaty Series, vol. 1513, p. 293. Kenya is a signatory to the Convention.

damage in a manner that: "Member States should adopt national laws relating to liability and compensation to victims of pollution and other environmental damage. Member States should also cooperate without delay and decisively in the adoption of future international regulations relating to liability and compensation, when activities within their legal competence or control cause environmental effects in areas outside their jurisdiction."

The Rio Conference on Environment and Development from 1992 established the basic principles of civil protection of basic ecological values, but also the precautionary principle, all based on the recommendations of the Brundland Commission. 18

The Montreal Protocol, 19 also an international Treaty, aims to regulate the production and use of chemicals that contribute to the depletion of Earth's ozone layer. The Protocol sets limits on the production of chlorofluorocarbons (CFCs), halons, and related substances that release chlorine or bromine to the ozone layer of the atmosphere.<sup>20</sup>

Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal<sup>21</sup> affirms that States are responsible for the fulfillment of their international obligations concerning the protection of human health and protection and preservation of the environment, and are liable in accordance with international law.<sup>22</sup> The Convention is also based on the fact that States should take necessary measures to ensure that the management of hazardous wastes and other wastes including their transboundary movement and disposal is consistent with the protection of human health and the environment whatever the place of disposal.

The Convention requires Parties to co-operate with a view to adopting, as soon as practicable, a protocol which sets out appropriate rules and procedures in the field of liability and compensation for damage resulting from the transboundary movement and disposal of hazardous wastes and other wastes.<sup>23</sup>

Also relevant is the *Minamata Convention on Mercury*<sup>24</sup> is a global treaty to protect human health and the environment from the adverse effects of mercury. Major highlights of the Minamata Convention include a ban on new mercury mines, the phase-out of existing ones, the phase out and phase down of mercury use in a number of products and processes, control measures on emissions to air and on releases to land and water, and the regulation of the informal sector of artisanal and small-scale gold mining. The Convention also addresses interim storage of

<sup>18</sup> Krstinić, D., Bingulac, N., & Dragojlović, J., "Criminal and civil liability for environmental damage," op. cit., at

Montreal Protocol and (London Amendment) on Substances that Deplete the Ozone layer, 1522 UNTS 3; 26 ILM 1550 (1987). Kenya is a signatory to the Protocol.

<sup>&</sup>lt;sup>21</sup> Basel, 22 March 1989, 1673 UNTS 126; 28 ILM 657 (1989). Kenya is a signatory to the Convention.

<sup>&</sup>lt;sup>22</sup> Preamble.

<sup>&</sup>lt;sup>23</sup> Art. 12.

<sup>&</sup>lt;sup>24</sup> 16 August 2017, No. 54669. Adopted in 2013 in Japan, entered into force in 2017.

mercury and its disposal once it becomes waste, sites contaminated by mercury as well as health issues.<sup>25</sup> Kenya signed up on 10 Oct 2013 but is yet to ratify the Convention.<sup>26</sup>

Also notable is the *European Charter on Environment and Health*<sup>27</sup> which provides for both entitlements and responsibilities. Article 2 thereof provides that every individual has a responsibility to contribute to the protection of the environment, in the interests of his or her own health and the health of others.

The International Court of Justice, in the 1997 case concerning the *Gabcíkovo-Nagymaros Project* (Hungary and Slovakia)<sup>28</sup>, observed that "the protection of the environment is...a vital part of contemporary human rights doctrine, for it is a *sine qua non* for numerous human rights such as the right to health and the right to life itself. It is scarcely necessary to elaborate on this, as damage to the environment can impair and undermine all the human rights spoken of in the Universal Declaration and other human rights instruments." The Court held that the corpus of international law which relates to the environment now consists of the general obligation of states to ensure that activities within their jurisdiction and control respects the environment of other states or areas beyond national control. The concept of sustainable development is in consonance with the need to reconcile economic development with the protection of the environment. Hence, the terms of agreements to implement must be negotiated by the parties.<sup>29</sup>

# 3. Environmental Liability under Kenya's Legal Framework: the (In) adequacy

Under the Fourth Schedule to the Constitution, the National and County Governments have shared responsibilities when it comes to environment and natural resources. The National Government is tasked with protection of the environment and natural resources with a view to establishing a durable and sustainable system of development, including, in particular—fishing, hunting and gathering; protection of animals and wildlife; water protection, securing sufficient residual water, hydraulic engineering and the safety of dams; and energy policy.<sup>30</sup> It is also to come up with health policy; agricultural policy; and the energy policy including electricity and gas reticulation and energy regulation.<sup>31</sup>

On the other hand, the functions and powers of the county are, *inter alia*: agriculture, including—crop and animal husbandry; livestock sale yards; plant and animal disease control; and fisheries.<sup>32</sup> They are also tasked with County health services, including, in particular—county health facilities and pharmacies; ambulance services; promotion of primary health care;

<sup>&</sup>lt;sup>25</sup> http://www.mercuryconvention.org/Convention/Text [Accessed on 24/4/2019].

<sup>&</sup>lt;sup>26</sup> https://treaties.un.org/Pages/ViewDetails.aspx?src=IND&mtdsg no=XXVII-17&chapter=27&clang= en

WHO, European Charter on Environment and Health, 1989, European Series No. 35, adopted at the First European Conference on Environment and Health Frankfurt, 7–8 December 1989.

<sup>&</sup>lt;sup>28</sup> GabCikovo-Nagymaros Project (HungarylSlovakia), Judgment, 1. C. J. Reports 1997, p. 7.

<sup>&</sup>lt;sup>29</sup> Ibid

<sup>&</sup>lt;sup>30</sup> Fourth Schedule to the Constitution, Part I clause 22.

<sup>&</sup>lt;sup>31</sup> Clauses 28, 29, 31.

<sup>&</sup>lt;sup>32</sup> Fourth Schedule to the Constitution, Part II, Clause 1.

licensing and control of undertakings that sell food to the public; and refuse removal, refuse dumps and solid waste disposal.<sup>33</sup> The other function of county governments is control of air pollution, noise pollution, other public nuisances and outdoor advertising.<sup>34</sup> The foregoing functions all contribute in one way or the other to creation of a clean and healthy environment.<sup>35</sup> The two government levels should work together to facilitate a coordinated, multisectoral approach for effectiveness discharge of their environmental responsibilities.

# 3.1 Environmental Management Tools in Kenya

While some approaches seek to rely on a human rights approach to environmental conservation and protection, it has rightly been argued that there are other regulatory approaches to achieving environmental protection and public health that are not rights-based. These include economic incentives and disincentives, criminal law, and private liability regimes which have all formed part of the framework of international and national environmental law and health law. <sup>36</sup> This section discusses some of these approaches in reference to Kenya's environmental laws. It is however worth pointing out that while most of these tools are provided for and enforced through the *Environmental Management and Coordination Act* (EMCA)<sup>37</sup>, there are corresponding provisions and requirements under the various sectoral laws on water<sup>38</sup>, land<sup>39</sup>, forests<sup>40</sup>,

- Sec. 144. (1) Power to order a person to remedy the contravention of the Act and in particular-
  - (a) to clean up any pollution or make good any other harm identified to any water resource; or
  - (b) to remove or destroy any works, plant or machinery employed for the purposes of the contravention.
- (2) Power to recover the expenses incurred in remedying the contravention through an application to the Tribunal.

Sec. 146. Power to institute and maintain criminal proceedings in any court against any person accused of an offence under this Act or under any Regulations or Regulations made under this Act.

- 11. Conservation of ecologically sensitive public land.
- 12. Allocation of public land.

#### 148. Compensation in respect of public right of way.

- <sup>40</sup> Forests Management and Conservation Act, No. 34 of 2016, Laws of Kenya:
  - 44. Compulsory restoration and re-vegetation where forests are depleted.
  - 46. Requirements for a strategic environmental, cultural, economic and social impact assessment licence.

<sup>&</sup>lt;sup>33</sup> Ibid, clause 2.

<sup>&</sup>lt;sup>34</sup> Ibid, clause 3.

<sup>&</sup>lt;sup>35</sup> Article 42, Constitution of Kenya 2010 (Government printer, Nairobi, 2010).

<sup>&</sup>lt;sup>36</sup> Shelton, D., 'Human Rights, Health and Environmental Protection: Linkages in Law and Practice: A Background Paper for the WHO,' p. 3. Available at

http://www.who.int/hhr/information/Human\_Rights\_Health\_and\_Environmental\_Protection.pdf [Accessed on 12/4/2019].

<sup>&</sup>lt;sup>37</sup> Environmental Management and Coordination Act (EMCA), Act No. 8 of 1999, Laws of Kenya; See also Environmental Management and Coordination (Amendment) Act, 2015).

<sup>&</sup>lt;sup>38</sup> Water Act, No. 43 of 2016, Laws of Kenya:

<sup>&</sup>lt;sup>39</sup> Land Act, No. 6 of 2012, Laws of Kenya:

mining<sup>41</sup>, public health<sup>42</sup>, agricultural production<sup>43</sup> and energy<sup>44</sup> sectors, among others. Their wordings may be different but they are mainly concerned with health and environmental protection while carrying out various activities or laying out relevant infrastructure. They also define penalties and other remedies in case of violation of set rules and regulations.

# a. Civil Liability Against State and Private persons

Civil law protection of the environment is not regulated directly by specific regulations, but it is foreseen by legislative instruments in the area of compensation of damages.<sup>45</sup> Civil law

- 101. (2) Environmental and social impact assessment report and environmental management plan for the term of the mining licence to the National Environment Management Authority;
- 181. (1) Environmental protection bond sufficient to cover the costs associated with the implementation of the environmental and rehabilitation obligations of the licence holder.

An Act of Parliament to make provision for securing and maintaining health

Health Act, No. 21 of 2017, Laws of Kenya:

15. (1) The national government ministry responsible for health shall- (v) provide policy guidelines and regulations for hospital waste management and conduct of environmental health impact assessment;

An Act of Parliament to provide for the consolidation of the laws on the regulation and promotion of agriculture generally, to provide for the establishment of the Agriculture, Fisheries and Food Authority, to make provision for the respective roles of the national and county governments in agriculture excluding livestock and related matters in furtherance of the relevant provisions of the Fourth Schedule to the Constitution and for connected purposes.

Fisheries Management and Development Act, No. 35 of 2016, Laws of Kenya:

49. (1) prohibition of introduction into the Kenya fishery waters any toxic, hazardous or other harmful substances.

Crops Act, No. 16 of 2013, Laws of Kenya:

4. (b) land owners and lessees of agricultural land, being stewards, have the obligation to cultivate the lands they own or lease and make the land economically productive on a sustainable and environmentally friendly manner;

- 100. (2) All licences or permits issued by the Authority shall include-
- (a) a requirement that the licensee shall comply with all applicable environmental, health and safety laws;
- (b) a stipulation that the licensee is subject to liability under tort and the contract laws;

<sup>&</sup>lt;sup>41</sup> Mining Act, No. 12 of 2016, Laws of Kenya:

<sup>&</sup>lt;sup>42</sup> Public Health Act, Cap 242, Laws of Kenya:

<sup>&</sup>lt;sup>43</sup> Agriculture, Fisheries and Food Authority Act, No. 13 of 2013, Laws of Kenya:

<sup>&</sup>lt;sup>44</sup> Energy Act, No. 1 of 2019, Laws of Kenya:

<sup>&</sup>lt;sup>45</sup> Krstinić, D., Bingulac, N., & Dragojlović, J., "Criminal and civil liability for environmental damage," *Economics of Agriculture* 64, no. 3 (2017): 1161-1176.

protection is enforced through sanctions as a mechanism of coercion against a person or entity that causes damage, with the aim of achieving and bringing the property or other personal nonmaterial goods to the state in which they were before threat or disturbance. 46 Notably, civil law sanctions relating to protection of the environment are grouped on the basis of their function: preventive sanctions, natural restitution and compensatory and reparatory sanctions (emphasis added).<sup>47</sup> The objective of preventive sanctions, which can be assumed, is to eliminate potential hazards, i.e. to prevent activities that are causing harassment or the danger or harm that might occur.48

The Draft Principles on Human Rights and the Environment of 1994, 49 declare that all persons have the right to freedom from pollution, environmental degradation and activities that adversely affect the environment, threaten life, health, livelihood, well-being or sustainable development within, across or outside national boundaries.<sup>50</sup>

Enforcing environmental standards and regulations is one of the surest ways governments can use to checkmate the negative impacts of corporation's activities (and even individuals) on the environment and on the lives of inhabitants of host communities.<sup>51</sup>

The current Constitution of Kenya has some express provisions that seek to apportion environmental liability as far as realisation of the right to clean and healthy environment is concerned. For instance, Article 42 of the Constitution of Kenya provides that every person has the right to a clean and healthy environment, which includes the right—to have the environment protected for the benefit of present and future generations through legislative and other measures, particularly those contemplated in Article 69; and to have obligations relating to the environment fulfilled under Article 70.

Article 69 outlines the State and individual obligations in respect of the environment. Clause (1) provides that the State shall—ensure sustainable exploitation, utilisation, management and conservation of the environment and natural resources, and ensure the equitable sharing of the accruing benefits; work to achieve and maintain a tree cover of at least ten per cent of the land area of Kenya; protect and enhance intellectual property in, and indigenous knowledge of, biodiversity and the genetic resources of the communities; encourage public participation in the management, protection and conservation of the environment; protect genetic resources and biological diversity; establish systems of environmental impact assessment, environmental audit and monitoring of the environment; eliminate processes and activities that are likely to endanger

<sup>&</sup>lt;sup>46</sup> Krstinić, D., Bingulac, N., & Dragojlović, J., "Criminal and civil liability for environmental damage," op cit., 1163.

<sup>&</sup>lt;sup>47</sup> Ibid., at p. 1163.

<sup>&</sup>lt;sup>48</sup> Ibid., at p. 1163.

<sup>&</sup>lt;sup>49</sup> Draft Principles On Human Rights And The Environment, E/CN.4/Sub.2/1994/9, Annex I (1994).

<sup>&</sup>lt;sup>50</sup> Ibid, Principle 5.

<sup>&</sup>lt;sup>51</sup> Edo, Z.O., 'The Challenges of Effective Environmental Enforcement and Compliance in the Niger Delta Region of Nigeria,' Journal of Sustainable Development in Africa, Vol. 14, No.6, 2012, p. 262.

the environment; and utilise the environment and natural resources for the benefit of the people of Kenya.

Article 70(1) provides that if a person alleges that a right to a clean and healthy environment recognised and protected under Art. 42 has been, is being or is likely to be, denied, violated, infringed or threatened, the person may apply to a court for redress in addition to any other legal remedies that are available in respect to the same matter.

To facilitate the implementation of the foregoing provisions, the Constitution gives courts the power to make any order, or give any directions, it considers appropriate – to prevent, stop or discontinue any act on omission that is harmful to the environment, or to any public officer to take measures to prevent or discontinue any act or omission that is harmful to the environment, or to provide compensation for any victim of a violation of the right to a clean and healthy environment. An applicant seeking such orders from courts does not have to demonstrate that any person has incurred loss or suffered injury. The Constitution provides that an applicant does not have to demonstrate that any person has incurred loss or suffered injury. However, to succeed in their plea one must demonstrate that their Right under Article 42 has been or is likely to be denied, violated, infringed or threatened. An applicant description of the right under Article 42 has been or is likely to be denied, violated, infringed or threatened.

The *Environment and Land Court Act* 2011<sup>55</sup> establishes the Environment and Land Court<sup>56</sup> and grants it original and appellate jurisdiction to hear and determine all disputes in accordance with Article 162(2)(b) of the Constitution and with the provisions of this Act or any other law applicable in Kenya relating to environment and land.<sup>57</sup> In exercise of its jurisdiction under Article 162(2)(b) of the Constitution, the Court has power to hear and determine disputes—relating to environmental planning and protection, climate issues, land use planning, title, tenure, boundaries, rates, rents, valuations, mining, minerals and other natural resources.<sup>58</sup> Notably, nothing in the Act precludes the Court from hearing and determining applications for redress of a denial, violation or infringement of, or threat to, rights or fundamental freedom relating to a clean and healthy environment under Articles 42, 69 and 70 of the Constitution.<sup>59</sup> In exercise of its jurisdiction under this Act, the Court shall have power to make any order and grant any relief as the Court deems fit and just, including—interim or permanent preservation orders including injunctions; prerogative orders; award of damages; compensation; specific performance; restitution; declaration; or costs.<sup>60</sup> Also notable is section 18 thereof which provides that in exercise of its jurisdiction under this Act, the Court shall be guided by the following principles—

<sup>&</sup>lt;sup>52</sup> Art. 70(2).

<sup>&</sup>lt;sup>53</sup> Art. 70(3); See also s. 3(1) of Environment (Management and Conservation) Act, 1999 (EMCA)

<sup>&</sup>lt;sup>54</sup> Joseph Owino Muchesia & another v Joseph Owino Muchesia & another [2014] eKLR, para. 34.

<sup>55</sup> Environment and Land Court Act, No. 19 of 2011, Laws of Kenya.

<sup>&</sup>lt;sup>56</sup> Ibid, sec. 4.

<sup>&</sup>lt;sup>57</sup> Ibid, sec. 13(1).

<sup>&</sup>lt;sup>58</sup> Ibid, sec. 13(2) (a).

<sup>&</sup>lt;sup>59</sup> Ibid, sec. 13(3).

<sup>&</sup>lt;sup>60</sup> Ibid, sec. 13(7).

the principles of sustainable development, including—the principle of public participation in the development of policies, plans and processes for the management of the environment and land; the cultural and social principles traditionally applied by any community in Kenya for the management of the environment or natural resources in so far as the same are relevant and not inconsistent with any written law; the principle of international co-operation in the management of environmental resources shared by two or more states; the principles of intergenerational and intragenerational equity; the polluter-pays principle; and the pre-cautionary principle.

The implication of the foregoing is that even where a party is unable to prove the denial, violation, infringement or threat to environmental rights for one reason or the other, then the court should step in and use their *suo motu* powers in respect of environmental protection and conservation to safeguard the right to clean and healthy environment of all and promote the sustainable development agenda. The set out remedies can go a long way in strengthening the environmental liability regime in Kenya. This is in line with the national values and principles of governance that requires or persons and state organs to promote sustainable development.

These provisions were invoked in the case of *Joseph Leboo & 2 others v Director Kenya Forest Services & another*<sup>61</sup> where the Learned Judge observed that "...in my view, any person is free to raise an issue that touches on the conservation and management of the environment, and it is not necessary for such person to demonstrate, that the issues being raised, concern him personally, or indeed, demonstrate that he stands to suffer individually. Any interference with the environment affects every person in his individual capacity, but even if there cannot be demonstration of personal injury, such person is not precluded from raising a matter touching on the management and conservation of the environment....Any person, without the need of demonstrating personal injury, has the freedom and capacity to institute an action aimed at protecting the environment. The plaintiffs have filed this suit as representatives of the local community and also in their own capacity. The community, of course, has an interest in the preservation and sustainable use of forests. Their very livelihoods depend on the proper management of the forests. Even if they had not demonstrated such interest that would not have been important, as any person who alleges a violation of any law touching on the environment is free to commence litigation to ensure the protection of such environment...."

6 (emphasis added)

In addition to the foregoing post constitutional provisions and practice, courts in Kenya have been making positive strides for longer as far as environmental liability is concerned. In the case of *Peter K. Waweru v Republic*, the Court observed that "...environmental crimes under the Water Act, Public Health Act and EMCA cover the entire range of liability including strict liability and absolute liability and ought to be severely punished because the challenge of the restoration of the environment has to be tackled from all sides and by every man and woman..." It went further to state, "...In the name of environmental justice water was given to us by the

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<sup>&</sup>lt;sup>61</sup> [2013] eKLR, Environment and Land No. 273 of 2013.

<sup>62</sup> Paras 25 & 28.

Creator and in whatever form it should never ever be the privilege of a few – the same applies to the right to a clean environment."63

Courts in most Common Law jurisdictions including Kenya rely on common law principles as in the case of Rylands vs Fletcher when determining the issue of strict liability in environmental matters. 64 The English Case of Rylands vs Fletcher 65 resulted in what is commonly referred to as the rule in Rylands vs Fletcher which imposes strict liability on the owner of land for damage caused by the escape of substances to his or her neighbour's land. From this case the prerequisites of a strict liability claim are that the defendant made a "non-natural" or "special" use of his land; that the defendant brought onto his land something that was likely to do mischief if it escaped; the substance in question escaped; and the Plaintiff's property was damaged because of the escape.<sup>67</sup>

"We think that the true rule of law is that the person who, for his own purposes, brings on his land, and collects and keeps there anything likely to do mischief if it escapes, must keep it at his own peril, and, if he does not do so, he is prima facie answerable for all the damage which is the natural consequence of its escape. He can excuse himself by showing that the escape was owing to the Plaintiff's own default, or, perhaps that the escape was a consequence of vis major, or the act of God; but as nothing of this sort exists here, it is unnecessary to inquire what excuse would be sufficient. The general rule, as above stated, seems on principle just. The person whose grass or corn is eaten down by the escaped cattle of his neighbour, or whose mine is flooded by the water from his

neighbour's reservoir, or whose cellar is invaded by the filth of his neighbour's privy, or whose habitation is made unhealthy by the fumes and noisome vapours of his neighbour's alkali works, is damnified without any fault of his own, and it seems but reasonable and just that the neighbour who has brought something on his own property which was not naturally there, harmless to others as long as it is confined to his property, but which he knows will be mischievous if it gets on his neighbour's, should be obliged to make good the damage which ensues if he does not succeed in confining it to his own property. But for his act in bringing it there no mischief would have accrued, and it seems just that he should at his peril keep it there, so that no mischief may accrue, or answer for the natural and anticipated consequences." "If it does escape and cause damage, he is responsible, however careful he may have taken to prevent the damage. In considering whether a defendant is liable to a Plaintiff for the damage which the plaintiff may have sustained, the question in general is not whether the defendant has acted with due care and caution, but whether his acts have occasioned the damage."

<sup>63 [2006]</sup> eKLR, Misc. Civ. Applic. No. 118 of 2004, p.14.

<sup>&</sup>lt;sup>64</sup> See also *Donoghue v Stevenson* [1932] UKHL 100, SC (HL) 31, AC 562, All ER Rep 1. It laid the foundation of the modern law of negligence, establishing general principles of the duty of care.

<sup>&</sup>lt;sup>65</sup> Rylands vs Fletcher [1861-73] ALL ER REP 1. In that case, the Defendant had employed contractors to build a reservoir on his land. While building it, the contractors discovered a series of old coal shafts and passages under the land filled loosely with soil and debris, which joined up with Plaintiff's adjoining mine. Rather than blocking these shafts, the contractors left them and as a result the Defendant's reservoir burst and flooded the Plaintiff's mine causing damage. The Court stated as follows:

<sup>&</sup>lt;sup>66</sup> The Supreme Court of Colombia in the case of John Campbell Law Incorporation Vs Owners Strata Plan, 1350 [2001]BSCS 1342, the principle of non-natural use of land under Rylands Vs Fletcher is not a fixed concept but rather an evolving rule which reflects the constant changes that occur in modern life. This approach has also been adopted by different courts in various jurisdictions, including the English courts.

<sup>&</sup>lt;sup>67</sup> David M. Ndetei v Orbit Chemical Industries Limited [2014] eKLR, para. 23.

The Supreme Court of India has in addition introduced the concept of absolute liability in addition to strict liability where the defendant is engaged in industrial activities resulting in pollution. In the case of *M C Mehta vs Union Of India* [1987] 1 SCC 395, cited with approval in *Indian Council For Enviro-Legal Action & Others vs Union of India & Others* [1996] 2 LRC, the court stated that the test upon which such liability is to be imposed is based on the nature of the activity. 68 Consequently, where an activity is inherently dangerous or hazardous, then absolute liability for the resulting damage attaches on the person engaged in the activity. 69

As part of civil liability, EMCA also provides for environmental restoration orders, conservation orders, and easements.<sup>70</sup>

# b. Criminal Liability in Environmental Matters

Criminal law enforces the protection of society from crime, so that the most favorable protection of the environment is achieved in this way.<sup>71</sup>

The Environmental Management and Coordination Act (EMCA), 1999, provides for criminal liability in environmental matters under various sections. The Act provides that 'subject to the Constitution and the directions and control of the Attorney-General, an environmental inspector may, in any case in which he considers it desirable so to do:- institute and undertake criminal proceedings against any person before a court of competent jurisdiction (other than a court-

it stated-

The enterprise must be held to be under an obligation to provide that the hazardous or inherently dangerous activity in which it is engaged must be conducted with the highest standards of safety and if any harm results on account of such activity, the enterprise must be absolutely liable to compensate for such harm and it should be no answer to the enterprise to say that it had taken all reasonable care and that the harm occurred without any negligence on its part. Since the persons harmed on account of the hazardous or inherently dangerous activity carried on by the enterprise would not be in a position to isolate the process of operation from the hazardous preparation of the substance of any other related element that caused the harm, the enterprise must be held strictly liable for causing such harm as part of the social cost of carrying on the hazardous or inherently dangerous activity. If the enterprise is permitted to carry on a hazardous or inherently dangerous activity for its profit, the law must presume that such permission is conditional on the enterprise absorbing the cost of any accident arising on account of such hazardous or inherently dangerous activity as an appropriate item for its overheads. Such hazardous or inherently dangerous activity for private profit can be tolerated on condition that the enterprise engaged in such hazardous or inherently dangerous activity indemnifies all those who suffer on account of carrying on of such hazardous or inherently dangerous activity regardless of whether it is carried out carefully or not.......We would therefore hold that where an enterprise is engaged in a hazardous or inherently dangerous activity, resulting for example in escape of toxic gas, the enterprise is strictly and absolutely liable to compensate all those who are affected by the accident and such liability is not subject to any of the exceptions which operate vis-a-vis the tortious principle of strict liability under the rule in Rylands Vs. Fletcher [1868] LR 3 HL 330, [1861-73]."

<sup>&</sup>lt;sup>68</sup> It stated-

<sup>&</sup>lt;sup>69</sup> David M. Ndetei v Orbit Chemical Industries Limited [2014] eKLR, para. 29.

<sup>&</sup>lt;sup>70</sup> EMCA, Part IX (Sec. 108-116).

<sup>&</sup>lt;sup>71</sup> Krstinić, D., Bingulac, N., & Dragojlović, J., "Criminal and civil liability for environmental damage," *Economics of Agriculture* 64, no. 3 (2017): 1161-1176.

martial) in respect of any offence alleged to have been committed by that person under EMCA; and discontinue at any stage with the approval of the Attorney-General, before judgement is delivered any such proceedings instituted or undertaken by himself.<sup>72</sup>

Part XIII of EMCA on environmental offences carries more elaborate provisions on criminal liability in environmental matters. The offences range from failure to maintain proper records as required under EMCA, to violation of environmental standards under the Act and for each there are prescribed penalties.<sup>73</sup>

# c. Environmental Impact Assessment

Environmental Impact Assessment means a systematic examination conducted to determine whether or not a programme, activity or project will have any adverse impacts on the environment.<sup>74</sup>

Effective Environmental Impact Assessment (EIA) has been described as 'a process for identifying and considering the impacts of an action'. It is 'not about rejecting development; rather it is about making sure that development proceeds with full knowledge of the environmental consequences'. EIA may provide an opportunity for public scrutiny and participation in decision-making; introduce elements of independence and impartiality; and facilitate better informed judgments when balancing environmental and developmental needs. The Environment (Management and Conservation) Act (EMCA) 1999 Trovides for the use of Environmental Impact Assessment (EIA) in environmental management and conservation efforts. EIA is defined as an environmental management tool aiming at identifying environmental problems and providing solutions to prevent or mitigate these problems to the acceptable levels and contribute to achieving sustainable development.

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

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<sup>&</sup>lt;sup>72</sup> S. 118, EMCA.

<sup>&</sup>lt;sup>73</sup> Environmental Management and Co-ordination Act, Act. No. 8 of 1999, Part XIII Ss. 137-146.

<sup>&</sup>lt;sup>74</sup> Environmental Management and Co-Ordination Act, No 8 of 1999 (Government Printer, Nairobi, 1999), s.2.

<sup>&</sup>lt;sup>75</sup> Ingelson, A., et al, 'Philippine Environmental Impact Assessment, Mining and Genuine Development,' *Law, Environment and Development Journal*, Vol. 5, No. 1, 2009, p. 7.

<sup>&</sup>lt;sup>76</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/Art./109/A%20Paper%20on%20Environmental%20impact%20assessment.pdf <sup>77</sup> Act No. 8 of 1999, Laws of Kenya.

<sup>&</sup>lt;sup>78</sup> Al Ouran, N.M., 'Analysis of Environmental Health linkages in the EIA process in Jordan,' *International Journal of Current Microbiology and Applied Sciences*, Vol. 4, No. 7, 2015, pp. 862-871, p. 862.

environmental performance which should include the cost of mitigation measures and the time frame of implementing the measures.<sup>79</sup>

Principle 17 of the *Rio Declaration on Environment and Development*, states that environmental impact assessment, as a national instrument, should be undertaken for proposed activities that are likely to have a significant adverse impact on the environment and are subject to a decision of a competent national authority.

EIA can be a powerful tool for keeping the corporates including Multinational Corporations (MNCs) operating in the country in check. However, the general public should be empowered through more meaningful participation in the same to ensure that the EIAs achieve their objectives. This is the only way that the affected sections of population appreciate the use of EIAs and also ensure that such exercises are not mere formalities on paper but are utilised fully for the protection of the right to clean and healthy environment. This is especially for projects taking place within the community dwellings, with potentially great effects on the people's lives such as unregulated mining activities. A good example is the alleged lead poisoning in Owino Uhuru, a slum area in Mombasa city adjacent to a lead battery recycling factory, which has led to protracted court battles. These are some of the incidences that can be avoided through effective enforcement of the environmental laws at the early stages of setting up such factories.

# d. Strategic Environmental and Social Assessment (SESA) and Strategic Environmental Assessment (SEA)

Strategic Environmental and Social Assessment (SESA) is an effective environmental management tool since it integrates the social issues that are likely to emerge and not just the environmental considerations.<sup>82</sup>

<sup>80</sup> Jenje, B., 'MP to compensate families injured by lead poison 'if guilty',' *Daily Nation*, Wednesday, April 29, 2015, available at <a href="http://www.nation.co.ke/news/politics/MP-to-compensate-families-injured-by-lead-poison-if-guilty/-/1064/2701594/-/15u9ivl/-/index.html">http://www.nation.co.ke/news/politics/MP-to-compensate-families-injured-by-lead-poison-if-guilty/-/1064/2701594/-/15u9ivl/-/index.html</a> [Accessed on 05/09/2015]; See also Chege, M. W., et al, 'Lead contamination of traditional hand-dug wells in parts of Kwale County, Kenya,' *International Journal of Physical Sciences*, Vol. 8, No.17, 9 May, 2013, pp. 835-839.

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<sup>&</sup>lt;sup>79</sup> Regulation 16, Environmental (Impact Assessment and Audit) Regulations, 2003, Legal Notice 101 of 2003.

Network B. & Wangila A., "Lead Poisoning in Owino Uhuru Slums in Mombasa- Kenya," (Eco-Ethics International —Kenya Chapter, 2012). Available at <a href="https://www.cofek.co.ke/Lead%20Poisoning%20in%20Owino%20Uhuru%20Slums%20Mombasa.pdf">https://www.cofek.co.ke/Lead%20Poisoning%20in%20Owino%20Uhuru%20Slums%20Mombasa.pdf</a> [Accessed on 24/4/2019]; Zoë Schlanger, "A Kenyan mother, two disappearing Indian businessmen, and the battery factory that poisoned a village," Quartz Africa, March 18, 2018. Available at <a href="https://qz.com/africa/1231792/a-battery-recycling-plant-owned-by-indian-businessmen-caused-a-lead-poisoning-crisis-in-kenya/">https://qz.com/africa/1231792/a-battery-recycling-plant-owned-by-indian-businessmen-caused-a-lead-poisoning-crisis-in-kenya/</a> [Accessed on 24/4/2019].

Notably, the \*Energy Act, No. 1 of 2019\*, Laws of Kenya, requires under section 107 (1) (2)(d) that a person who

<sup>&</sup>lt;sup>82</sup> Notably, the *Energy Act, No. 1 of 2019*, Laws of Kenya, requires under section 107 (1) (2)(d) that a person who intends to construct a facility that produces energy using coal shall, before commencing such construction, apply in writing to the Authority for a permit to do so. Such an application must be accompanied by, inter alia, a Strategic Environment Assessment and Social Impact Assessment licenses. Also notable are the provisions of s. 57A(1) of the *Environmental Management Co-ordination (Amendment) Act 2015* which are to the effect that all policies, plans and programmes for implementation shall be subject to Strategic Environmental Assessment.

Strategic Environmental Assessment (SEA) is defined as the process by which environmental considerations are required to be fully integrated into the preparation of policies, plans and programmes and prior to their final adoption (emphasis added). 83 The objectives of the SEA process are to provide for a high level of protection of the environment and to promote sustainable development by contributing to the integration of environmental considerations into the preparation and adoption of specified policies, plans and programmes.<sup>84</sup>

# e. Environmental Audits and Monitoring

The Constitution of Kenya requires the State to establish systems of environmental impact assessment, environmental audit and monitoring of the environment.<sup>85</sup>

EMCA defines "environmental audit" to mean the systematic, documented, periodic and objective evaluation of how well environmental organisation, management and equipment are performing in conserving or preserving the environment.<sup>86</sup> An initial environmental audit and a control audit are conducted by a qualified and authorized environmental auditor or environmental inspector who is an expert or a firm of experts registered by NEMA. In the case of an ongoing project NEMA requires the proponent to undertake an initial environmental audit study to provide baseline information upon which subsequent environmental audits shall be based. The proponent shall be issued with an acknowledgement letter and an improvement order where necessary.<sup>87</sup>

One of the functions of the National Environment Management Authority (NEMA) under EMCA is to identify projects and programmes or types of projects and programme, plans and policies for which environmental audit or environmental monitoring must be conducted under this Act.<sup>88</sup>

NEMA or its designated agents is responsible for carrying out environmental audit of all activities that are likely to have significant effect on the environment. An environmental

<sup>&</sup>lt;sup>83</sup>Environmental Available protection 'Strategic Agency, Environmental Assessment,' http://www.epa.ie/monitoringassessment/assessment/sea/#.Vi5tmGuJ2CA; S. 57(2), EMCA, provides that for the avoidance of doubt, the plans, programmes and policies (referred to in the Act)are those that are- (a) subject to preparation or adoption by an authority at regional, national, county or local level, or which are prepared by an authority for adoption through a legislative procedure by Parliament, Government or if regional, by agreements between the governments or regional authorities, as the case may be; (b) determined by the Authority as likely to have significant effects on the environment.

<sup>&</sup>lt;sup>84</sup> Ibid; See also the Environmental (Impact Assessment and Audit) Regulations, 2003, Legal Notice 101 of 2003, Regulations 42 & 43.

<sup>85</sup> Constitution of Kenya, 2010, Art. 69(1) (f).

<sup>&</sup>lt;sup>87</sup> The Environmental (Impact Assessment and Audit) Regulations, 2003. Available at https://www.nema.go.ke/index.php?option=com\_content&view=article&id=27&Itemid=167 [Accessed 21/4/2019].

<sup>&</sup>lt;sup>88</sup> S. 9(2) (j), EMCA.

inspector appointed under the Act may enter any land or premises for the purposes of determining how far the activities carried out on that land or premises conform with the statements made in the environmental impact assessment study report issued in respect of that land or those premises under section 58(2).<sup>89</sup>

The owner of the premises or the operator of a project for which an environmental impact assessment study report has been made should keep accurate records and make annual reports to the Authority describing how far the project conforms in operation with the statements made in the environmental impact assessment study report submitted under section 58(2).

The owner of premises or the operator of a project should take all reasonable measures to mitigate any undesirable effects not contemplated in the environmental impact assessment study report submitted under section 58(2) and should prepare and submit an environmental audit report on those measures to the Authority annually or as the Authority may, in writing, require.<sup>91</sup>

The Authority is empowered to, in consultation with the relevant lead agencies, monitor:- all environmental phenomena with a view to making an assessment of any possible changes in the environment and their possible impacts; or the operation of any industry, project or activity with a view of determining its immediate and long-term effects on the environment. 92

In addition, an environmental inspector appointed under this Act may enter upon any land or premises for the purposes of monitoring the effects upon the environment of any activities carried on that land or premises.<sup>93</sup>

The Environment (Assessment and Audit) Regulations, 2003<sup>94</sup> provide the necessary guidelines on the procedure.

Arguably, NEMA is still facing challenges in discharging its mandate as it is currently and there is a need to work closely with the county governments in order to be in touch with what is happening across the country. These challenges were brought to the public limelight on 10th May, 2018, when Kenyans woke up to the shocking news of the collapse of Milmet Dam – also known as Solai Dam – in Nakuru County. Farms and villages had been washed away in the onrush of the water's break. Hundreds of people were caught up in the consequent muddy sludge, claiming 47 lives in the downstream flood chaos. The subsequent cases brought against NEMA officials by the Director of Public Prosecutions to hold them liable for the disaster highlighted

<sup>90</sup> S. 68(2), EMCA.

<sup>&</sup>lt;sup>89</sup> S. 68(1), EMCA.

<sup>&</sup>lt;sup>91</sup> S. 68(3), EMCA.

<sup>&</sup>lt;sup>92</sup> S. 69(1), EMCA.

<sup>&</sup>lt;sup>93</sup> S. 69(2), EMCA.

<sup>&</sup>lt;sup>94</sup> Environmental (Impact Assessment and Audit) Regulations, 2003, Legal Notice 101 of 2003, Laws of Kenya (Government Printer, Nairobi, 2003).

the challenges that NEMA is facing in discharging its mandate across the country. <sup>95</sup> This therefore calls for concerted efforts from all lead agencies under the direction of NEMA to ensure that environmental standards are upheld and enforced across the various sectors.

# f. Implementation Principles of Sustainable Development

One of the national values and principles of governance as provided under Art. 10 of the Constitution is sustainable development. The principles of sustainable development as also captured in EMCA<sup>96</sup> include: the principle of public participation in the development of policies, plans and processes for the management of the environment; the principle of international cooperation in the management of environmental resources shared by two or more states; the polluter-pays principle; and the pre-cautionary principle.

Principle 16 of the *Rio Declaration on Environment and Development* states that national authorities should endeavour to promote the internalization of environmental costs and the use of economic instruments, taking into account the approach that the polluter should, in principle, bear the cost of pollution, with due regard to the public interest and without distorting international trade and investment.

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

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<sup>&</sup>lt;sup>95</sup> See *Johnson Kamau Njuguna & another v Director of Public Prosecutions* [2018] eKLR, Judicial Review No 9 of 2018.

<sup>&</sup>lt;sup>96</sup> EMCA, S. 3(5).

<sup>&</sup>lt;sup>97</sup> OECD, *Environmental Principles and Concepts*, (Organisation For Economic Co-Operation And Development, Paris, 1995), op cit., Para. 37.

<sup>&</sup>lt;sup>98</sup> 1972 OECD Guiding Principles on the International Economic Aspects of Environmental Policies, OECD, C (72)128 (As quoted in OECD, *Environmental Principles and Concepts*, (Organisation For Economic Co-Operation And Development, Paris, 1995), op cit., Para. 33).

In the *Trail Smelter Arbitration (United States v. Canada)*, <sup>99</sup> the Tribunal held that it is the responsibility of the State to protect other states against harmful acts by individuals from within its jurisdiction at all times. No state has the right to use or permit the use of the territory in a manner as to cause injury by fumes in or to the territory of another or the properties or persons therein as stipulated under the United States (Plaintiff) laws and the principles of international law.

These principles were also the subject of Case concerning the Gabcíkovo-Nagymaros Project (Hungary/Slovakia), Judgment of 25 September 1997<sup>100</sup> where the International Court of Justice concluded that both Parties committed internationally wrongful acts, and that those acts gave rise to the damage sustained by the Parties; consequently, Hungary and Slovakia were both under an obligation to pay compensation and were both entitled to obtain compensation.

The OECD Council's *Recommendation on Guiding Principles Concerning International Economic Aspects of Environmental Policies* is believed to have been the first formulation of the Polluter-Pays Principle at the international level, and it sought to encourage sound environmental management and to harmonise methods for allocating the cost of pollution to avoid distortions in prices for products entering international trade. <sup>101</sup>

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

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<sup>&</sup>lt;sup>99</sup> Arbitral Trib., 3 U.N. Rep. Int'l Arb. Awards 1905 (1941). The Trail Smelter located in British Columbia since 1906, was owned and operated by a Canadian corporation. The resultant effect of air pollution from the sulfur dioxide from Trail Smelter resulted in the damage of the state of Washington between 1925 and 1937. This led to the United States (P) suit against the Canada (D) with an injunction against further air pollution by Trail Smelter. The decision made by the Tribunal established the concept of Trans Boundary Harm and the principle of the "polluter pays" to ensure sovereignty. (Prunella, C., 'An International Environmental Law case study: The Trail Smelter Arbitration,' December, 2014. Available at

http://intlpollution.commons.gc.cuny.edu/an-international-environmental-law-case-study-the-trail-smelter-arbitration/[ Accessed on 13/4/2019].

<sup>&</sup>lt;sup>100</sup> International Court of Justice, Communiqué (unofficial) No. 97/10 bis of 25 September 1997 and Judgement. Both available from the ICJ Internet Home Page (http://www.icj-cij.org/docket/files/92/7375.pdf [Accessed on 13/4/2019].

Vícha, O, The Polluter-Pays Principle In OECD Recommendations And Its Application In International And EC/EU Law, *Czech Yearbook of Public & Private International Law*, Vol. 2, 2011, pp. 57-67. Available at *files.cyil.eu*/200000043-87d4c88ce6/%C4%8CSMP 2011 05 vicha.pdf Accessed on 13/4/2019].

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

lbid, p. 67; See also Nicoleta, D.D., 'The Polluter-Pays Principle- -Expression Of Tort Liability For Environmental Protection,' Analele Universității din Oradea, Fascicula Protecția Mediului Vol. XVIII, 2012, pp. 295-302 at p. 301. Available at

avoid wasting natural resources and to put an end to the cost-free use of the environment as a receptacle for pollution. 104

The constitutional provision on the enforcement of the right to clean and healthy environment in Kenya is largely based on the principle of the polluter pays principle 105, where the provisions give extensive powers to the court to compel the government or any public agency to take restorative measures and to provide compensation for any victim of pollution and to compensate the cost borne by victims for the lost use of natural resources as a result of an act of pollution. 106 EMCA however provides that 'no civil or criminal liability in respect of a project or consequences resulting from a project shall be incurred by the Government, the Authority or any public officer by reason of the approval of an environmental impact assessment study, evaluation or review report or grant of an environmental impact assessment licence or by reason of any condition attached to such licence. The same defence is however not available to the licensee as the Act provides that 'the issuance of an environmental impact assessment licence in respect of a project shall afford no defence to any civil action or to a prosecution that may be brought or preferred against a proponent in respect of the manner in which the project is executed, managed or operated.'108

In addition to the polluter-pays principle, there is also the precautionary principle which also directly impacts on environmental liability.

Principle 15 of the Rio Declaration on Environment and Development 109 states that in order to protect the environment, the precautionary approach should be widely applied by States according to their capabilities. Further, it states that where there are threats of serious or irreversible damage, lack of full scientific certainty should not be used as a reason for postponing cost-effective measures to prevent environmental degradation.

The precautionary principle is believed to provide guidance for governance and management in responding to uncertainty. 110 It also provides for action to avert risks of serious or irreversible harm to the environment or human health in the absence of scientific certainty about that harm

http://protmed.uoradea.ro/facultate/anale/protectia mediului/2012A/im/11.%20Dascalu%20Diana.pdf [Accessed on 13/4/2019]. Ibid, p. 67.

<sup>&</sup>lt;sup>105</sup> Articles 42; 70, Constitution of Kenya 2010.

<sup>106</sup> Luppi, B., Parisi, F., & Rajagopalan, S., "The rise and fall of the polluter-pays principle in developing countries," International Review of Law and Economics 32 (2012): 135-144, at p.138.

<sup>&</sup>lt;sup>107</sup> EMCA, s. 66(1).

<sup>&</sup>lt;sup>108</sup> EMCA, s. 66(2).

<sup>&</sup>lt;sup>109</sup> Principle 15, 1992 Rio Declaration on Environment and Development, UN Doc. A/CONF.151/26 (vol. I) / 31 ILM 874 (1992). Adopted at the United Nations Conference on Environment and Development in Rio de Janeiro, Brazil from 3-14 June1992.

<sup>110</sup> Cooney, R., The **Precautionary** Principle in Biodiversity Conservation and Natural Resource Management: An issues paper for policy-makers, researchers and practitioners, (IUCN, Gland, Switzerland and Cambridge, 2004), UK. xi + 51pp at p. 1. Available at

http://www.sehn.org/pdf/PrecautionaryPrincipleissuespaper.pdf [Accessed on 13/4/2019].

and it is now widely and increasingly accepted in sustainable development and environmental policy at multilateral and national levels.<sup>111</sup>

The emergence of the precautionary principle marked a shift from post-damage control (civil liability as a curative tool) to the level of a pre-damage control (anticipatory measures) of risks. It originated in environmental risk management to provide regulatory authority to stop specific environmental contaminations without waiting for conclusive evidence of harm to the environment (i.e., while there was still "uncertainty" about the evidence). 113

It has been suggested that the precautionary principle might be described both in terms of the level of uncertainty that triggers a regulatory response and in terms of the tool that will be chosen in the face of uncertainty (as in the case of technological requirements or prohibitions). 114

There is a need to actively engage the communities in environmental management and conservation in order to help in the implementation of these principles. With the communities empowered, then it is possible to hold to account those who flout environmental laws, be they entities or individuals. It is easier to engage a community that feels a sense of belonging than one that feels sidelined by the state actors.

# 4. Enhanced Environmental Enforcement and Compliance for Sustainable Development in Kenya

Environmental protection is inherent in the concept of sustainable development, as is a focus on the sources of environmental problems rather than the symptoms. While the existing laws seem to put great emphasis on enforcement of environmental responsibilities, there is little evidence of actual promotion of deterrence under the current environmental liability regime in Kenya.

Kenya Vision 2030 is the long-term development blueprint for the country, with various pillars that include environmental, economic, social and political pillars. The social pillar seeks to build a just and cohesive society that enjoys equitable social development in a clean and secure environment. The Blueprint seeks to ensure that Kenya becomes a nation that has a clean, secure and sustainable environment by 2030, to be achieved through: promoting environmental

<sup>&</sup>lt;sup>111</sup> Ibid, p.1.

World Commission on the Ethics of Scientific Knowledge and Technology (COMEST), *The Precautionary Principle*, (United Nations Educational, Scientific and Cultural Organization, Paris, 2005), p.7. Available at <a href="http://www.eubios.info/UNESCO/precprin.pdf">http://www.eubios.info/UNESCO/precprin.pdf</a> [Accessed on 13/4/2019]

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

Sunstein, C.R., 'Beyond the Precautionary Principle,' University of Chicago Public Law and Legal Theory Working Paper No. 38, January 2003, p.11. Available at

http://www.law.uchicago.edu/files/files/38.crs\_.precautionary.pl-lt.pdf [Accessed on 13/4/2019]. 115 Ibid. para. 50.

<sup>&</sup>lt;sup>116</sup> Sessional paper No. 10 of 2012, On Kenya Vision 2030, Government Printer, 2012.

conservation to better support the economic pillar's aspirations; improving pollution and waste management through the application of the right economic incentives; commissioning of public-private partnerships (PPPs) for improved efficiency in water and sanitation delivery; enhancing disaster preparedness in all disaster-prone areas and improving the capacity for adaptation to global climatic change.<sup>117</sup>

Proper apportionment of environmental liability in the country will go a long way in ensuring that all stakeholders, both public and private play their role in achieving sustainable development agenda. Investing in compliance and enforcement of environmental laws benefits the public by securing a healthier and safer environment for themselves and their children. It also benefits individuals, firms and others in the regulated community by ensuring a level playing field governed by clear rules applied in a fair and consistent manner. 118

Strengthening environmental compliance and enforcement requires renewed efforts by individuals and institutions everywhere. Government officials, particularly inspectors, investigators, and prosecutors, must exercise public authority in trust for all of their citizens according to the standards of good governance and with a view to protecting and improving public well-being and conserving the environment. The judiciary has a fundamental contribution to make in upholding the rule of law and ensuring that national and international laws are interpreted and applied fairly, efficiently, and effectively.

Courts also need to work closely with the public as a way of enhancing identification of activities that violate environmental laws as well as increasing the rate of enforcement and compliance with court decisions, by bodies and individuals.

There is also need to sensitise the public on the dangers of environmental degradation through pollution, overstocking, over-exploitation of resources. Other professionals should be brought on board. These may be drawn from such fields as medical, agricultural, mining, amongst others.

When people appreciate that the state of environmental health directly affects their livelihoods, it is possible to engage them in creation of a better environment that is clean and healthy as the first step towards improving their lives.

Concerted efforts from all the stakeholders, including the general public can ensure that the compliance and enforcement framework in place is used to promote and safeguard the right to clean and healthy environment as envisaged in the Constitution and environmental laws.

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<sup>117</sup> Ibid.

<sup>&</sup>lt;sup>118</sup> International Network for Environmental Compliance and Enforcement (INECE), 'The Importance of Environmental Compliance and Enforcement for Sustainable Development for the Rio+20 Conference,' *op cit*, p.2. <sup>119</sup> Ibid.

<sup>&</sup>lt;sup>120</sup> Ibid.

# 4.1 Encouraging Proactive Corporate Environmental Compliance

It has rightly been pointed out that virtually all companies face the possibility of environmental liability costs and as such, it is imperative for the management to make at a least a general estimate of their company's potential future environmental liability be it from legally mandated cleanup of hazardous waste sites or from lawsuits involving consumers, employees, or communities.<sup>121</sup> The gathered information, it is argued could be useful in the following ways: encourage defensive and prudent operations and waste reduction; improve manufacturing, waste disposal and shipping practices; negotiate and settle disputes with insurance carriers; influence regulators and public policy makers; determine suitable levels of financial resources; reassess corporate strategy and management practices (think green); articulate a comprehensive risk management program; improve public relations and public citizenship; and assess hidden risks in takeovers and acquisitions. 122

It is advisable for companies and organisations to engage in proactive environmental risk management as part of their strategic plans in order to avoid costly environmental liability mistakes. 123

# 4.2 Due Diligence/Cultivating Environmental Ethics

Kenyans have a role to play in achieving the ideal of a clean and healthy environment. 124 There is need to cultivate a culture of respect for environment by all, without necessarily relying on courts for enforcing the same. 125 The citizenry should be able to practise preventive measures while allowing the courts to come in only in cases of violation of environmental standards.

This is in line with the ISO 14000 which is a series of environmental management standards developed and published by the International Organization for Standardization (ISO) for organizations. The ISO 14000 standards provide a guideline or framework for organizations that need to systematize and improve their environmental management efforts. The ISO 14000 standards are not designed to aid the enforcement of environmental laws and do not regulate the environmental activities of organizations. Adherence to these standards is voluntary.

The ISO 14001 standard specifies the requirements of an environmental management system (EMS) for small to large organizations. An EMS is a systemic approach to handling environmental issues within an organization. The ISO 14001 standard is based on the Plan-Check-Do-Review-Improve cycle.

(ISO 14000 and 1400, https://whatis.techtarget.com/definition/ISO-14000-and-14001).

The ISO 14000 family of standards provides practical tools for companies and organizations of all kinds looking to manage their environmental responsibilities. ISO 14001:2015 and its supporting standards such as ISO 14006:2011 focus on environmental systems to achieve this. The other standards in the family focus on specific approaches such as audits, communications, labelling and life cycle analysis, as well as environmental challenges such as climate change.

(International Organization for Standardization, "ISO 14000 family - Environmental management," https://www.iso.org/iso-14001-environmental-management.html).

<sup>&</sup>lt;sup>121</sup> Schoemaker, P. J., & Schoemaker, J. A., "Estimating environmental liability: Quantifying the unknown," *California Management Review*, Vol.37, no. 3 (1995): 29-61, at p.29. <sup>122</sup> Ibid, at pp. 29-30.

<sup>&</sup>lt;sup>124</sup> Article 69(2), Constitution of Kenya.

<sup>&</sup>lt;sup>125</sup> Preamble, Constitution of Kenya.

Developing environmental ethics and consciousness can be enhanced through adopting participatory approaches to conservation and management of environment and its resources. Dissemination of information and knowledge in meaningful forms can also enhance participation in decision-making and enhance appreciation of the best ways of protecting and conserving the environment. 127

There is, therefore, a need to encourage voluntary compliance with environmental regulations, by the general public. This can be achieved through creating public awareness on the impacts of unsustainable and environment-degrading production and social activities, while providing sustainable alternatives. Such awareness can include organizing public forums, use of media to disseminate information and environmental campaigns and introducing comprehensive and up-to date environmental studies in learning institutions, at all levels. Incentives and disincentives can also be offered to encourage people to discard unsustainable methods of production and other activities that contribute to the degradation of the environment. Environmental rules that reward environmental leadership, build on best practices, and ensure a level playing field are more likely to succeed in securing compliance. <sup>128</sup>

Sustainable development efforts may not bear much if the country does not move beyond laws. There is need for educating the public on the subject, with emphasis on preventive and conservation measures. The same should include change of attitude by the general public. The current generation has a responsibility and an environmental liability to ensure that future (unborn) generations have their future guaranteed. This responsibility was affirmed in the case of *Oposa et al. v. Fulgencio S. Factoran, Jr. et al (G.R. No. 101083)* (199) where the Supreme Court of the Philippines stated that even though the right to a balanced and healthful ecology is under the Declaration of Principles and State Policies of the Constitution and not under the Bill of Rights, it does not follow that it is less important than any of the rights enumerated in the latter: "[it] concerns nothing less than self-preservation and self-perpetuation, the advancement of which may even be said to predate all governments and constitutions". The right is linked to the constitutional right to health, is "fundamental", "constitutionalised", "self-executing" and "judicially enforceable". It imposes the correlative duty to refrain from impairing the environment. The right to a class suit both for others of their generation and for succeeding generations as "the minors' assertion of their right to a

<sup>127</sup> See generally, Muigua, K., *Realising Environmental Democracy in Kenya*, available at <a href="http://kmco.co.ke/wp-content/uploads/2018/08/REALISING-ENVIRONMENTAL-DEMOCRACY-IN-KENYA-4th-May-2018-1-1.pdf">http://kmco.co.ke/wp-content/uploads/2018/08/REALISING-ENVIRONMENTAL-DEMOCRACY-IN-KENYA-4th-May-2018-1-1.pdf</a> [Accessed on 15/4/2019].

<sup>&</sup>lt;sup>126</sup> Article 69(2), Constitution of Kenya.

<sup>&</sup>lt;sup>128</sup> International Network for Environmental Compliance and Enforcement (INECE), 'The Importance of Environmental Compliance and Enforcement for Sustainable Development for the Rio+20 Conference,' p.2, available at

 $http://www.uncsd2012.org/content/documents/332INECE\%20Submission\%20Rio\%20Compilation\%20Document.pd\\ f [Accessed on 15/4/2019].$ 

Oposa et al. v. Fulgencio S. Factoran, Jr. et al (G.R. No. 101083), <a href="https://www.escr-net.org/caselaw/2006/oposa-et-al-v-fulgencio-s-factoran-jr-et-al-gr-no-101083">https://www.escr-net.org/caselaw/2006/oposa-et-al-v-fulgencio-s-factoran-jr-et-al-gr-no-101083</a>

sound environment constitutes, at the same time, the performance of their obligation to ensure the protection of that right for the generations to come."130

It is thus important to ensure that all persons are conscious of their responsibility and duty to future generations to eliminate environmental threats affecting life, health and the wellbeing of the generations to come in the spirit of intragenerational and intergenerational equity.

#### 4.3 Environmental Insurance

Environmental insurance is one of the tools that is used in environmental management. However, EMCA does not have provisions touching on the same. In addition, Kenyan insurance firms are yet to popularise environmental insurance services. It is suggested that this is a service that they should take up especially in light of the sustainable development agenda. However, all is not lost as a few of the insurance providers have packages on environmental impairment liability, such as the AIG insurance whose package covers: third-party bodily injury; third-party property and environmental damage; and clean-up costs for pollution conditions, both on site or while migrating from site.<sup>131</sup> Environmental law practitioners may also advise their clients on the possibility of taking up environmental liability insurance. The closest that EMCA has in terms of state sponsored environmental insurance is the National Environment Restoration Fund, which is a state kitty meant to supplementary insurance for the mitigation of environmental degradation where the perpetrator is not identifiable or where exceptional circumstances require the Authority to intervene towards the control or mitigation of environmental degradation. 132 There is a need to popularize environmental insurance in the country for both medium and huge companies to shield them against environmental liability which could turn out to be too costly.

The basic considerations when buying environmental damage liability insurance have been summarized as follows: the nature and extent of the risk to be insured; the purposes the insurance is to serve; the available types of policies, scopes of coverage, deductibles, and prices; the extent to which the issues just noted are governed by mandatory governmental insurance requirements (i.e., where being used to satisfy federal or state financial responsibility requirements); the importance of disclosures in answers to the warranty questions in the application form; the extent to which the actual scope of coverage in various competing policies serves the insured's purposes, given the nature and extent of the risks involved; the extent to which the rights of the insurance company under the policy may affect the client's freedom to pursue the appropriate regulatory or public relations strategy after an environmentally damaging release; the advantages and disadvantages of self-insurance; and the need for close coordination between legal counsel, environmental managers, and those in charge of insurance for the client on all of these matters. 133

<sup>&</sup>lt;sup>130</sup> Ibid.

<sup>131</sup> https://www.aig.co.ke/commercial/products/liabilities/environmental-impairment-liability

<sup>&</sup>lt;sup>133</sup> Smith Jr, T.T., "Environmental Damage Liability Insurance—A Primer," *The Business Lawyer* (1983): 333-354, at p.336.

#### 5. Conclusion

The environment should be accorded some right, independent of the human beings. Indeed, the Constitution of Kenya 2010 elevates the environment as worthy of protection by stating in the preamble that the People of Kenya are respectful of the environment, which is their heritage, and are determined to sustain it for the benefit of future generations. The constitutional recognition of this position in Kenya should give the law makers, courts and other stakeholders an incentive and clear authority to take strong action to protect the environment.

Strengthening the environmental liability regime in Kenya is necessary in order to enable the country to have a clean and healthy environment and to achieve sustainable development.

#### References

'Wangari Maathai-an excerpt from the Nobel Peace Prize winner's Acceptance Speech,' Earth Island Journal. Available at

http://www.earthisland.org/journal/index.php/eij/Art./wangari\_maathai\_an\_excerpt\_from\_the\_n obel\_peace\_prize\_winners\_acceptance\_sp/ [Accessed on 12/4/2019].

Al Ouran, N.M., 'Analysis of Environmental Health linkages in the EIA process in Jordan,' *International Journal of Current Microbiology and Applied Sciences*, Vol. 4, No. 7, 2015, pp. 862-871.

Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, Basel, 22 March 1989, 1673 UNTS 126; 28 ILM 657 (1989).

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

Chege, M. W., et al, 'Lead contamination of traditional hand-dug wells in parts of Kwale County, Kenya,' *International Journal of Physical Sciences*, Vol. 8, No.17, 9 May, 2013, pp. 835-839.

Constitution of Kenya 2010 (Government printer, Nairobi, 2010).

Cooney, R., The Precautionary Principle in Biodiversity Conservation and Natural Resource Management: An issues paper for policy-makers, researchers and practitioners, (IUCN, Gland, Switzerland and Cambridge, 2004), UK. xi + 51pp. Available at http://www.sehn.org/pdf/PrecautionaryPrincipleissuespaper.pdf [Accessed on 13/4/2019].

David M. Ndetei v Orbit Chemical Industries Limited [2014] eKLR.

Donoghue v Stevenson [1932] UKHL 100, SC (HL) 31, AC 562, All ER Rep 1.

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

Edo, Z.O., 'The Challenges of Effective Environmental Enforcement and Compliance in the Niger Delta Region of Nigeria,' *Journal of Sustainable Development in Africa*, Vol. 14, No.6, 2012, p. 262.

Energy Act, No. 1 of 2019, Laws of Kenya.

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

Environmental Management and Coordination (Amendment) Act, No. 5 of 2015, Laws of Kenya.

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

Environmental protection Agency, 'Strategic Environmental Assessment,' Available at <a href="http://www.epa.ie/monitoringassessment/assessment/sea/#.Vi5tmGuJ2CA">http://www.epa.ie/monitoringassessment/assessment/sea/#.Vi5tmGuJ2CA</a>.

F.X., Perrez, 'Key questions concerning the human rights and environment debate: An introduction,' in *Human Rights and the Environment: Proceedings of a Geneva Environment Network roundtable*, (United Nations Environment Programme for the Geneva Environment Network, 2004).

GabCikovo-Nagymaros Project (HungarylSlovakia), Judgment, 1. C. J. Reports 1997, p. 7.

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

Health and Environment Linkages Initiative – HELI, *Health and Environment Linkages Initiative*, available at *http://www.who.int/heli/en/* [Accessed on 13/4/2019].

Higenbottam, N., 'Nurse's Role as an Environmental Activist.' Available at http://www.theluminaryproject.org/downloads/Essay%20Contest%20Higenbottam.pdf [Accessed on 13/4/2019].

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

International Court of Justice, Communiqué (unofficial) No. 97/10 bis of 25 September 1997 and Judgement. Both available from the ICJ Internet Home Page (http://www.icj-cij.org/docket/files/92/7375.pdf [Accessed on 13/4/2019].

International Network for Environmental Compliance and Enforcement (INECE), 'The Importance of Environmental Compliance and Enforcement for Sustainable Development for the Rio+20 Conference,' available at

http://www.uncsd2012.org/content/documents/332INECE%20Submission%20Rio%20Compilation%20Document.pdf [Accessed on 15/4/2019].

Jenje, B., 'MP to compensate families injured by lead poison 'if guilty',' *Daily Nation*, Wednesday, April 29, 2015, available at <a href="http://www.nation.co.ke/news/politics/MP-to-compensate-families-injured-by-lead-poison-if-guilty/-/1064/2701594/-/15u9ivl/-/index.html">http://www.nation.co.ke/news/politics/MP-to-compensate-families-injured-by-lead-poison-if-guilty/-/1064/2701594/-/15u9ivl/-/index.html</a> [Accessed on 05/09/2015].

Joseph Leboo & 2 others v Director Kenya Forest Services & another [2013] eKLR, Environment and Land No. 273 of 2013.

Joseph Owino Muchesia & another v Joseph Owino Muchesia & another [2014] eKLR.

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

Luppi, B., Parisi, F., & Rajagopalan, S., "The rise and fall of the polluter-pays principle in developing countries," *International Review of Law and Economics* 32 (2012): 135-144.

Minamata Convention on Mercury, 16 August 2017, No. 54669. Adopted in 2013 in Japan, entered into force in 2017.

Montreal Protocol and (London Amendment) on Substances that Deplete the Ozone layer, 1522 UNTS 3; 26 ILM 1550 (1987).

Muigua, K., 'Environmental Impact Assessment (EIA) in Kenya,' available at <a href="http://www.kmco.co.ke/attachments/Art./109/A%20Paper%20on%20Environmental%20impact%20assessment.pdf">http://www.kmco.co.ke/attachments/Art./109/A%20Paper%20on%20Environmental%20impact%20assessment.pdf</a>

Muigua, K., *Realising Environmental Democracy in Kenya*, available at <a href="http://kmco.co.ke/wpcontent/uploads/2018/08/REALISING-ENVIRONMENTAL-DEMOCRACY-IN-KENYA-4th-May-2018-1-1.pdf">http://kmco.co.ke/wpcontent/uploads/2018/08/REALISING-ENVIRONMENTAL-DEMOCRACY-IN-KENYA-4th-May-2018-1-1.pdf</a> [Accessed on 15/4/2019].

Muigua, K., Reconceptualising the Right to Clean and Healthy Environment in Kenya, Paper Presented at the side event at the 3rd United Nations Environment Assembly held in Nairobi, organized by the UoN School of Law & the Centre International de Droit Comparé de l'Environnement (CIDCE), at the UoN School of Law on Friday 1<sup>st</sup> December 2017.

Nicoleta, D.D., 'The Polluter-Pays Principle- -Expression Of Tort Liability For Environmental Protection,' Analele Universității din Oradea, Fascicula Protecția Mediului Vol. XVIII, 2012, pp. 295-302. Available at

http://protmed.uoradea.ro/facultate/anale/protectia\_mediului/2012A/im/11.%20Dascalu%20Dia na.pdf [Accessed on 13/4/2019].

Nuta, F. M., & Nuta, A. C., "Environmental Liabilities Accounting: A Review Of Some Standards And Guidelines," *Journal of Public Administration, Finance and Law* 2, no. 2 (2012): 47-51.

OECD, Recommendation of the Council concerning the Application of the Polluter-Pays Principle to Accidental Pollution, 7 July 1989 - C(89)88/FINAL.

Okeyo B. & Wangila A., "Lead Poisoning in Owino Uhuru Slums in Mombasa- Kenya," (Eco-Ethics International –Kenya Chapter, 2012). Available at <a href="https://www.cofek.co.ke/Lead%20Poisoning%20in%20Owino%20Uhuru%20Slums%20Mombasa.pdf">https://www.cofek.co.ke/Lead%20Poisoning%20in%20Owino%20Uhuru%20Slums%20Mombasa.pdf</a> [Accessed on 24/4/2019].

Prunella, C., 'An International Environmental Law case study: The Trail Smelter Arbitration,' December, 2014. Available at <a href="http://intlpollution.commons.gc.cuny.edu/an-international-environmental-law-case-study-the-trail-smelter-arbitration/">http://intlpollution.commons.gc.cuny.edu/an-international-environmental-law-case-study-the-trail-smelter-arbitration/</a>[ Accessed on 13/4/2019].

R v Peter K. Waweru [2006] eKLR, Misc. Civ. Applic. No. 118 of 2004.

Republic of Kenya, Sessional paper No. 10 of 2012, on Kenya Vision 2030, Government Printer, 2012.

Rylands vs Fletcher [1861-73] ALL ER REP 1.

Schoemaker, P. J., & Schoemaker, J. A., "Estimating environmental liability: Quantifying the unknown," *California Management Review*, Vol.37, no. 3 (1995): 29-61.

Shelton, D., 'Human Rights, Health and Environmental Protection: Linkages in Law and Practice: A Background Paper for the WHO.' Available at <a href="http://www.who.int/hhr/information/Human\_Rights\_Health\_and\_Environmental\_Protection.pdf">http://www.who.int/hhr/information/Human\_Rights\_Health\_and\_Environmental\_Protection.pdf</a> [Accessed on 12/4/2019].

Smith Jr, T.T., "Environmental Damage Liability Insurance—A Primer," *The Business Lawyer* (1983): 333-354.

Sunstein, C.R., 'Beyond the Precautionary Principle,' University of Chicago Public Law and Legal Theory Working Paper No. 38, January 2003. Available at <a href="http://www.law.uchicago.edu/files/files/38.crs\_.precautionary.pl-lt.pdf">http://www.law.uchicago.edu/files/files/38.crs\_.precautionary.pl-lt.pdf</a> [Accessed on 13/4/2019]. United Nations, 1992 Rio Declaration on Environment and Development, UN Doc. A/CONF.151/26 (vol. I) / 31 ILM 874 (1992). Adopted at the United Nations Conference on Environment and Development in Rio de Janeiro, Brazil from 3-14 June1992.

United Nations, Vienna Convention for the Protection of the Ozone Layer, Vienna, 22 March 1985, United Nations, Treaty Series, vol. 1513, p. 293.

Vícha, O, The Polluter-Pays Principle In OECD Recommendations And Its Application In International And EC/EU Law, *Czech Yearbook of Public & Private International Law*, Vol. 2, 2011, pp. 57-67.

World Commission on Environment and Development, *Our Common Future*, United Nations 1987."Report of the World Commission on Environment and Development." General Assembly Resolution 42/187, 11 December 1987. A/42/427.

World Commission on the Ethics of Scientific Knowledge and Technology (COMEST), *The Precautionary Principle*, (United Nations Educational, Scientific and Cultural Organization, Paris, 2005). Available at <a href="http://www.eubios.info/UNESCO/precprin.pdf">http://www.eubios.info/UNESCO/precprin.pdf</a> [Accessed on 13/4/2019].

World Health Organization, Children's environmental health: The environment and health for children and their mothers,' available at <a href="http://www.who.int/ceh/publications/factsheets/fs284/en/">http://www.who.int/ceh/publications/factsheets/fs284/en/</a> [Accessed on 13/4/2019].

World Health Organization, *Environmental Health*, available at <a href="http://www.who.int/topics/environmental\_health/en/">http://www.who.int/topics/environmental\_health/en/</a> [Accessed on 13/4/2019].

World Health Organization, *European Charter on Environment and Health*, 1989, European Series No. 35, adopted at the First European Conference on Environment and Health Frankfurt, 7–8 December 1989.

World Health Organization, *Human health under threat from ecosystem degradation*, 9 *December 2005*, available at *http://www.who.int/mediacentre/news/releases/2005/pr67/en/* [Accessed on 13/4/2019].

Zoë Schlanger, "A Kenyan mother, two disappearing Indian businessmen, and the battery factory that poisoned a village," Quartz Africa, March 18, 2018. Available at <a href="https://qz.com/africa/1231792/a-battery-recycling-plant-owned-by-indian-businessmen-caused-a-lead-poisoning-crisis-in-kenya/">https://qz.com/africa/1231792/a-battery-recycling-plant-owned-by-indian-businessmen-caused-a-lead-poisoning-crisis-in-kenya/</a> [Accessed on 24/4/2019].