



# Africa in the Eye of the Storm: Navigating Law and Structural Inequality in Global Environmental Relations

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## ABSTRACT

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Environmental racism is a phenomenon defined by an unfair allocation of environmental risks. It is a systematic violation of the right to a safe and healthy environment. Environmental racism takes root in the colonial prioritisation of race in the distribution of social and environmental benefits. The environment should not be treated like an infinite garbage can. The economic polarity of the world will always have some people on the receiving end of an ordeal. In contradistinction to the ideal, in Africa, environmental justice is a concept of privilege. The costs of industrialisation such as environmental degradation and the generation of toxic waste have brought about imbalances in the environment. These imbalances have caused variant problems, both short term and long term

This article discussed environmental racism and what it means for the realisation of environmental justice. This article further compared the successes of the Bamako Convention to the Basel Convention in the light of the realities of the dumping of hazardous waste in Africa and the conduct of activities injurious to the environment. It further examined the activities of multinational companies in Africa and how weak regulatory environments aid the impunity of environmental pollution.

## INTRODUCTION

Environmental racism is the type of structural racism that causes people of color to be disproportionately affected by policies and practices that necessitate them to live close to places with toxic waste like landfills, sewage works, mines, power stations and other such locations that poses a risk to their health or safety.<sup>1</sup> As Weintraub stated, environmental racism is the deliberate placement of toxic waste sites, landfills, incinerators and industries that pollute the environment in communities of people of color.<sup>2</sup> In a broader context, environmental racism poses a significant risk to the poorest countries in the world, most of which are in Africa.<sup>3</sup> Besides the inefficient environmental policymaking in many African countries, the flow of plastics to Africa is contributing to the buildup of an immense environmental crisis. There has been a consistent dumping of electronic products in Africa, this alone accounts for a significant share of the environmental risk that Africa is exposed to.<sup>4</sup>

In the wake of environmental racism, indigenous populations are often at risk.<sup>5</sup> This is because the gentrification of indigenous land can inspire the need for resettlement. Environmental racism is a racial injustice that is often not really considered in the severity of its impact on the environment of vulnerable racial communities.<sup>6</sup> Africa is a region that

is trapped in the toxicity of environmental racism. The history of environmental racism in Africa dates back to colonialism, when the exploitation of the African environment led to the creation of systems that currently burden the African environment and has led to the displacement of indigenous communities.<sup>7</sup> In examining environmental racism and its impact on Africa, there is the question whether toxic waste dumping in Africa is based on a calculation of cost benefit analysis or on environmental racism. Cost benefit analysis is the systematic process through which businesses explore decisions to take and which to forego. In cost benefit analysis, the expected rewards of an action are weighed against the costs.<sup>8</sup> This determines whether the action would be taken. The use of cost benefit analysis in the evaluation of environmental regulations especially in developed countries like the US has been criticized to lack an ethical foundation, and therefore not the right fit for the problems it was hoped it would resolve since environmental regulation is about moral issues.<sup>9</sup> The argument against the ethical value of cost benefit analysis in environmental protection was further treated in Hsu's article, which captured debates on the relevance of cost benefit analysis in environmental law.

One of the most prominent scholars, amongst critics of the economic approach to measuring impact of environmental law and policy, Lisa Heinzerling, is known for her intense engagement of the debate where through a confrontational approach, she has held ground on the ethical indignation of environmental issues.<sup>10</sup> Cost benefit analysis have rightly been considered amoral, until an environmental outcome defines its use. An instance is when oil

- 1 Beech, P., (2020). *What is environmental racism and how can we fight it?* World Economic Forum. <<https://www.weforum.org/agenda/2020/07/what-is-environmental-racism-pollution-covid-systemic/>> [Last seen: 18.01.2022].
- 2 Weintraub, I., (1994). Fighting environmental racism: a selected annotated bibliography. *Electronic Green Journal*, 1 (1). <<https://doi.org/10.5070/g31110155>>
- 3 Focus Economics., (2020). *The poorest countries in the world.* FocusEconomics | Economic Forecasts from the World's Leading Economists. <<https://www.focus-economics.com/blog/the-poorest-countries-in-the-world>> [Last seen: 18.01.2022].
- 4 UN Environment., (2022). Africa waste management outlook: Summary for decision makers. <[https://wedocs.unep.org/bitstream/handle/20.500.11822/25515/Africa\\_WMO\\_Summary.pdf?sequence=1&isAllowed=y](https://wedocs.unep.org/bitstream/handle/20.500.11822/25515/Africa_WMO_Summary.pdf?sequence=1&isAllowed=y)> Beech, P., (2020). *What is environmental racism and how can we fight it?* World Economic Forum. <<https://www.weforum.org/agenda/2020/07/what-is-environmental-racism-pollution-covid-systemic/>> [Last seen: 18.01.2022].
- 6 The Lancet Planetary Health., (2018). Environmental racism: time to tackle social injustice. *The Lancet Planetary Health*, 2 (11), e462. <[https://doi.org/10.1016/s2542-](https://doi.org/10.1016/s2542-5196(18)30219-5)

- 7 Dominguez, L. & Luoma, C., (2020). Decolonising conservation policy: how colonial land and conservation ideologies persist and perpetuate indigenous injustices at the expense of the environment. *Country*, 9 (3), 65. <<https://doi.org/10.3390/land9030065>>
- 8 Hayes, A., (2021). *How Cost-Benefit analysis (CBA) process is performed.* Investopedia. <<https://www.investopedia.com/terms/c/cost-benefitanalysis.asp>> [Last seen: 18.01.2022]
- 9 Ackerman, F. & Heinzerling, L., (2002). Pricing the priceless: cost-benefit analysis of environmental protection. *University of Pennsylvania Law Review*, 150 (5), 1553. <<https://doi.org/10.2307/3312947>>
- 10 Shi-Ling Hsu, "On the Role of Cost-Benefit Analysis in Environmental Law" 2004 Northwestern School of Law Draft Paper

industry players decide to use international politics to influence environmental regulation on plastics in Kenya, where it is obvious that economically for them, it's more profitable to find a ready market for their environmentally harmful goods than to have to be mindful of its impact on the environment.<sup>11</sup> This is despite Kenya's struggle with the management of plastic waste. When cost benefit analysis is used to calculate the benefits of toxic waste dumping in countries with weak environmental protection mechanisms, and there is a choice to protect economic interests above environmental wellbeing of communities concerned, then cost benefit analysis stop appearing in its amoral sartorial, but adopt an ethical pose.

## THE HISTORY OF ENVIRONMENTAL RACISM

Environmental racism emerged from the events that defined the mission of the environmental justice movement in the America of the 1980s. Events such as the hazardous mass of the Warren Country waste disputes in North Carolina and the 'racially distributed spread of petrochemical pollution in "Cancer Alley", Louisiana' were evidence of the contemporary problem that environmental racism is. The idea that detritus is a social process, conceptually frames the historical essence in which environmental racism developed in. It especially captures the social problems and constructions that have long defined environmental relations. The interpretations of race and waste and their influences on each other reach to the foundations of American nationhood.<sup>12</sup> Environmental racism was essentially an American idea, since it was discovered that waste management policies had a racist undertone. Environmental racism is a problem that can be contextualized and it is often judged based on the

effect that environmental risks have on a racial demographic, stemming from the actions of the privileged race.

The existence of racial privilege has long been the foundation for environmental racism. In the African context, the history of environmental racism is the history of colonial exploitation. White argued that colonialism wrecks violence on the human relationship with the environment. He further showed how environmental racism is connected with colonialism by creating a link on the negative impact of colonialism on the lives of indigenous people and their environment.<sup>13</sup> The Scramble for Africa in 1884 to 1885 set the pace for the environmental exploitation that was to define the power balance of environmental relations and the framing of Africa as the dumping ground in today's environmental politics. The colonial power claims that made the Berlin Conference of 1884-85 necessary were so strong that the mediative purpose of the conference was defeated. The colonial power claims was one of the major factors that brought about the First World War.<sup>14</sup> The Scramble for Africa was a scramble for resources.<sup>15</sup> It was a commodification of the African environment without regard for its systemic implications. Weingaf pointed out that Africa had long suffered from astonishing levels of inequality, poverty and oppression since the end of colonialism. He argued that tying the cause of underdevelopment and poverty to corruption and governance is falling far from the real cause of Africa's problems which is the frustration of industrial development in the stifling atmosphere that was created by colonialism.<sup>16</sup> Environmental racism has evolved with colonialism. Today, colonialism far from being a subject of occupation has thrived in an international system of

11 Tabuchi, H., Corkery, M. & Mureithi, C., (2020). *Big oil is in trouble. Its plan: Flood Africa with plastic*. The New York Times. <<https://www.nytimes.com/2020/08/30/climate/oil-kenya-africa-plastics-trade.html>> [Last seen: 18.01.2022].

12 Davies, T., (2017). Clean and white: a history of environmental racism in the United States. *Ethnic and Racial Studies*, 40 (8), 1360–1362. <<https://doi.org/10.1080/01419870.2017.1287425>>

13 Whyte, K., (2018). Settler Colonialism, Ecology, and Environmental Justice. *Environment and Society*, 9 (1), 125–144. <<https://doi.org/10.3167/ares.2018.090109>>

14 Joplin, S., (2019). *Scramble for Africa – New World Encyclopedia*. New World Encyclopedia. <[https://www.newworldencyclopedia.org/p/index.php?title=Scramble\\_for\\_Africa&oldid=1026554](https://www.newworldencyclopedia.org/p/index.php?title=Scramble_for_Africa&oldid=1026554)> [Last seen: 18.01.2022].

15 Al Jazeera. (2010, Sept. 5). *The scramble for Africa: A History of independence*. Independence News | Al Jazeera. <<https://www.aljazeera.com/videos/2010/9/5/the-scramble-for-africa-a-history-of-independence>> [Last seen: 18.01.2022].

16 Weingraf, L., (2019). *Legacies of colonialism in Africa* | International Socialist Review. International Socialist Review. <<https://isreview.org/issue/103/legacies-colonialism-africa/>> [Last seen: 18.01.2022].

environmental regulation and with it, environmental racism is perpetuated not just with the way it gives more representation to Western interests, but also in how it controls the narratives from Africa.<sup>17</sup>

## GERBOISE BLEUE AND THE NUCLEAR PRECEDENCE

When the Gerboise Bleue happened, it marked as one of the many expressions of environmental racism in a region that is often the target of exploitative actions by the developed world. The Gerboise Bleue was a French nuclear testing operation that started on the 13<sup>th</sup> of February 1960. The name had meant 'blue jerboa' after the blue part of the French tricolor flag and a small Saharan rodent. The nuclear bomb had a blast capacity of 70 kilotons. More powerful than the bomb the United States had dropped after the Second World War in Hiroshima. The first of the nuclear bombs that France had tested was in Tanezrouft area of the Sahara Desert. Over the span of two years, France had tested four nuclear bombs above Tanezrouft. During these two years, Algeria which was a country close to the test site was under the colonial occupation of France. When Algeria got independence in 1962, still reeling from a long-term revolutionary war, France had kept a military presence in the area and had tested 13 nuclear bombs in a facility that was hidden underneath the Hoggar Mountains, 400 miles from Reggane in the Sahara. Upon leaving, the French had buried hazardous materials from the nuclear tests in the areas it had tested.

Some Algerians who did not know that the buried materials were contaminated started to harvest the materials for their useful parts. After that time, the inhabitants of Reggane had recorded the prevalence of medical problems such as babies that were born with atrophied limbs; stomach cancer, skin cancer and liver cancer; and there also were reports of temporary blindness among those that saw the vicious flash of light that lit up the Maghreb in the early morning hours. The French government's response to the criticism that attended

17 DeCastro, D., (2017). The Colonial Aspects of International Environmental Law: Treaties as Promoters of Continuous Structural Violence. *Groningen Journal of International Law*, 5 (2), 168-190. <<https://doi.org/10.21827/5a6af9c46c2ff>>

the Gerboise Bleue was about its recklessness in its management of the nuclear operation. In 2014, the French newspaper *Le Parisien* had revisited the Gerboise Bleue operation by publishing an article titled 'choc sur la bombe A en Algeria,' (the shocking document regarding the A-bomb in Algeria. The article which had been written by Sébastien Ramnoux exposed information which contradicted what the French government had earlier claimed. Along with it was a copy of a French military map from the 1960s that showed the test area of the initial explosion at Reggane in the Sahara with a distance of 1,300 kilometres in the southwest of the Algerian capital, Algiers. The map further showed the spread of the operation's aftereffects from the test area to different parts of Africa and Southern Europe. The radiation had been more intense and had reached farther places than the French government had admitted before 2014.<sup>18</sup> The Gerboise Bleue emphasised the environmental impact of colonialism and its tendency of environmental racism.<sup>19</sup> The colonial experience of Africa and the imbalance in the environmental relations it created, justified a dangerous precedence like the Gerboise Bleue. The Gerboise Bleue, as it should, has become a reference point for the complex evolution of environmental racism and its structural violence against Africa.

## THE SCOURGE OF E-WASTE

Thirteen significant levels of copper, cadmium, lead, iron, chromium, and nickel.<sup>20</sup> At the Agbogbloshie dump, it was discovered that the workers at an e-waste recycling facility had a high level of blood lead, cadmium, chromium, and urinary nickel more than non-e-waste workers.<sup>21</sup> The impact of

18 Panchasi, R., (2019). "No Hiroshima in Africa": The Algerian war and the question of French nuclear tests in the Sahara. *History of the Present*, 9 (1), 84. <<https://doi.org/10.5406/historypresent.9.10084>>

19 Magdaleno, J., (2015). *Algerians suffering from French atomic legacy, 55 years after nuke tests*. Aljazeera. <<http://america.aljazeera.com/articles/2015/3/1/algerians-suffering-from-french-atomic-legacy-55-years-after-nuclear-tests.html>> [Last seen: 18.01.2022].

20 Chama, M., Amankwa, E. & Oteng-Ababio, M., (2014). Trace metal levels of the Odaw river sediments at the Agbogbloshie e-waste recycling site. *Journal of Science and Technology (Ghana)*, 34 (1), 1. <<https://doi.org/10.4314/just.v34i1.1>>

21 Wittsiepe, J., Feldt, T., Till, H., Burchard, G., Wilhelm, M.

e-waste in Ghana is underemphasized as the country makes about 105 to 268 million dollars per annum from materials that were gotten from e-waste.<sup>22</sup> It also provides jobs for around 200,000 people<sup>23</sup> and forms what would be considered an extra source of foreign exchange. The long term effect is however not considered.

The trade of e-waste in Nigeria and Ghana is further motivated by the rising costs of new electronic equipment, and the exportation of old and used Electronic and Electrical Equipment (EEE) to developing countries like Nigeria and Ghana is on the basis that there is the lack of capacity to purchase new equipment while there is need to keep up with the technological trend.<sup>24</sup> The toxicity of the e-waste trade is a highly significant evident of the changing faces of environmental racism, especially against the most vulnerable people in Africa. The exploitation of their socioeconomic vulnerability touches on the fundamental question about the right to a healthy environment and the protection of such right as it is contained in Article 4 of the African Charter on Human and People's Rights (Banjul Charter). Article 24 provides that 'All people shall have the right to a general satisfactory environment favourable to their development.'<sup>25</sup> A 'general satisfactory environment' would mean an environment healthy and safe by global standards. However the scale of balances in global trade has seen that the African

environment and its sustainable development are threatened by the toxicity of e-waste trade and governmental incapacity in addressing its importation.

## HAZARDOUS WASTE MANAGEMENT IN AFRICA

The danger of environmental racism in Africa is that it is costly both financially and environmentally. This is because hazardous waste management is expensive and complex to handle. Akpan and Olukanni have found that the improper management of hazardous waste in Africa has led to the proliferation of health challenges such as birth deficiencies and cancers.<sup>26</sup> In Nigeria, management of hazardous waste is unwieldy as its continued importation over several decades has proliferated in tons of toxic material that threatens the environment, economic growth, development and the enjoyment of human rights.<sup>27</sup> The disposal of hazardous waste is expensive as it requires special procedures and technical expertise to execute. Since e-waste is often left to informal waste management and recycling processes that employ crude techniques, in the absence of recycling infrastructure and competent waste management system, e-waste has now become a leading environmental pollutant and a threat to human health in Nigeria.<sup>28</sup>

The lack of competence in the management of hazardous waste is not only a Nigerian problem, in Kenya, Ghana and Tanzania too, e-waste management goes through informal processes that make it a dangerous environmental problem. Besides the governmental indifference to hazardous waste management in Nigeria, Kenya, Ghana and Tanzania, its management is further pressured by environmental

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& Fobil, JN., (2016). Pilot study on the internal exposure to heavy metals of informal-level electronic waste workers in Agbogbloshie, Accra, Ghana. *Environmental Science and Pollution Research*, 24 (3), 3097-3107. <<https://doi.org/10.1007/s11356-016-8002-5>>

- 22 Lebbie, TS, Moyebi, OD, Asante, KA, Fobil, J., Brune-Drisse, MN, Suk, WA, Sly, PD, Gorman, J. & Carpenter, DO., (2021). E-Waste in Africa: A Serious Threat to the Health of Children. *International Journal of Environmental Research and Public Health* , 18 (16), 8488. <<https://doi.org/10.3390/ijerph18168488>>
- 23 Lebbie, TS, Moyebi, OD, Asante, KA, Fobil, J., Brune-Drisse, MN, Suk, WA, Sly, PD, Gorman, J. & Carpenter, DO., (2021). E-Waste in Africa: A Serious Threat to the Health of Children. *International Journal of Environmental Research and Public Health* , 18 (16), 8488. <<https://doi.org/10.3390/ijerph18168488>>
- 24 Albuquerque, CA, Mello, CHP, Paes, VC, Balestrassi, PP & Souza, LB (2017, July). *Electronic junk: Best practice of recycling and production forecast case study in Brazil*. International Joint Conference – ICIEOM-ADINGOR-IISE-AIM-ASEM, Valencia, Spain.
- 25 African Charter on Human and People's Rights (Banjul Charter) 1970.

- 26 Akpan, VE & Olukanni, DO., (2020). Hazardous Waste Management: An African Overview. *Recycling*, 5 (3), 15. <<https://doi.org/10.3390/recycling5030015>>
- 27 Ijaiya, H., Abbas, WI & Wuraola, OT., (2018). Re-Examining Hazardous Waste in Nigeria: Practical Possibilities within the United Nations System. *African Journal of International and Comparative Law*, 26 (2), 264-282. <<https://doi.org/10.3366/ajicl.2018.0231>>
- 28 Nnorom, IC & Odeyingbo, OA., (2020). *Electronic waste management practices in Nigeria*. ScienceDirect. [Last seen: March 18, 2022], <<https://www.sciencedirect.com/science/article/pii/B9780128170304000140#:~:7E:text=Nigeria%20lacks%20the%20necessary%20recycling,E%2Dwaste%20disposal%20at%20dumpsites>>

racism. In other parts of the world, there are stories that show how environmental racism puts people at risk when it is evident that they have nothing to alleviate the risk. Bullard's study in 2007, found that race was more likely to predispose a population to environmental pollution than socioeconomic status.<sup>29</sup> In the case of Africa, the perception of the region, its people and its relevance, in the developed world has often influenced its environmental relations. The extreme faith in the quality of goods from developed countries like the United States and the UK often validate the market for foreign-used goods. However Azuka has argued that the preference for used electronic goods is motivated by economic forces.<sup>30</sup> Although used electronic goods can be cheap, there is no evidence that shows that the price differences between the new and the old is significant. One of the most problematic issues with e-waste management in Africa is that it is processed by people who have little knowledge about its dangers to the health and the environment, hence toxic components often find their way into places where they can easily cause havoc.

## AFRICA'S PLIGHT IN A NEAR ENVIRONMENTAL APOCALYPSE

Environmental racism presents challenges to Africa, especially when combined with the effects of climate change and poverty. Africa's most significant challenge in legally addressing environmental pollution from environmental racism is poverty. Africa's delicate situation is accentuated by the fact that Africa approached the 21<sup>st</sup> century as the poorest region.<sup>31</sup> Africa's plight is further made critical as it has been established that poverty contributes to environmental damage. Environmental pollution threatens human health in many African countries. Pona

and others found that environmentally-linked health problems are a major concern in Nigeria as there are many sources of environmental pollution such as air and water pollution, oil spillage, deforestation, desertification, erosion, and flooding resulting from a lack of good drainage system.<sup>32</sup> Most of the significant causes of death in Nigeria have been linked to environmental risk factors. Over the years, lower respiratory infection from air pollution in Nigeria has emerged from its fourth position in 2007 to be at the topmost rung of ranked causes of death in 2017.<sup>33</sup> Cobbinah and others have shown that in Ghana, the situation is no less severe, with increasing poverty predisposing the population to environmental pollution.<sup>34</sup> According to Srivastava and Pawlowska, Accra's main source air pollution is the burning of e-waste at the Agbogbloshie dumpsite with carcinogenic materials dispersed in the air and toxic metals spread in the waterways and oceans. The exposure to this dangerous materials causes health problems that costs millions of dollars in treatment.<sup>35</sup> The problem of environmental pollution is however compounded by the poor health infrastructure, especially in the countries most affected.

Minja of the National Bureau of Statistics in Tanzania, showed that Tanzania is a major consumer of used electronic goods that quickly become e-waste. She further pointed out that the country has a poor management system for e-waste.<sup>36</sup> Like in Nigeria and Ghana, there is no effective implementation of regulations in Tanzania. The increasing demand for such obsolete electronic goods poses a serious

29 NRDC. (2007, March). *Toxic wastes and race at twenty: 1987-2007*. <<https://www.nrdc.org/resources/toxic-wastes-and-race-twenty-1987-2007>> [Last seen: 18.01.2022].

30 Azuka, A.I., (2009). The influx of used Electronics into Africa: A perilous trend. *The influx of used electronics into Africa: A Perilous Trend*, 5 (1).

31 Hope, K.R., (2007). Poverty and environmental degradation in Africa: towards sustainable policy for reversing the spiral. *International Journal of Environment and Sustainable Development*, 6 (4), 451. <<https://doi.org/10.1504/ijesd.2007.016246>>

32 Pona, HT, Xiaoli, D., Ayantobo, OO & Narh Daniel Tetteh., (2021). Environmental health situation in Nigeria: current status and future needs. *Heliyon*, 7 (3), e06330. <<https://doi.org/10.1016/j.heliyon.2021.e06330>>

33 Pona, HT, Xiaoli, D., Ayantobo, OO & Narh Daniel Tetteh., (2021). Environmental health situation in Nigeria: current status and future needs. *Heliyon*, 7 (3), e06330. <<https://doi.org/10.1016/j.heliyon.2021.e06330>>

34 Cobbinah, P.B., Poku-Boansi, M. & Peprah, C., (2017). Urban environmental problems in Ghana. *Environmental Development*, 23, 33-46. <<https://doi.org/10.1016/j.envdev.2017.05.001>>

35 Srivastava, S. & Pawlowska, A.E. (2020, September 26). *Ghana: Balancing economic growth and depletion of resources*. World Bank Blog. <<https://blogs.worldbank.org/african/ghana-balancing-economic-growth-and-depletion-resources>> [Last seen: 18.01.2022].

36 Minja, R., (2019). *Tanzania's experience in compilation of e-waste statistics*. UNStats. <<https://unstats.un.org/unsd/environment/FDES/EGES6/Session%2028Tanzania E-waste%20statistics.pdf>>

long term problem since there is hardly a viable plan to control its inflow into Tanzania.<sup>37</sup> Although there are recyclable parts in such electronic goods, yet the unusable parts contain toxic materials that are often left in streets and in office stores.<sup>38</sup> In Kenya, the situation is no less dire. Before smart phones became ubiquitous in 2007, Kenya generated 2,800 tons of e-waste from television sets, Kenya churns out 44,000 tons of e-waste annually and has no law regulating the management of e-waste. The Nairobi River that serves as a source for many streams is heavily polluted by e-waste.<sup>39</sup>

The Kenyan government has responded to the problem of e-waste by developing the National E-Waste Management Strategy, an action plan to combat the scourge of e-waste. The Kenyan National E-Waste Management Strategy, which is an action plan with a timespan of 2019/20 to 2023/24. It intends to fill the gaps in its management of e-waste at all political levels, and ensure a monitoring and evaluation apparatus for e-waste management, encourage research and innovation in E-waste management and put in place legal and regulatory framework for e-waste management in Kenya.<sup>40</sup> 150 tons from mobile phones and 2,500 tons from personal computers. The problem of e-waste in Nigeria, Kenya, Ghana and Tanzania mirrors the bigger picture of a serious futuristic public health emergency that would take from the lean resources of the vulnerable people in these countries. The asymmetric environmental relations with the source of the pollution defines the environmental racism that the region is confronted with. Asante and others have expressed that Africa is the most significant recipient of the burden of e-waste.<sup>41</sup> What this means for the region

is that there is a looming environmental crisis that it would not be able to resolve since the region lacks the financial resources, infrastructure and strong institutions to attend to the problem.

## BASEL CONVENTION

Environmental racism is not new to Africa. It has long been occurring in many forms, especially as toxic waste dumping and dangerous natural resource exploitation that would often have negative effects on indigenous people. The development of legal frameworks to address the issue of environmental racism has often encountered significant challenges that touch upon implementation, monitoring and assessment of environmental risks and damages. The Basel Convention was an instrument that promised to tackle the problem of toxic waste dumping but failed. The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal 1992 is an international instrument that was made in response to the risks of environmental pollution. As far as the early 1980s, the international community had been interested in managing hazardous waste. It was one of the three main environmental concerns and was in the United Nations Environment Programme's (UNEP) first Montevideo Programme on Environmental Law in 1981.<sup>42</sup> The aspiration of the Basel Convention was to protect developing states from the scourge of hazardous waste dumping, in the light of the fact that exported waste was finding its way from more developed countries to developing ones. The international community decided to adopt the Basel Convention in 1989.<sup>43</sup> Although during the negotiations that culminated into the Basel Conven-

37 Minja, R., (2019). *Tanzania's experience in compilation of e-waste statistics*. UNStats. <[https://unstats.un.org/unsd/environment/FDES/EGES6/Session%202\\_8Tanzania\\_E-waste%20statistics.pdf](https://unstats.un.org/unsd/environment/FDES/EGES6/Session%202_8Tanzania_E-waste%20statistics.pdf)>

38 Minja, R., (2019). *Tanzania's experience in compilation of e-waste statistics*. UNStats. <[https://unstats.un.org/unsd/environment/FDES/EGES6/Session%202\\_8Tanzania\\_E-waste%20statistics.pdf](https://unstats.un.org/unsd/environment/FDES/EGES6/Session%202_8Tanzania_E-waste%20statistics.pdf)>

39 Odhiambo, R., (2018). *Kenya's e-waste problem*. DW.COM. [Last seen: March 18, 2022, from <<https://www.dw.com/en/kenya-needs-to-step-up-efforts-to-recycle-e-waste/a-43252169>>

40 Ministry of Environment and Forestry. 2019. *National e-waste management strategy*. <<http://www.environment.go.ke/wp-content/uploads/2019/05/NATIONAL-E-WASTE-MANAGEMENT-STRATEGY-APRIL-29th-1.pdf>>

41 Asante, KA, Amoyaw-Osei, Y. & Agusa, T., (2019). E-waste

recycling in Africa: risks and opportunities. *Current Opinion in Green and Sustainable Chemistry*, 18, 109-117. <<https://doi.org/10.1016/j.cogsc.2019.04.001>>

42 UN Environment Programme., 2011. *Basel Convention > The Convention > Overview > History > Overview*. <<http://www.basel.int/TheConvention/Overview/History/Overview/tabid/3405/Default.aspx#:~:text=Law%20in%201981-,The%20Basel%20Convention%20on%20the%20Control%20of%20Transboundary%20Movements%20of,world%20of%20deposits%20of%20toxic>> [Last seen: 18.01.022].

43 Ahmad Khan, S., (2020). Clearly hazardous, obscurely regulated: Lessons from the Basel Convention on waste trade. *AJIL Unbound*, 114, 200-205. <<https://doi.org/10.1017/aju.2020.38>>

tion, there was the general consensus that it was morally inappropriate to dump toxic waste in developing countries with weak regulatory framework, yet there was disagreement over what materials would qualify as toxic and whether such materials could be exempted in the event that they are being exported for recycling and recovery purposes.<sup>44</sup> The resolution of that disagreement was leaving it to the discretion of states to prohibit whatever they deem as hazardous waste.<sup>45</sup> This was in line with the reasoning that states would act in their best interests and would prohibit what they need to prohibit.

The obligation of the state as contained in the instrument was towards ensuring that the state prohibiting toxic waste, would inform other parties to the treaty of its intention to enforce the prohibition.<sup>46</sup> States were also mandated not to allow the exportation of hazardous waste from its jurisdiction to states that have prohibited the exportation so far as there has been a notification of the prohibition. The convention also provides for states to exercise their rights to accept or refuse the importation of toxic waste.<sup>47</sup> Important to the treaty was the right of a party state to exercise its sovereignty in accepting or rejecting the importation of hazardous waste. The progress of the Basel Convention was weighed by the evolving trend of international politics, the empowerment of capitalism and what this meant for its compliance. The weakness of the international treaty came from the rise of multinationals and their growing power to influence local politics. The Basel Convention did not also take into consideration the asymmetric environmental relations between wealthy countries and poor countries. Khan observed that despite the existence of international law prohibiting hazardous waste dumping yet, many African countries have continued to be victims of the toxic waste trade.<sup>48</sup> This concern is rooted in

the failure of the instrument to have considered the weak regulatory systems of the developing countries who are parties to the convention and how the regulatory systems were susceptible to exploitation.

## BAMAKO CONVENTION

The protection of the environment in developing African countries was made necessary by the realities of the trade in toxic waste and its management. Ajibo found that over 90 percent of toxic waste generated and traded every year are from developed countries. The toxic waste is then shipped to developing countries to be recycled and to be disposed.<sup>49</sup> The making of the Bamako Convention on the Ban of the Import to Africa and the Control of Transboundary Movement and Management of Hazardous Wastes in Africa (Bamako Convention) was a reaction to Article 11 of the Basel Convention that provided that parties could enter into bilateral, multilateral and regional agreements on toxic wastes to developing countries.<sup>50</sup> The failure of the Basel Convention to protect the African environment from toxic waste dumping, culminated into the conception of the Bamako Convention as an instrument that would address the asymmetric environmental relations between poor African countries and developed countries that would attempt to exploit weak regulatory systems of these poor African countries.<sup>51</sup>

The Bamako Convention was negotiated in January 1991, by 12 countries which were then members of the Organisation of African Unity (OAU) and it came into force in 1998.<sup>52</sup> The Bamako Conven-

44 Clapp, J., (2010). *Toxic Exports: The Transfer of Hazardous Wastes from Rich to Poor Countries* (Illustrated ed.). Cornell University Press.

45 The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal., (1992), Article 3.

46 The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal., (1992), Article 4(1)(b).

47 The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal., (1992), Article 6(2).

48 Ahmad Khan, S., (2020). Clearly hazardous, obscurely

regulated: Lessons from the Basel Convention on waste trade. *AJIL Unbound*, 114, 200-205. <<https://doi.org/10.1017/aju.2020.38>>

49 Ajibo, K.I., (2016). Transboundary hazardous wastes and environmental justice. *Environmental Law Review*, 18(4), 267-283. <<https://doi.org/10.1177/1461452916675538>>

50 Ajibo, K.I., (2016). Transboundary hazardous wastes and environmental justice. *Environmental Law Review*, 18(4), 267-283. <<https://doi.org/10.1177/1461452916675538>>

51 Agbor, A. A., (2016). The ineffectiveness and inadequacies of international instruments in combatting and ending the transboundary movement of hazardous wastes and environmental degradation in Africa. *African Journal of Legal Studies*, 9 (4), 235-267. <<https://doi.org/10.1163/17087384-12340010>>

52 UNEP., 2018. *The Bamako Convention*. UNEP – UN Environment Programme. <<https://www.unep.org/explore-topics/environmental-rights-and-governance/>>



tion as an instrument to address the environmental racism of toxic waste dumping was timely gauging the history of toxic waste dumping in Africa. The Probo Koala and the Koko dumping are instances that spurred the Bamako Convention into realization. The Probo Koala incident in 1996 was about the dumping of 500 cubic meters of highly toxic waste in Abidjan, Cote d'Ivoire, by a Panama-registered cargo tanker, which had been chartered by Trafigura, a commodities trading multinational company.<sup>53</sup> The toxic waste had been generated onboard the ship from the refining of a dirty petroleum product called coker naphtha that would be added to petrol, before being sold. Trafigura had the knowledge that the waste that had been generated was hazardous but they did not know how they were going to dispose them. This was made evident in an internal Trafigura mail that Amnesty International had gotten and which someone in the company had written: *I don't know how we dispose of the slops and I don't imply we would dump them, but for sure there must be some way to pay someone to take them.*<sup>54</sup>

The incident had had more impact than the deaths that had been recorded, with over 100,000 people needing medical intervention.<sup>55</sup> Trafigura had refused to allow a company to safely dispose the waste in the Netherlands for 620,000 US dollars, rather they hired a local company in Côte d'Ivoire that illegally disposed the waste for 17,000 US dollars and this caused a public health emergency.<sup>56</sup> The Koko dumping which occurred in 1988 was by an Italian company. Some Nigerian students that had been studying in Italy had gotten the information and had written to major Nigerian

newspapers and the attendant public attention it gained had spurred the Nigerian government into investigating the incident and it had discovered that above 3,884 tons of toxic waste had been shipped into Nigeria by an Italian company with Nigerian associates. The Italian company had used its Nigerian registered company to aid the Italian multinationals, Ecomar and Jelly Wax dump toxic waste in the Mid-Western town of Koko.<sup>57</sup> In reflection on these incidents, the Bamako Convention provides a preambular recognition of the complexity in the transboundary trade in toxic waste.<sup>58</sup> The convention places an obligation in Article 1, on all parties to it, to prohibit the import of all toxic wastes.<sup>59</sup> This call to action realizes the lack of regulation in some African countries in checking the importation of toxic waste in its jurisdiction, just as in the case of Tanzania that has no well-defined e-waste legislation despite that e-waste is a major concern to its environment. The Bamako Convention in Article 4(1) (b) further allows for member states to protect other parties to the convention by preventing and interfering in the shipping of toxic wastes by a non-member to the Bamako Convention.<sup>60</sup>

The Bamako Convention's promise is in its tone of determination to stop the deleterious toxic waste trade in Africa that threatens the health and the environment of countries in the region. The convention's appeal to solidarity is a recognition of the asymmetric environmental relations between developed countries and developing countries. Eze has argued that the duty of checking the illegal disposal of toxic waste has been daunting even where strict regulation is concerned.<sup>61</sup> The unchecked flow

[what-we-do/meeting-international-environmental](#)> [Last seen: 18.01.2022]

53 UNEP., 2018. *The Bamako Convention*. UNEP – UN Environment Programme. <<https://www.unep.org/explore-topics/environmental-rights-and-governance/what-we-do/meeting-international-environmental>> [Last seen: 18.01.2022]

54 Amnesty International., 2021. *Trafigura: A toxic journey*. <<https://www.amnesty.org/en/latest/news/2016/04/trafigura-a-toxic-journey/>> [Last seen: 18.01.2022]

55 Amnesty International., 2021. *Trafigura: A toxic journey*. <<https://www.amnesty.org/en/latest/news/2016/04/trafigura-a-toxic-journey/>>

56 Amnesty International., 2021. *Trafigura: A toxic journey*. <<https://www.amnesty.org/en/latest/news/2016/04/trafigura-a-toxic-journey/>> [Last seen: 18.01. 2022]

57 Ladapo, O.A., (2013). The contribution of cartoonists to environmental debates in Nigeria: The Koko toxic-waste-dumping incident. *RCC Perspectives, Eco-Images: Historical Views and Political Strategies, 1*.

58 Bamako Convention on the Ban of the Import to Africa and the Control of Transboundary Movement and Management of Hazardous Wastes in Africa 1991.

59 Bamako Convention on the Ban of the Import to Africa and the Control of Transboundary Movement and Management of Hazardous Wastes in Africa 1991.

60 Bamako Convention on the Ban of the Import to Africa and the Control of Transboundary Movement and Management of Hazardous Wastes in Africa 1991.

61 Eze, C. N., (2007). The Bamako Convention on the Ban of the Import into Africa and the Control of the Transboundary Movement and Management of Hazardous wastes within Africa: A milestone in environmental Protection? *African Journal of International and Comparative Law, 15* (2), 208

of e-waste in the form of used electronics to African countries like Nigeria, Kenya, Ghana and Tanzania proves that Eze's argument is still relevant to the discussion on environmental racism and the challenge it poses to environmental justice in African countries. It is in this context that the Bamako Convention's potential in tackling the e-waste trade at a regional level becomes essential. It has also become quite imperative to explore its appeal to a solidarity approach to the regulation of e-waste in the region.

## MULTINATIONAL COMPANIES AND ENVIRONMENTAL LOBBYING IN AFRICA

The discovery of oil, which is often referred to as the 'black gold' in many African countries brought along with it, economic development, pollution and immense corruption. Behind the scene of oil pollution and reckless environmental engagement, were African governments devoted to the interests of multinational oil companies, who for instance in a country like Nigeria, was linked to the persecution and violation of the rights of environmental activists who challenged the environmental damage that oil exploitation caused in their communities. The environmental racism that framed the reckless oil exploitation in Nigeria has had lasting impact on the lives of rural dwellers in the Niger Delta region of Nigeria. Oil was found in Oloibiri in 1956 by the Royal Dutch/Shell in what is now known as Bayelsa in the southern region of Nigeria.<sup>62</sup> This was before the Nigerian Independence. Oil production took place in 1958 and continued even after the Nigerian Independence in 1960.

The Nigerian subsidiary of the Shell Company, Shell Petroleum Development Corporation (SPDC), produces around 14 percent of the oil production of the Shell company and outside the United States, is the largest producer of its subsidiaries. Ogoniland which accommodates the most oil facilities in the Niger Delta region of Nigeria. It is made up of three local governments: Khana, Gokana, and Tai-Elleme.

– 229. <<https://doi.org/10.3366/ajicl.2007.15.2.208>>

62 Ndimele, P. E. & Okotie, S., (2018). The Nigerian Economy before the discovery of crude oil. In *The political ecology of oil and gas activities in the Nigerian Aquatic Ecosystem*. Essay, Academic Press, an imprint of Elsevier.

It measures an area of 404 square miles and with a population of around 500,000 Ogoni people in 1996, was one of the most densely-populated areas in Nigeria. The SPDC with its oilfields in Bomu, Korokoro, Yorla, Bodo West, and Ebubu had above-ground pipes that were badly managed and would create oil spills often.<sup>63</sup> At the time, the discovery of oil seemed to have held a lot of promises for the people of the community, but the ensuing pollution disrupted their livelihoods through the degradation of farmlands and its devastating effects on aquatic life.<sup>64</sup> This meant that the fishing and farming, which were the major occupations in the community became difficult. The rise of Ken Saro-Wiwa, a Nigerian journalist and environmental activist and the Movement for the Survival of the Ogoni People (MOSOP) against the environmental destruction that SPDC's operations caused Ogoniland, pitted Ken Saro Wiwa and MOSOP against the military regime of General Sani Abacha who was actively looking out for SPDC's interests.<sup>65</sup> Ken Saro Wiwa after he and eight others from the MOSOP had been tried by judges, who were loyal to the Abacha regime, they were executed<sup>66</sup> despite interventions from the international community.

The environmental pollution in the Niger Delta which is a result of SPDC's activities has not just affected the livelihoods of the communities where the oil spills have occurred, but also threatens their health too as their source of drinking water is contaminated too.<sup>67</sup> The United Nations Environmental Programme (UNEP) in 2011 produced a report that contained the environmentally disastrous impact

63 Cayford, S., (1996). The Ogoni uprising: Oil, human rights, and a democratic alternative in Nigeria. *Conflict and Conflict Resolution in Africa*, 43 (2).

64 Atanda, O., (2015). *An overview of the legal framework for oil pollution in Nigeria*. ResearchGate. <[https://www.researchgate.net/publication/281102181\\_AN\\_OVERVIEW\\_OF\\_THE\\_LEGAL\\_FRAMEWORK\\_FOR\\_OIL\\_POLLUTION\\_IN\\_NIGERIA](https://www.researchgate.net/publication/281102181_AN_OVERVIEW_OF_THE_LEGAL_FRAMEWORK_FOR_OIL_POLLUTION_IN_NIGERIA)>

65 Brittain, V., (2014). Ken Saro-Wiwa: a hero for our times. *Race & Class*, 56 (3), 5-17. <<https://doi.org/10.1177/0306396814556220>>

66 Brittain, V., (2014). Ken Saro-Wiwa: a hero for our times. *Race & Class*, 56 (3), 5-17. <<https://doi.org/10.1177/0306396814556220>>

67 Amnesty International., 2013. *No clean up, no justice: Shell's oil pollution in the Niger Delta*. <<https://www.amnesty.org/en/latest/news/2020/06/no-clean-up-no-justice-shell-oil-pollution-in-the-niger-delta/>> [Last seen: 18.01.2022]

of oil production in Ogoniland and recommended the immediate cleanup of the environment. However, the recommendations of UNEP concerning the cleanup of oil spills in Ogoniland have been improperly attended to, and the Nigerian government's billion-dollar cleanup project in 2016 did not resolve the pollution.<sup>68</sup> The presence of multinational companies in Ghana is hinged on the fact that the country is endowed with natural resources such as gold, diamonds, manganese, oil, and bauxite. Gold contributes significantly to the Ghanaian economy.<sup>69</sup> According to Sasu, gold contributed 7.8 billion Ghanaian cedis (GHS), which is about 1.3 billion U.S. dollars in 2020 to Ghana's Gross Domestic Product.<sup>70</sup> This was about 2.03 of the Ghana's GDP in 2020 which was 68.35 billion dollars.<sup>71</sup> Essah has argued that while mining companies in the Global North adopt sustainable mining practices, it is not the case in the Global South. Abosso Goldfields, a mining company that owns one of Ghana's largest gold mine, the Damang mine, was acquired by the multinational mining company, Gold fields in 2002.<sup>72</sup> Essah has opined that Gold fields as a multinational company engaged more with the community and provided a lot of opportunities such as jobs and a boost of their agricultural productivity.

However environmental displacement was a part of the reality in the mining communities and in Damang, Abosso Goldfields would take lands from community members without consultation.<sup>73</sup> In Ken-

ya, the situation was the same as it was in Nigeria, as in the shown in the case of *Cortec Mining Kenya Limited, Cortec (Pty) Limited and Stirling Capital Limited v. Republic of Kenya*,<sup>74</sup> corruption and lack of transparency defined some of the contracts and deals that emanated from the mining industry. The case involved a mining project that was not in compliance with domestic environmental law.<sup>75</sup> It mirrors a concern about the collusion of government and multinationals in the big politics of natural resource management, that corruption is certain to encourage the lack of compliance with environmental regulations and regard for the host communities. Environmental racism is often in the power dynamics that exist between the multinational company and the host community where the multinational company is politically protected by the state. Such that the deliberate avoidance of responsibility where environmental pollution takes place is a disregard of the host community's right to life and to a safe environment.

## ENVIRONMENTAL RULE OF LAW AND AFRICA

Environmental rule of law is essential to the realisation of environmental justice. It represents an essential foundation for environmental and international law governance.<sup>76</sup> In establishing how environmental rule of law can act as a safeguard against the devastating effects of environmental racism in Africa, it is important to understand the environmental rule of law and its purpose in the international environmental law system. The rule of law as a legal concept is the principle of governance, whereby persons, institutions, and entities are subject to the law and are without the exception of favour, held towards the fulfillment of laws that were promulgated, equally enforced and adjudicated independently in accordance with international human rights norms and standards.<sup>77</sup> In an environmental context, the

68 Amnesty International., 2013. *No clean up, no justice: Shell's oil pollution in the Niger Delta*. <<https://www.amnesty.org/en/latest/news/2020/06/no-clean-up-no-justice-shell-oil-pollution-in-the-niger-delta/>> [Last seen: 18.01.2022]

69 Kwakyewah, C. & Idemudia, U., (2017). Canada-Ghana engagements in the mining sector: Protecting human rights or business as usual. *Transnational Human Rights Review*, 4.

70 Sasu, D.D., 2021. *Annual contributions of gold to GDP in Ghana 2013-2020*. <<https://www.statista.com/statistics/1272300/annual-contributions-of-gold-to-gdp-in-ghana/>> [Last seen: 18.01.2022]

71 O'Neill, A., (2021). *Gross domestic product (GDP) in Ghana 2026*. Statista. <<https://www.statista.com/statistics/447486/gross-domestic-product-gdp-in-ghana/>> [Last seen: 18.01.2022]

72 Business Excellence., 2020. *Abosso Goldfields Ltd / Business Excellence*. <<https://www.bus-ex.com/article/abosso-goldfields-ltd>> [Last seen: 18.01.2022]

73 Essah, M., (2016). *Addressing community development through sustainable mining practices: The Case of Abosso Goldfields*. York University, Toronto Ontario, Canada.

74 ICSID Case No. ARB/15/29.

75 Cortec Mining Kenya Limited, Cortec (Pty) Limited and Stirling Capital Limited v. Republic of Kenya, ICSID Case No. ARB/15/29.

76 Kreilhuber, A. & Kariuki, A., (2020). Environmental rule of law in the context of sustainable development. *The Georgetown Environmental Law Review*, 32.

77 UNEP Governing Council, Advancing Justice, Gover-

rule of law is represented by environmental justice, as its elements and definition suggests that its essence is the realization of a safe environment for everyone regardless of their socio-economic status, nationality or race. What this means is that, at the national level, the law would protect vulnerable communities from being subjected to the health risks of environmental pollution. At the international level, states would ensure that in their environmental relations with less developed states, the responsibility of not exploiting the socio-economic and political incapacity of such states is taken seriously. This is the cooperation needed for environmental justice to be realised globally. Nemesio has noted that environmental rule of law in developing countries is compromised because of a lack of cooperation between government, the private sector, and individual citizens.<sup>78</sup> This she attributed to the weakness of regulatory systems.<sup>79</sup> Raine and Pluchon argued along Nemesio's observation that effective laws and powerful institutions are needed to push the global climate agenda. According to them, the 2030 Agenda for Sustainable Development could only be realised if laws by states become more effective and institutions stronger.<sup>80</sup> At the international level, the distribution of culpability for environmental pollution indicates that global environmental rule of law is problematic. Oxfam's 2015 study showed that developed countries are responsible for more carbon emissions to the detriment of vulnerable developing countries that emit less. The study puts it thus: *The poorest half of the global population are responsible for only around 10% of global emissions yet live overwhelmingly in the countries most vulnerable to climate change – while the richest 10% of people in the world are responsible for around 50% of global emissions.*<sup>81</sup>

nance and Law for Environmental Sustainability (U.N. Doc. UNEP/GC.27/17 February 2013).

78 Nemesio, I.V., (2014). Strengthening environmental rule of law: Enforcement, combatting corruption, and encouraging citizen suits. *The Georgetown International Environmental Law Review*, 27.

79 Nemesio, IV., (2014). Strengthening environmental rule of law: Enforcement, combatting corruption, and encouraging citizen suits. *The Georgetown International Environmental Law Review*, 27.

80 Raine, A. & Pluchon, E., (2019). UN Environment—Advancing the environmental rule of law in the Asia-Pacific. *Chinese Journal of Environmental Law*, 3 (1), 117-126. <<https://doi.org/10.1163/24686042-12340037>>

81 Oxfam., 2015. *Extreme carbon inequality: Why the Paris*

Environmental racism in this context is the lack of consideration in the environmental scheme of things. The Oxfam study demonstrated that while consumption footprints of richer and poorer citizens in many countries assists in proving that while countries like China, India, Brazil and South Africa because of their expanding economies have a significant level and emissions that is increasing rapidly, the lifestyle consumption emissions of even their wealthiest citizens still does not match that of their counterparts in wealthy OECD countries.<sup>82</sup> Although there have been plans to transition from fossil fuels to sustainable energy sources in many developed countries, yet the urgency of environmental vulnerability in least developed countries is lacking in global environmental actions. For least developed countries, the combination of toxic environmental pollution and climate change are two environmental problems that have aggravated vulnerability and the challenges that come with it, however more attention is focused on climate change. Marcantonio and others have argued that there is a correlation between the effects of toxic pollution and climate change and both should be jointly examined, so as to arrive at exact solutions towards mitigation or reduction.<sup>83</sup> The lack of an environmental rule of law in the global environmental relations is evident in the unequal environmental burden that is borne by developing countries and in the lip service that world leaders pay to the urgency that attends the challenges. In the midst of all of these, Africa is the most affected, because it is home to the poorest countries in the world. The environmental racism which is the consequence of a lack of environmental rule of law in global environmental relations can be resolved through the establishment of an envi-

*climate deal must put the poorest, lowest emitting and most vulnerable people first.* Oxfam Media Briefing. <[https://oi-files-d8-prod.s3.eu-west-2.amazonaws.com/s3fs-public/file\\_attachments/mb-extreme-carbon-inequality-021215-en.pdf](https://oi-files-d8-prod.s3.eu-west-2.amazonaws.com/s3fs-public/file_attachments/mb-extreme-carbon-inequality-021215-en.pdf)>

82 Oxfam., 2015. *Extreme carbon inequality: Why the Paris climate deal must put the poorest, lowest emitting and most vulnerable people first.* Oxfam Media Briefing. <[https://oi-files-d8-prod.s3.eu-west-2.amazonaws.com/s3fs-public/file\\_attachments/mb-extreme-carbon-inequality-021215-en.pdf](https://oi-files-d8-prod.s3.eu-west-2.amazonaws.com/s3fs-public/file_attachments/mb-extreme-carbon-inequality-021215-en.pdf)>

83 Marcantonio, R., Javeline, D., Field, S. & Fuentes, A., (2021). Global distribution and coincidence of pollution, climate impacts, and health risk in the Anthropocene. *PLOS ONE*, 16 (7), e0254060. <<https://doi.org/10.1371/journal.pone.0254060>>

ronmental rule of law. There are three ways an environmental rule of law can be established in global environmental relations. These three ways involve African governments, environmental NGOs in the region, and governments of developed countries.

Firstly African governments have to understand the urgency that attends environmental challenges in the region and how collusion with the structural inequality exacerbates the problems. Environmental NGOs in the region are the voice of vulnerable communities and have a good knowledge of the environmental realities at the grassroots of many African countries. This is why environmental NGOs are vital to the resolution of the problem. African environmental NGOs must realise that the challenges that confront the African environment demand a different approach from those elsewhere. Therefore environmental NGOs in the region must ensure that they are heard more by improving on networks outside the region and should also approach local environmental problems through coalitional efforts. The governments of developed countries are often concerned more about the climate change than toxic waste dumping, however the correlated effects suggest that the same urgency should attend both environmental problems. There is need more than ever for the governments of developed countries to scrutinise the overseas environmental activities of multinationals registered in their countries following the obligation in the Basel Convention that demands that governments must not allow exportation of hazardous waste from their jurisdiction to states that have prohibited the exportation, especially states that have notified of the prohibition. The governments of developed countries could also work with environmental NGOs in Africa, so as to

encourage non-state participation in the realisation of environmental justice.

## CONCLUSION

Environmental racism continues to chip away at Africa's resilience to climate change and pollution. What prior studies have proven about environmental racism in Africa is that it has continued to evolve since the colonial times. From brazen environmental misadventures in Africa like the Gerboise Bleue to the Koko toxic waste dumping and now to the e-waste problem, environmental racism is becoming more complex in its manifestations and this is because it currently involves a multilayer complicity that puts Africans at the heart of environmental pollution and the toxic waste trade. The rising rate of pollution and crippling effects of climate change exacerbates Africa's environmental vulnerability, especially because it is a region that is home to the world's poorest communities and urban residential inequities. What makes environmental racism so established is the lack of an environmental rule of law in the global environmental relations system in which Africa gets a hard bargain. In the resolution of this environmental precarity, African governments must realise the urgency of the situation and must be willing to cooperate through multilateral efforts in combating environmental pollution. Environmental NGOs in the region must internalise and externalise their networking efforts and share information on the pattern of environmental pollution at the grassroots where there is little government presence so as to drive the realisation of environmental justice in Africa.

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## BIBLIOGRAPHY:

1. Abalansa, S., El Mahrad, B., Icely, J., & Newton, A., (2021). Electronic Waste, an Environmental Problem Exported to Developing Countries: The GOOD, the BAD and the UGLY. *Sustainability*, 13 (9), 5302. <<https://doi.org/10.3390/su13095302>> (In English)
2. Ackerman, F., & Heinzerling, L., (2002). Pricing the priceless: cost-benefit analysis of environmental protection. *University of Pennsylvania Law Review*, 150 (5), 1553. <<https://doi.org/10.2307/3312947>> (In English)

3. African Charter on Human and Peoples Rights (Banjul Charter), 1970 (In English)
4. Agbor, A. A., (2016). The ineffectiveness and inadequacies of international instruments in combatting and ending the transboundary movement of hazardous wastes and environmental degradation in Africa. *African Journal of Legal Studies*, 9 (4), 235-267. <<https://doi.org/10.1163/17087384-12340010>> (In English)
5. Ahmad Khan, S., (2020). Clearly hazardous, obscurely regulated: Lessons from the Basel Convention on waste trade. *AJIL Unbound*, 114, 200-205. <<https://doi.org/10.1017/aju.2020.38>> (In English)
6. Ajibo, K.I., (2016). Transboundary hazardous wastes and environmental justice. *Environmental Law Review*, 18 (4), 267-283. <<https://doi.org/10.1177/1461452916675538>> (In English)
7. Akpan, VE, & Olukanni, DO (2020). Hazardous Waste Management: An African Overview. *Recycling*, 5 (3), 15. <<https://doi.org/10.3390/recycling5030015>> (In English)
8. Albuquerque, CA, Mello, CHP, Paes, VC, Balestrassi, PP, & Souza, LB (2017, July). Electronic junk: Best practice of recycling and production forecast case study in Brazil. International Joint Conference – ICIEOM-ADINGOR-IISE-AIM-ASEM, Valencia, Spain. (In English)
9. Al Jazeera. (2010, Sept. 5). The scramble for Africa: A History of independence. Independence News | Al Jazeera. <https://www.aljazeera.com/videos/2010/9/5/the-scramble-for-africa-a-history-of-independence> [Last seen: 18.01.2022] (In English)
10. Amechi, E.P., & Oni, B.A., (2019). Import of Electronic Waste into Nigeria: the Imperative of a Regulatory Policy Shift. *Chinese Journal of Environmental Law*, 3 (2), 141-166. <<https://doi.org/10.1163/24686042-12340040>> (In English)
11. Amnesty International. (2021). Trafigura: A toxic journey. <<https://www.amnesty.org/en/latest/news/2016/04/trafigura-a-toxic-journey/>> [Last seen: 18.01.2022] (In English)
12. Amnesty International. (2013). No clean up, no justice: Shell's oil pollution in the Niger Delta. <<https://www.amnesty.org/en/latest/news/2020/06/no-clean-up-no-justice-shell-oil-pollution-in-the-niger-delta/>> [Last seen: March 18.01.2022] (In English)
13. Asante, KA, Amoyaw-Osei, Y., & Agusa, T., (2019). E-waste recycling in Africa: risks and opportunities. *Current Opinion in Green and Sustainable Chemistry*, 18, 109-117. <<https://doi.org/10.1016/j.cogsc.2019.04.001>> (In English)
14. Atanda, O., (2015). An overview of the legal framework for oil pollution in Nigeria. ResearchGate. <[https://www.researchgate.net/publication/281102181\\_AN\\_OVERVIEW\\_OF\\_THE\\_LEGAL\\_FRAMEWORK\\_FOR\\_OIL\\_POLLUTION\\_IN\\_NIGERIA](https://www.researchgate.net/publication/281102181_AN_OVERVIEW_OF_THE_LEGAL_FRAMEWORK_FOR_OIL_POLLUTION_IN_NIGERIA)> (In English)
15. Azuka, A.I., (2009). The influx of used Electronics into Africa: A perilous trend. *The influx of used electronics into Africa: A Perilous Trend*, 5 (1). (In English)
16. Bamako Convention on the Ban of the Import to Africa and the Control of Transboundary Movement and Management of Hazardous Wastes in Africa 1991. (In English)
17. Beech, P., (2020). What is environmental racism and how can we fight it? World Economic Forum. Retrieved March 18, 2022, from <https://www.weforum.org/agenda/2020/07/what-is-environmental-racism-pollution-covid-systemic/> (In English)
18. Brooke, J., (1988). Waste dumpers turning to West Africa. *The New York Times*. <<https://www.nytimes.com/1988/07/17/world/waste-dumpers-turning-to-west-africa.html#:~:text=At%20the%20urging%20or%20Nigeria,waste%20dumps%20in%20their%20territories>> (In English)
19. Brittain, V., (2014). Ken Saro-Wiwa: a hero for our times. *Race & Class*, 56 (3), 5-17. <<https://doi.org/10.1177/0306396814556220>> (In English)
20. Business Excellence. (2020). Abosso Goldfields Ltd | Business Excellence. <<https://www.bus-ex.com/article/abosso-goldfields-ltd>> [Last seen: 18.01.2022] (In English)

21. Cayford, S., (1996). The Ogoni uprising: Oil, human rights, and a democratic alternative in Nigeria. *Conflict and Conflict Resolution in Africa*, 43 (2). (In English)
22. Chama, M., Amankwa, E., & Oteng-Ababio, M., (2014). Trace metal levels of the Odaw river sediments at the Agbogbloshie e-waste recycling site. *Journal of Science and Technology (Ghana)*, 34 (1), 1. <<https://doi.org/10.4314/just.v34i1.1>> (In English)
23. Clapp, J., (2010). *Toxic Exports: The Transfer of Hazardous Wastes from Rich to Poor Countries* (Illustrated ed.). Cornell University Press. (In English)
24. Cobbinah, P.B., Poku-Boansi, M., & Peprah, C., (2017). Urban environmental problems in Ghana. *Environmental Development*, 23, 33-46. <<https://doi.org/10.1016/j.envdev.2017.05.001>> (In English)
25. Cortec Mining Kenya Limited, Cortec (Pty) Limited and Stirling Capital Limited v. Republic of Kenya, ICSID Case No. ARB/15/29 (In English)
26. Cotta, B., (2020). What goes around, comes around? Access and allocation problems in Global North–South waste trade. *International Environmental Agreements: Politics, Law and Economics*, 20 (2), 255-269. <<https://doi.org/10.1007/s10784-20-09479-3>> (In English)
27. Davies, T., (2017). Clean and white: a history of environmental racism in the United States. *Ethnic and Racial Studies*, 40 (8), 1360-1362. <https://doi.org/10.1080/01419870.2017.1287425> (In English)
28. Dominguez, L., & Luoma, C., (2020). Decolonising conservation policy: how colonial land and conservation ideologies persist and perpetuate indigenous injustices at the expense of the environment. *Country*, 9 (3), 65. <<https://doi.org/10.3390/land9030065>> (In English)
29. DeCastro, D., (2017). The Colonial Aspects of International Environmental Law: Treaties as Promoters of Continuous Structural Violence. *Groningen Journal of International Law*, 5 (2), 168-190. <<https://doi.org/10.21827/5a6af9c46c2ff>> (In English)
30. Focus Economics., (2020). The poorest countries in the world. *FocusEconomics | Economic Forecasts from the World's Leading Economists*. <<https://www.focus-economics.com/blog/the-poorest-countries-in-the-world>> [Last seen: 18.01.2022] (In English)
31. Essah, M., (2016). Addressing community development through sustainable mining practices: The Case of Abooso Goldfields. York University, Toronto Ontario, Canada. (In English)
32. Eze, C. N., (2007). The Bamako Convention on the Ban of the Import into Africa and the Control of the Transboundary Movement and Management of Hazardous wastes within Africa: A milestone in environmental Protection? *African Journal of International and Comparative Law*, 15 (2), 208-229. <<https://doi.org/10.3366/ajicl.2007.15.2.208>> (In English)
33. Hayes, A., (2021). How Cost-Benefit analysis (CBA) process is performed. Investopedia. <<https://www.investopedia.com/terms/c/cost-benefitanalysis.asp>> [Last seen: 18.01.2022] (In English)
34. Hope, K.R., (2007). Poverty and environmental degradation in Africa: towards sustainable policy for reversing the spiral. *International Journal of Environment and Sustainable Development*, 6 (4), 451. <<https://doi.org/10.1504/ijesd.2007.016246>> (In English)
35. ICSID Case No. ARB/15/29, <<https://www.italaw.com/cases/3974>> (In English)
36. Ijaiya, H., Abbas, WI, & Wuraola, OT (2018). Re-Examining Hazardous Waste in Nigeria: Practical Possibilities within the United Nations System. *African Journal of International and Comparative Law*, 26 (2), 264-282. <<https://doi.org/10.3366/ajicl.2018.0231>> (In English)
37. Joplin, S., (2019). Scramble for Africa – New World Encyclopedia. New World Encyclopedia. <[https://www.newworldencyclopedia.org/p/index.php?title=Scramble\\_for\\_Africa&oldid=1026554](https://www.newworldencyclopedia.org/p/index.php?title=Scramble_for_Africa&oldid=1026554)> [Last seen: 18.01.2022] (In English)
38. Kreilhuber, A., & Kariuki, A., (2020). Environmental Rule of Law in the Context of Sustainable Development. *The Georgetown Environmental Law Review*, 32. (In English)

39. Kwakyewah, C., & Idemudia, U., (2017). Canada-Ghana engagements in the mining sector: Protecting human rights or business as usual. *Transnational Human Rights Review*, 4. (In English)
40. Ladapo, O.A., (2013). The contribution of cartoonists to environmental debates in Nigeria: The Koko toxic-waste-dumping incident. *RCC Perspectives, Eco-Images: Historical Views and Political Strategies*, 1. (In English)
41. Lebbie, TS, Moyebi, OD, Asante, KA, Fobil, J., Brune-Drisse, MN, Suk, WA, Sly, PD, Gorman, J., & Carpenter, DO (2021). E-Waste in Africa: A Serious Threat to the Health of Children. *International Journal of Environmental Research and Public Health*, 18 (16), 8488. <https://doi.org/10.3390/ijerph18168488> (In English)
42. Magdaleno, J., (2015). Algerians suffering from French atomic legacy, 55 years after nuke tests. *Aljazeera*. <<http://america.aljazeera.com/articles/2015/3/1/algerians-suffering-from-french-atomic-legacy-55-years-after-nuclear-tests.html>> [Last seen: 18.01.2022] (In English)
43. Ministry of Environment and Forestry. (2019). National e-waste management strategy. <<http://www.environment.go.ke/wp-content/uploads/2019/05/NATIONAL-E-WASTE-MANAGEMENT-STRATEGY-APRIL-29th-1.pdf>> (In English)
44. Nemesio, I.V., (2014). Strengthening environmental rule of law: Enforcement, combatting corruption, and encouraging citizen suits. *The Georgetown International Environmental Law Review*, 27. (In English)
45. Ndimele, P. E., & Okotie, S., (2018). The Nigerian Economy before the discovery of crude oil. In *The political ecology of oil and gas activities in the Nigerian Aquatic Ecosystem*. Essay, Academic Press, an imprint of Elsevier. (In English)
46. Nnorom, IC, & Odeyingbo, OA (2020). Electronic waste management practices in Nigeria. *ScienceDirect*. <<https://www.sciencedirect.com/science/article/pii/B9780128170304000140#:~:text=Nigeria%20lacks%20the%20necessary%20recycling,E%2Dwaste%20disposal%20at%20dumpsites>> [Last seen: 18.01.2022] (In English)
47. NRDC. (2007, March). Toxic wastes and race at twenty: 1987–2007. <<https://www.nrdc.org/resources/toxic-wastes-and-race-twenty-1987-2007>> [Last seen: 18.01.2022] (In English)
48. Odhiambo, R., (2018). Kenya's e-waste problem. *DW.COM*. <<https://www.dw.com/en/kenya-needs-to-step-up-efforts-to-recycle-e-waste/a-43252169>> [Last seen: 18.01.2022] (In English)
49. Olaiya, TT (2017, March 16). Inside the toxic graveyard of Lagos. *The Guardian Nigeria News – Nigeria and World News*. <<https://guardian.ng/features/inside-the-toxic-graveyard-of-lagos/>> [Last seen: 18.01.2022] (In English)
50. Akpan, VE, & Olukanni, DO (2020). Hazardous Waste Management: An African Overview. *Recycling*, 5 (3), 15. <<https://doi.org/10.3390/recycling5030015>> (In English)
51. O'Neill, A., (2021). Gross domestic product (GDP) in Ghana 2026. *Statista*. <<https://www.statista.com/statistics/447486/gross-domestic-product-gdp-in-ghana/>> [Last seen: March 18, 2022] (In English)
52. Oxfam. (2015). Extreme carbon inequality: Why the Paris climate deal must put the poorest, lowest emitting and most vulnerable people first. *Oxfam Media Briefing*. <[https://oi-files-d8-prod.s3.eu-west-2.amazonaws.com/s3fs-public/file\\_attachments/mb-extreme-carbon-inequality-021215-en.pdf](https://oi-files-d8-prod.s3.eu-west-2.amazonaws.com/s3fs-public/file_attachments/mb-extreme-carbon-inequality-021215-en.pdf)> (In English)
53. Oxfam. (2015). Why the Paris climate deal must put the poorest, lowest emitting and most vulnerable people first. *Oxfam Media Briefing*. <[https://oi-files-d8-prod.s3.eu-west-2.amazonaws.com/s3fs-public/file\\_attachments/mb-extreme-carbon-inequality-021215-en.pdf](https://oi-files-d8-prod.s3.eu-west-2.amazonaws.com/s3fs-public/file_attachments/mb-extreme-carbon-inequality-021215-en.pdf)> (In English)
54. Panchasi, R. (2019). “No Hiroshima in Africa”: The Algerian war and the question of French nuclear tests in the Sahara. *History of the Present*, 9 (1), 84. <<https://doi.org/10.5406/historypresent.9.10084>> (In English)
55. Pona, HT, Xiaoli, D., Ayantobo, OO, & Narh Daniel Tetteh., (2021). Environmental health situation in Nigeria: current status and future needs. *Heliyon*, 7 (3), e06330.



- <<https://doi.org/10.1016/j.heliyon.2021.e06330>> (In English)
56. Premium Times. (2021, Nov. 15). Experts say Nigeria “dump site for e-waste”. Premium Times Nigeria. <<https://www.premiumtimesng.com/news/more-news/495506-experts-say-nigeria-dumpsite-for-e-wastes.html>> (In English)
  57. Raine, A., & Pluchon, E., (2019). UN Environment-Advancing the environmental rule of law in the Asia-Pacific. Chinese Journal of Environmental Law, 3 (1), 117-126. <<https://doi.org/10.1163/24686042-12340037>> (In English)
  58. Sasu, D.D. (2021). Annual contributions of gold to GDP in Ghana 2013-2020. <<https://www.statista.com/statistics/1272300/annual-contributions-of-gold-to-gdp-in-ghana/>> [Last seen: 18.01.2022] (In English)
  59. Shi-Ling Hsu, “On the Role of Cost-Benefit Analysis in Environmental Law” (2004) Northwestern School of Law Draft Paper. (In English)
  60. Srivastava, S., & Pawlowska, A.E. (2020, September 26). Ghana: Balancing economic growth and depletion of resources. World Bank Blog. <<https://blogs.worldbank.org/africacan/ghana-balancing-economic-growth-and-depletion-resources>> [Last seen: 18.01.2022] (In English)
  61. Tabuchi, H., Corkery, M., & Mureithi, C., (2020). Big oil is in trouble. Its plan: Flood Africa with plastic. The New York Times.<<https://www.nytimes.com/2020/08/30/climate/oil-kenya-africa-plastics-trade.html>> [Last seen: 18.01.2022] (In English)
  62. The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal 1992, Article 3. (In English)
  63. The Lancet Planetary Health., (2018). Environmental racism: time to tackle social injustice. The Lancet Planetary Health, 2 (11), e462. <[https://doi.org/10.1016/S2542-5196\(18\)30219-5](https://doi.org/10.1016/S2542-5196(18)30219-5)> (In English)
  64. UN Environment, (2022). Africa waste management outlook: Summary for decision makers. <[https://wedocs.unep.org/bitstream/handle/20.500.11822/25515/Africa\\_WMO\\_Summary.pdf?sequence=1&isAllowed=y](https://wedocs.unep.org/bitstream/handle/20.500.11822/25515/Africa_WMO_Summary.pdf?sequence=1&isAllowed=y)> (In English)
  65. UNEP, (2018). The Bamako Convention. UNEP – UN Environment Programme. <<https://www.unep.org/explore-topics/environmental-rights-and-governance/what-we-do/meeting-international-environmental>> [Last seen: 18.01.2022] (In English)
  66. UNEP Governing Council, Advancing Justice, Governance and Law for Environmental Sustainability, (U.N. Doc. UNEP/GC.27/17 February 2013) (In English)
  67. UN Environment Programme, (2011). Basel Convention > The Convention > Overview > History > Overview. <<http://www.basel.int/TheConvention/Overview/History/Overview/tabid/3405/Default.aspx#:~:text=Law%20in%201981.,The%20Basel%20Convention%20on%20the%20Control%20of%20Transboundary%20Movements%20of,world%20of%20deposits%20of%20toxic>> [Last seen:18.01.2022] (In English)
  68. Weingraf, L., (2019). Legacies of colonialism in Africa | International Socialist Review. International Socialist Review. <<https://isreview.org/issue/103/legacies-colonialism-africa/>> [Last seen: 18.01.2022] (In English)
  69. Weintraub, I., (1994). Fighting environmental racism: a selected annotated bibliography. Electronic Green Journal, 1 (1). <<https://doi.org/10.5070/g31110155>> (In English)
  70. Whyte, K., (2018). Settler Colonialism, Ecology, and Environmental Justice. Environment and Society, 9 (1), 125-144. <<https://doi.org/10.3167/ares.2018.090109>> (In English)
  71. Wittsiepe, J., Feldt, T., Till, H., Burchard, G., Wilhelm, M., & Fobil, JN (2016). Pilot study on the internal exposure to heavy metals of informal-level electronic waste workers in Agbogbloshie, Accra, Ghana. Environmental Science and Pollution Research, 24 (3), 3097-3107. <<https://doi.org/10.1007/s11356-016-8002-5>> (In English)