

# **Contemporary Issues in Environmental Conflict Management: Challenges and Prospects**

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**Kariuki Muigua**

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### **Abstract**

*This paper argues that environmental conflict management is not a linear process involving progression from the causes to the full blown conflict. It is affected by many factors in terms of contributing to the origin or progression of the conflict. The paper thus highlights the contemporary factors that play a role in either triggering or exacerbating the environmental conflict either directly or having adverse effects on environmental resources and consequently, affecting efforts towards peace and development.*

### **1. Introduction**

The paper highlights the national obligations on environment and sustainable development; basic principles of sustainable development; general approaches to sustainability and sustainable development debate; the link between human rights and sustainable development; natural resources exploitation; climate change; environmental security; food security; trade; indigenous knowledge; gender equity; and natural resource conflicts, among others. This paper is necessary in light of the fact that conflicts and especially environmental conflicts never take place in isolation. They have either triggering or exacerbating factors. It has been observed that ‘when we talk about sustainability or sustainable human development, we frequently instantly consider how people interact with their environmental, physical, or biological surroundings. To put it another way, we prioritise protecting the environment and the world. From an economic standpoint, however, sustainability is also linked to rationed production methods that are environmentally friendly and that restrict growth to provide resources time to regenerate and avoid resource depletion. It may be considered to focus on the harmony between nature and human activity’.<sup>1</sup>

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<sup>1</sup> Martínez-Martín, R. and Lozano-Martín, A.M., "Sustainability and Conflict Management in the University Environment. Analysis of Students of the Degrees in Labour Relations and Human Resources, and Social Work at the University of Granada (Spain)." *Sustainability* 13, no. 23 (2021): 13431.

## **2. Contemporary Issues in Conflict Management and Environmental Matters**

It is worth noting that Political, economic, and social inequality, extreme poverty, economic stagnation, inadequate government services, high unemployment, environmental degradation, and personal (economic) motivations to fight are some of the fundamental causes of conflict.<sup>2</sup> Environmental conflicts are generally understood to be societal conflicts involving the environment. They are distinct from other conflicts based on gender, class, territory, or identity, but they also commonly overlap with them.<sup>3</sup> It is important to understand some of these factors especially in search of solution to these conflicts.

### **a) Gender and Conflict Management**

It is imperative to ensure that the gender component is taken into account when calling for public engagement and the involvement of all stakeholders in the sustainable development agenda. Article 27 of the Constitution, which protects everyone's right to equality and freedom from discrimination, supports this stance as well.<sup>4</sup>

The need to ensure that both groups are actively and meaningfully involved in all management issues is vital since the misuse of natural resources and the subsequent conflicts hurt both men and women, especially due to their perceived traditional roles.

Although the Kenyan Constitution calls for the protection and empowerment of historically underrepresented and vulnerable groups, including women, it is crucial that these efforts extend beyond positions of national leadership to include them in all facets of everyday life.

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<sup>2</sup> Stewart F, 'Root Causes of Violent Conflict in Developing Countries' (2002) 324 BMJ: British Medical Journal 342.

<sup>3</sup> Scheidel, A., Del Bene, D., Liu, J., Navas, G., Mingorría, S., Demaria, F., Avila, S., Roy, B., Ertör, I., Temper, L. and Martínez-Alier, J., "Environmental conflicts and defenders: A global overview." *Global Environmental Change* 63 (2020): 102104.

<sup>4</sup> 27(1) Every person is equal before the law and has the right to equal protection and equal benefit of the law.

(2) Equality includes the full and equal enjoyment of all rights and fundamental freedoms.

(3) Women and men have the right to equal treatment, including the right to equal opportunities in political, economic, cultural and social spheres.

(4) The State shall not discriminate directly or indirectly against any person on any ground, including race, sex, pregnancy, marital status, health status, ethnic or social origin, colour, age, disability, religion, conscience, belief, culture, dress, language or birth.

(5) A person shall not discriminate directly or indirectly against another person on any of the grounds specified or contemplated in clause (4).

(6) *To give full effect to the realisation of the rights guaranteed under this Article, the State shall take legislative and other measures, including affirmative action programmes and policies designed to redress any disadvantage suffered by individuals or groups because of past discrimination.*

Individually empowering men and women will strengthen institutions, even as lawmakers and policymakers make sure that gender issues are given enough weight in conflict resolution systems and that female conflict resolvers, such as mediators and arbitrators, are included when necessary, such as when land rights are at stake.<sup>5</sup>

According to UN Security Council Resolution 1325, a gender perspective would include measures that encouraged women's peace efforts and indigenous conflict resolution techniques (2000). It also stressed the need of protecting women's and girls' human rights, especially those that pertain to constitutions, electoral processes, law enforcement, and the judicial system.<sup>6</sup>

Domestic laws on conflict management should continually embrace gender inclusivity in responses to conflicts by promoting participation of both men and women as either facilitators of resolution or those seeking justice.

#### **b) Traditional Ecological Knowledge, Conflict Management and Environmental Management**

Through the application of both formal knowledge and traditional ecological knowledge, it is important to recognise the role that ecological knowledge plays in attaining successful environmental and conflict management for sustainable development. This covers the role of traditional or indigenous knowledge in managing the environment and resolving disputes. This is based on African traditional traditions and the global consensus that respect for indigenous knowledge, cultures, and traditional practices promotes sustainable and equitable development and effective environmental management.<sup>7</sup> Since indigenous knowledge is now recognised internationally, national governments should offer it more respect and encourage communities to actively adopt and apply it.<sup>8</sup>

Furthermore, while there are admirable statutory and constitutional provisions in light of the fact that they have recognised indigenous or traditional knowledge within the legal framework, the real

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<sup>5</sup> Fitzpatrick, D., "Dispute Resolution; Mediating Land Conflict in East Timor", in AusAID' *Making Land Work Vol 2; Case Studies on Customary Land and Development in the Pacific*, (2008), Case Study No. 9, p. 175. Sourced from <http://www.ausaid.gov.au/publications/pdf>, [Accessed on 12 April 2022].

<sup>6</sup> Sikoska, T., & Solomon, J., "Introducing gender in conflict and conflict prevention: Conceptual and policy implications," *Gedownload op 20* (2002).

<sup>7</sup> 61/295. *United Nations Declaration on the Rights of Indigenous Peoples, Preamble*.

<sup>8</sup> See also Muigua, K., *Nurturing Our Environment for Sustainable Development*, Glenwood Publishers, Nairobi – 2016, p. 254.

challenge lies in putting these provisions into practice and creating opportunities for the incorporation of such knowledge in decision-making. There is a need to go beyond simply recognising traditional knowledge in Kenya and to make sure that it has been adequately assimilated, considered, and applied when the Constitution so mandates.<sup>9</sup>

It has rightly been observed that similar to many other linkages between trade and the environment, there are complicated relationships between biodiversity and intellectual property that have the potential for both harmony and conflict. A financial motivation for preserving biological variety might come from intellectual property. The commercialization of products developed on the basis of information encoded in genetic resources has been made possible by the patenting of products and processes based on those resources, including new crop and plant varieties, pharmaceuticals, herbicides, and pesticides, as well as new biotechnological products and processes. Thus, as the importance of biodiversity has grown commercially over the past few decades, so has understanding of its relevance.<sup>10</sup>

Along with the aforementioned, it is evidently necessary to combine traditional and formal sciences in order to implement adaptive solutions for managing natural resources through participatory monitoring and feedback.<sup>11</sup> The management of natural resources cannot be left to any one body of knowledge, such as Western science, but rather must take into account a variety of knowledge systems. Integration of knowledge systems is being done for a deeper, more basic cause. Application of scientific research with local knowledge benefits both the sustainability of natural resources and the fairness, opportunity, security, and empowerment of local populations. Local expertise is useful for scenario analysis, data gathering, management planning, building adaptive ways to learn and receive feedback, and institutional support for implementing policies. On the other side, science either develops new technologies or aids in their improvement. Additionally, it offers tools for networking, storing, visualising, analysing, and forecasting long-term patterns so that effective solutions to challenging issues may be found.<sup>12</sup> It is feasible to include the interests and sincere wishes of the locals in natural resource exploitation operations by

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<sup>9</sup> Ibid, pp. 257-258.

<sup>10</sup> Bernasconi-Osterwalder, N., Magraw, D., Oliva, M.J., Tuerk, E. and Orellana, M., *Environment and trade: a guide to WTO jurisprudence*. Routledge, 2012, p. 306.

<sup>11</sup> Pandey, D.N., 'Traditional Knowledge Systems for Biodiversity Conservation,' available at [http://www.infinityfoundation.com/mandala/t\\_es/t\\_es\\_pande\\_conserve.htm](http://www.infinityfoundation.com/mandala/t_es/t_es_pande_conserve.htm) [Accessed on 13 April 2022].

<sup>12</sup> Ibid.

assimilating indigenous knowledge. Conflict between members of the impacted communities and the government is also lessened as a result of this. These communities are inclined to support development initiatives if they do not sense a threat to their way of life, and they are also less prone to use unusual means of defending it.<sup>13</sup>

Therefore, traditional ecological knowledge is crucial to resolving environmental issues and managing conflicts in a productive manner.

### **c) Role of science and Technology in environmental management**

The provisions of Kenya's 2010 Constitution give stakeholders a platform to employ technology and innovation to solve environmental problems since they acknowledge the significance of science and technology in achieving sustainable development.<sup>14</sup> It is a commonly held belief that innovation, technology, and science all contribute to accomplishing the Sustainable Development Goals.<sup>15</sup> This essential role include environmental management as well, as it is one of the Sustainable Development Goals.<sup>16</sup> Chapter 35 of Agenda 21 places a strong emphasis on growing scientific knowledge, developing scientific aptitude, and building the scientific foundation for long-term management. Science for sustainable development is also at the core of this chapter.<sup>17</sup>

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<sup>13</sup> Muigua, K., *Nurturing Our Environment for Sustainable Development*, p. 258.

<sup>14</sup> See Constitution of Kenya, 2010, Article 11 (2) (b):

(2) *The State shall—*

(b) recognise the role of science and indigenous technologies in the development of the nation;

<sup>15</sup> Florian Kongoli, 'Role of Science and Technology on Sustainable Development' [2016] *Sustainable Industrial Processing Summit, SIPS 1*; Kongoli, Florian. "Investments needed for new sustainable technologies." *Copper Worldwide 6, no. 1 (2016): 3*; See also Likens, Gene E. "The role of science in decision making: does evidence-based science drive environmental policy?" *Frontiers in Ecology and the Environment 8, no. 6 (2010): e1-e9*; Miller, Clark A., Paul N. Edwards, and Paul Edwards, eds. *Changing the atmosphere: Expert knowledge and environmental governance. MIT press, 2001*; Christmann, Petra. "Effects of "best practices" of environmental management on cost advantage: The role of complementary assets." *Academy of Management journal 43, no. 4 (2000): 663-680*; Cashmore, Matthew. "The role of science in environmental impact assessment: process and procedure versus purpose in the development of theory." *Environmental Impact Assessment Review 24, no. 4 (2004): 403-426*.

<sup>16</sup> See also *Sustainable Development Goals Targets 17.6 and 17.8* which respectively aim to "Enhance North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation and enhance knowledge sharing on mutually agreed terms, including through improved coordination among existing mechanisms, in particular at the United Nations level, and through a global technology facilitation mechanism" and to "fully operationalize the technology bank and science, technology and innovation capacity-building mechanism for least developed countries by 2017 and enhance the use of enabling technology, in particular information and communications technology".

<sup>17</sup> 'Science.: Sustainable Development Knowledge Platform' <<https://sustainabledevelopment.un.org/topics/science>> accessed 14 April 2022.

Even though science and technology have contributed to many environmental problems, they can and have solved most, if not all, of the world's environmental problems, notably those related to climate change, waste management, and environmental degradation.<sup>18</sup> In order to enhance environmental management and protection, this may be done by utilising science and technology in the management of industrial waste. It can also be done by implementing green and clean technologies as well as climate change mitigation techniques.<sup>19</sup>

#### **d) Climate Change as a Catalyst for Environmental Conflicts**

A variety of violent conflicts have been caused by changing rainfall patterns, droughts, changes in natural vegetation, and a scarcity of resources overall. The link between pastoralist conflicts and these other violent conflicts is particularly obvious. That said, it is not always the case that violent conflict results from climate change; typically, the political, social, and economic context is important.<sup>20</sup> The harmful effects of climate change on people's livelihoods can be significant since a sizable section of the local population depends on rain-fed agriculture and pastoralism. In addition, groups may be more likely to resort to violence to settle disputes or get access to resources when environmental changes are coupled with additional socioeconomic stressors, such as political marginalisation.<sup>21</sup>

Due to its negative consequences on the environment and human livelihoods, climate change has grown to be a global issue throughout time.

Climate change is a significant issue that has an impact on many facets of the environment and human existence.<sup>22</sup> The fight against climate change is linked to the goal of sustainable development and the elimination of poverty.

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<sup>18</sup> Ibid, p. 12.

<sup>19</sup> ibid.

<sup>20</sup> Mobjörk, Malin. "Exploring the climate–conflict link: The case of East Africa." *Stockholm International Peace Research Institute, SIPRI yearbook 2017: Armaments, disarmament and international security* (2017): 287-299, at pp. 292-93.

<sup>21</sup> Mobjörk, Malin. "Exploring the climate–conflict link: The case of East Africa." *Stockholm International Peace Research Institute, SIPRI yearbook 2017: Armaments, disarmament and international security* (2017): 287-299, at p. 293.

<sup>22</sup> Muigua, K., *Nurturing Our Environment for Sustainable Development*, Glenwood Publishers, Nairobi – 2016; Muigua, K., Kariuki, F., Wamukoya, D., *Natural Resources and Environmental Justice in Kenya*, Glenwood Publishers, Nairobi – 2015.

Given that disproportionate numbers of people are affected by climate change, including women, youth, coastal populations, local communities, indigenous populations, fishermen, the impoverished, and the elderly, it is imperative that action be taken quickly. Additionally, excluded from the international efforts to combat climate change are the local communities, those who are impacted, and indigenous peoples. This is true despite the fact that the effects of climate change also put local economies that rely on natural resources and food sovereignty in danger. Furthermore, they have the potential to endanger the health of communities all over the world, particularly those who are weak and disenfranchised, such as children and the elderly.<sup>23</sup>

**e) International investments/Trade and Environment**

International commerce and investments are now widely accepted to have a significant influence on both the environment and human rights.<sup>24</sup> All countries' economies are seen to be driven by trade, which is often geared toward promoting development and eradicating poverty.<sup>25</sup> Given that promoting economic growth alone may not result in inclusive, sustainable, and equitable development results, the global trade and investment system has a significant influence on human rights.<sup>26</sup>

On the one hand, environmental legislation, both national and international, and environmental policies, such as the development of renewable energy, environmental taxes, and conservation measures, aid in defining how nations will structure their economic operations.<sup>27</sup> On the other hand, trade law has an impact on how nations formulate their laws and policies in areas

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<sup>23</sup> Muigua, *Securing Our Destiny through Effective Management of the Environment*, Glenwood Publishers Limited (2020), ISBN: 978-9966-046-06-1.

<sup>24</sup> 'Trade and the Environment - OECD' <<https://www.oecd.org/trade/topics/trade-and-the-environment/>> accessed 21 September 2022; 'OHCHR | Trade and Investment' (OHCHR) <<https://www.ohchr.org/en/development/trade-and-investment>> accessed 21 September 2022; Frankel, J.A., "Environmental effects of international trade." *HKS Faculty Research Working Paper Series* (2009).

<sup>25</sup> *The Link between Trade and Development: What Role for the EU Trade Policy?* AIF Conference, Christiansborg, 12 September 2000; See also Preamble, World Trade Organization, "Marrakesh Agreement Establishing the World Trade Organization. Annex 1A: Multilateral Agreements on Trade in Goods-Agreement on Trade-Related Investment Measures", *The Results of the Uruguay Round of Multilateral Trade Negotiations: The Legal Texts* (World Trade Organization, Geneva, 1995), pp. 163-167.

<sup>26</sup> 'OHCHR | Trade and Investment' (OHCHR) <<https://www.ohchr.org/en/development/trade-and-investment>> accessed 21 September 2022.

<sup>27</sup> International Institute for Sustainable Development & United Nations Environment Programme, *Trade and Green Economy: A Handbook*, (International Institute for Sustainable Development, Geneva, 2014), pp. 3-4.



## *Contemporary Issues in Environmental Conflict Management: Challenges and Prospects*

that are crucial to environmental policy, such as subsidies, technical regulations, investment policy, and taxation.<sup>28</sup>

The use of non-renewable raw commodities to generate foreign exchange has been considered to be the primary relationship between commerce and sustainable development.<sup>29</sup> This, it has been argued, is a result of a situation in which the developed market economies' dependence on other mineral imports from developing countries has also increased, and non-renewable resources like fuels and minerals, as well as manufactured goods, are now significantly more significant than tropical goods and other agricultural materials in the flow of primary goods from developing to industrial countries.<sup>30</sup> The Agenda 2030 for Sustainable Development seeks to ensure that there is a significant increase in exports of developing countries, with a focus on doubling the share of least developed countries in global exports by 2020. This has been such a serious issue that it has continuously impacted third world countries.<sup>31</sup>

Economic expansion brought about by increased commerce may have a clear negative effect on the environment by causing pollution to rise or the degradation of natural resources. Additionally, if environmental regulation rigour varies between nations, trade liberalisation may result in specialisation in pollution-intensive businesses in specific nations - the so-called pollution haven hypothesis.<sup>32</sup> On the other hand, equitable international commerce may help nations attain food security, create good jobs for the unemployed,<sup>33</sup> and encourage technological transfer<sup>33</sup>, maintain national economic stability and aid in the construction of infrastructure, not just for the

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<sup>28</sup> *Ibid*, pp. 3-4.

<sup>29</sup> "World commission on environment and development." *Our common future* 17, no. 1 (1987): 1-91., para. 41. *However, this is not to say that it is the only link. There are other links between trade and sustainable development; if protectionism raises barriers against manufactured exports, for example, developing nations have less scope for diversifying away from traditional commodities. And unsustainable development may arise not only from overuse of certain commodities but from manufactured goods that are potentially polluting. The Commission also observed that the increase in protectionism in industrial countries stifles export growth and prevents diversification from traditional exports. Consequently, if developing countries are to reconcile a need for rapid export growth with a need to conserve the resource base, it is imperative that they enjoy access to industrial country markets for non-traditional exports where they enjoy a comparative advantage. (para. 51).*

<sup>30</sup> *Ibid*, para. 40.

<sup>31</sup> United Nations, *Transforming our world: the 2030 Agenda for Sustainable Development*, op cit., para. 17.11.

<sup>32</sup> 'OHCHR | Trade and Investment' (OHCHR) <<https://www.ohchr.org/en/development/trade-and-investment>> accessed 21 September 2022.

<sup>33</sup> Art. 7 of the TRIPS states that: "The protection and enforcement of intellectual property should contribute to the promotion of technological innovation and to the transfer and dissemination of technology, to the mutual advantage of producers and users of technological knowledge and in a manner conducive to social and economic welfare, and to a balance of rights and obligations."

transportation of products to and from ports but also for the provision of essential services like energy, water, and sanitation.<sup>34</sup>

When included as an SDG facilitator in the framework for sustainable development, equitable trade may be more successfully used to achieve possible objectives including the eradication of poverty, the creation of jobs, access to universal healthcare and education, and a healthy environment.<sup>35</sup>

Under the right circumstances, trade may be helpful for growth and development. Trade enables nations to access bigger foreign markets, as well as skills, technology, and money, which in turn enables a better use of productive resources to accelerate structural change. Trade also gives a way to get over limitations provided by tiny local markets.<sup>36</sup>

While it is obvious that the environment, commerce, and development are related, it would be preferable to take an integrated strategy that completely takes into account environmental issues, fair trade, and sustainable development.<sup>37</sup> The goal of an efficient investment legal and policy framework should be to advance sustainable development. Additionally, it need to guarantee little to no environmental harm.<sup>38</sup> Furthermore, human rights must always be respected. Arguably, the regimes governing intellectual property, technological transfer, climate change, and energy also intersect and influence one another. Any review must take into account how different regime convergent, divergent, and intersectional trends affect the realisation of human rights.<sup>39</sup>

The principles of sustainable development, particularly those that strive to protect human rights as well as good environmental management and governance must, therefore, be adhered to for long-term and sustainable investment strategies to have a beneficial influence on the lives of

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<sup>34</sup> Galmés, G.V., 'Trade as an enabler of sustainable development and poverty eradication,' in *United Nations, The Road from Rio+20: Towards Sustainable Development Goals, Issue 4, September 2014, p. 10. UNCTAD/DITC/TED/2014/1 Available at* [http://unctad.org/en/PublicationsLibrary/ditcted2014d1\\_en.pdf](http://unctad.org/en/PublicationsLibrary/ditcted2014d1_en.pdf) [Accessed on 05 April 2022].

<sup>35</sup> *Ibid*, p.10.

<sup>36</sup> *United Nations Conference on Trade and Development, Towards an enabling multilateral trading system for inclusive and sustainable development, op cit, para. 5. Available at* [http://unctad.org/meetings/en/SessionalDocuments/cimem5d5\\_en.pdf](http://unctad.org/meetings/en/SessionalDocuments/cimem5d5_en.pdf) [Accessed on 5 April 2022].

<sup>37</sup> Muigua, K., *Nurturing Our Environment for Sustainable Development*, Glenwood Publishers, Nairobi – 2016, chapter Ten.

<sup>38</sup> Muigua, K., *International Investment Law and Policy in Africa: Human Rights, Environmental Damage and Sustainable Development* - Paper Presented at the Africa International Legal Awareness (AILA) Africa International Legal Awareness (AILA) Conference Held on 5th November, 2018 at Riara University, Nairobi, Kenya.

<sup>39</sup> 'OHCHR | Trade and Investment' (OHCHR) <<https://www.ohchr.org/en/development/trade-and-investment>> accessed 21 September 2022.

communities.<sup>40</sup> A human rights-based approach to trade and investment should take the following factors into account: how obligations under trade and investment law agreements may affect a state's capacity to uphold its human rights obligations; what steps States and other actors should be taking to ensure positive impacts and prevent negative impacts; and consideration of action that is necessary to mitigate against any negative impacts that do occur.<sup>41</sup>

To do this, the current frameworks for foreign trade and investment must change from being engines of economic growth to serving as a multifunctional platform for the promotion of comprehensive, people-centered development.<sup>42</sup>

### **3. Conclusion**

The issues highlighted in this paper are critical and require to be effectively considered when coming up with institutions and approaches designed to address environmental conflicts. The 2030 Agenda on Sustainable Development Goals recognises the cross cutting issues that affect people's livelihoods, pursuit of peace and development.

As such, the theme of conflict management should always be explored within the larger lens of sustainable development agenda.

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<sup>41</sup> 'OHCHR | Trade and Investment' (OHCHR) <<https://www.ohchr.org/en/development/trade-and-investment>> accessed 21 September 2022.

<sup>42</sup> Ibid.

*Contemporary Issues in Environmental Conflict Management: Challenges and Prospects*

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