

Combating Environmental Degradation for Posterity

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Abstract

Environmental degradation relates to damage or disturbance of the environment that results in the depletion or deterioration of natural resources. It is a major global challenge in the 21st century that threatens the realization of Sustainable Development. Addressing environmental degradation is therefore vital for sustainability. This paper critically discusses the need to combat environmental degradation. It argues that environmental degradation is a major threat to the attainment of Sustainable Development. The paper posits that combating environmental degradation is vital for posterity of both humanity and nature. It examines some of the measures adopted towards combating environmental degradation at global, regional, and national levels and related challenges. The paper further offers suggestions towards combating environmental degradation for posterity.

1.0 Introduction

Environmental degradation is the deterioration of the environment through depletion or disturbance of natural resources such as air, water and soil; the destruction of ecosystems and the extinction of wildlife and biodiversity¹. It is also defined as any change or disturbance to the environment perceived to be deleterious or undesirable². Environmental degradation can also be understood as the process through which the natural environment is compromised in some way, reducing biological diversity and the

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¹ United Nations Economic and Social Commission for Western Asia., 'Environmental Degradation' Available at <https://archive.unescwa.org/environmental-degradation> (Accessed on 07/03/2024)

² Ibid

general health of the environment³. It has also been asserted that environmental degradation is the deterioration of the environment through depletion of resources which includes all the biotic and abiotic element that form our surrounding including air, water, soil, plants, animals, and all other living and non-living element on the planet⁴. From the foregoing definitions, it emerges that environmental degradation relates to damage or disturbance of the environment that results in the depletion or deterioration of natural resources.

It has been noted that environmental degradation can be entirely natural in origin, or it can be accelerated or caused by human activities⁵. Some of the natural causes of environmental degradation include natural floods, typhoons, droughts, rising temperatures, wild fires among others⁶. However, it has been noted that human induced activities are the major cause of environmental degradation⁷. These activities include land misuse, soil erosion and loss, desertification, wildland fires, destruction of biodiversity, deforestation, mangrove destruction, land, water and air pollution⁸. In addition, it has been pointed out that some of the major factors of environmental degradation are human related activities including modern urbanization, industrialization, population growth, and deforestation among others⁹.

³ Environmental Degradation., Available at <https://www.eionet.europa.eu/gemet/en/concept/15154> (Accessed on 07/03/2024)

⁴ Maurya. P. K et al., 'An Introduction to Environmental Degradation: Causes, Consequence and Mitigation' Available at <https://www.aesacademy.org/books/edcrs-vol-1/01.pdf> (Accessed on 07/03/2024)

⁵ Ibid

⁶ Ibid

⁷ United Nations Office for Disaster Risk Reduction., 'Environmental Degradation from Conflict' Available at <https://www.undrr.org/understanding-disaster-risk/terminology/hips/so0005> (Accessed on 07/03/2024)

⁸ Ibid

⁹ Maurya. P. K et al., 'An Introduction to Environmental Degradation: Causes, Consequence and Mitigation' Op Cit

Environmental degradation is a major global challenge in the 21st Century¹⁰. It has been identified as an alarming issue that threatens sustainability¹¹. It has been noted that environmental degradation affects multidimensional aspects of a nation in terms of economics, social, and environment development¹². For example, the United Nations Environment Programme (UNEP) points out that almost a quarter of the world's total land area has been degraded¹³. UNEP notes that this creates enormous problems not only for the billions of people who directly depend on agriculture, but it has far-reaching impacts affecting every single person on this planet today¹⁴. These impacts include food shortages, volatility and increases in global food prices caused by declines in the productivity of croplands; heightened impacts of climate change globally caused by the release of carbon and nitrous oxide from degrading land; and the threat of social instability from the forced migration that will result¹⁵. UNEP estimates that if current trends continue, 95 per cent of the Earth's land areas could become degraded within the next 30 years¹⁶.

Environmental degradation is also causing or worsening the triple planetary crisis of climate change, loss of biodiversity, and pollution¹⁷. These problems have been identified as the most pressing issues facing humanity today that need to be urgently resolved for the benefit of both humanity and nature¹⁸. Combating environmental degradation is therefore key in addressing the triple planetary crisis¹⁹.

¹⁰ Lee. W. H., Husaini. D. H., & Lean. H. H., 'The Renewable Energy-Water-Environment Nexus' *Fundamentals, Technology, and Policy* (2024) pp 177-203

¹¹ Ibid

¹² Ibid

¹³ United Nations Environment Programme., 'Land Degradation' Available at <https://www.unep.org/gef/focal-areas/land-degradation#:~:text=UNEP%20has%20been%20a%20world,best%20to%20restore%20degraded%20lands.>

(Accessed on 07/03/2024)

¹⁴ Ibid

¹⁵ Ibid

¹⁶ Ibid

¹⁷ United Nations Climate Change., 'What is the Triple Planetary Crisis?' Available at <https://unfccc.int/news/what-is-the-triple-planetary-crisis> (Accessed on 07/03/2024)

¹⁸ Ibid

¹⁹ Ibid

This paper critically discusses the need to combat environmental degradation. It argues that environmental degradation is a major threat to the attainment of Sustainable Development. The paper posits that combating environmental degradation is vital for posterity of both humanity and nature. It examines some of the measures adopted towards combating environmental degradation at global, regional, and national levels and related challenges. The paper further offers suggestions towards combating environmental degradation for posterity.

2.0 Combating Environmental Degradation: Opportunities and Setbacks

Combating environmental degradation is a key theme under the United Nation's *2030 agenda for Sustainable Development*²⁰. It sets out the goal of protecting the planet from degradation, including through sustainable consumption and production, sustainably managing its natural resources and taking urgent action on climate change, so that it can support the needs of the present and future generations²¹. The Agenda acknowledges that the world is currently facing environmental problems including natural resource depletion and adverse impacts of environmental degradation including desertification, drought, land degradation, freshwater scarcity and loss of biodiversity which hinder the achievement of Sustainable Development²². The Sustainable Development Goals (SDGs) set out under the agenda further contain targets geared towards combating environmental degradation²³. For example, one of the targets under SDG 8 (promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all) is to decouple economic growth from environmental

²⁰ United Nations General Assembly., 'Transforming Our World: the 2030 Agenda for Sustainable Development.' 21 October 2015, A/RES/70/1., Available at <https://sustainabledevelopment.un.org/content/documents/21252030%20Agenda%20for%20Sustainable%20Development%20web.pdf> (Accessed on 08/03/2024)

²¹ Ibid

²² Ibid

²³ Ibid

degradation in order to achieve Sustainable Development²⁴. In addition SDG 15 seeks to Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and biodiversity loss²⁵. Among the specific targets under SDG 15 aimed at addressing the problem of environmental degradation is SDG 15.3 which aims to combat desertification, restore degraded land and soil, including land affected by desertification, drought, and floods, and strive to achieve a land degradation- neutral world²⁶; and SDG 15.5 which urges all countries to take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity, and protect and prevent the extinction of threatened species²⁷.

The 2030 Agenda for Sustainable Development and its SDGs reflect an understanding that Sustainable Development everywhere must integrate economic growth, social well-being and environmental protection²⁸. Combating environmental degradation is therefore vital for the realization of Sustainable Development.

At a continental level, Africa Union's *Agenda 2063*²⁹ acknowledges the problem of environmental degradation in Africa. According to Agenda 2063, Africa's natural resources are facing increasing challenges such as biodiversity loss, land degradation, and desertification³⁰. It notes that land degradation and desertification are impacting over forty three per cent of Africa's land surface with serious environmental and socio-economic consequences³¹. Agenda 2063 further points out that Africa has lost over four

²⁴ Ibid, Sustainable Development Goal 8.4

²⁵ Ibid, Sustainable Development Goal 15

²⁶ Ibid, Sustainable Development Goal 15.3

²⁷ Ibid, Sustainable Development Goal 15.5

²⁸ United Nations., 'The Sustainable Development Agenda' Available at <https://www.un.org/sustainabledevelopment/development-agenda/> (Accessed on 08/03/2024)

²⁹ Africa Union., 'Agenda 2063: The Africa we Want' Available at https://au.int/sites/default/files/documents/33126-doc-framework_document_book.pdf (Accessed on 08/03/2024)

³⁰ Ibid

³¹ Ibid

million hectares of forests annually over the past two decades due to extensive agricultural practices, unregulated and unsustainable wood harvesting and illegal commercial logging³². In addition, Agenda 2063 further asserts that deforestation results in significantly environmental degradation, diminished earnings with negative social and environmental consequences, including: deterioration of ecological systems with resulting negative impacts on soil fertility, water availability and biological resources and acute shortages of fuel wood and construction material in many parts of Africa³³. Further, Agenda 2063 acknowledges that there has been degradation of Africa's blue economy through dumping of toxic waste, oil spills, degradation of the marine environment³⁴. Agenda 2063 also identifies climate change as a key threat to Africa's blue economy with its effects most notably the rising ocean temperatures and ocean acidification leading to the weakening of the capacity of the ocean carbon sink and loss of fishery resources, and also reduction in the size of water bodies, such as Lake Chad³⁵. Agenda 2063 envisions a continent where land degradation and desertification would have been stopped and then reversed; all agricultural land will be managed in a manner that is environmentally and socially sustainable; all African countries would have reduced loss of biodiversity by at least ninety per cent; and natural habitats conserved³⁶. It is therefore necessary for Africa to implement the goals and aspirations of Agenda 2063 in order to unlock Sustainable Development in the continent and solve pressing environmental challenges such as environmental degradation.

Some of the key Conventions adopted towards combating environmental degradation include the *United Nations Convention to Combat Desertification*³⁷. The Convention seeks to

³² Ibid

³³ Ibid

³⁴ Ibid

³⁵ Ibid

³⁶ Ibid

³⁷ United Nations Convention to Combat Desertification., Available at https://catalogue.unccd.int/936_UNCCD_Convention_ENG.pdf (Accessed on 08/03/2024)

combat desertification which is a problem that arises from environmental degradation³⁸. The Convention defines desertification as land degradation in arid, semi-arid and dry sub-humid areas resulting from various factors, including climatic variations and human activities³⁹. According to the Convention, combating desertification includes activities which are part of the integrated development of land in arid, semi-arid and dry sub-humid areas for Sustainable Development which are aimed at prevention and/or reduction of land degradation; rehabilitation of partly degraded land; and reclamation of desertified land⁴⁰. The Convention therefore envisages combating desertification by restoring degraded and desertified land⁴¹. It requires contracting parties to implement effective strategies aimed at rehabilitation, conservation and sustainable management of land and water resources, leading to improved living conditions, in particular at the community level⁴².

In addition, the *Convention on Biological Diversity*⁴³ was adopted to foster the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources⁴⁴. The Convention notes the problem of degradation of biological diversity and acknowledges that biological diversity is being significantly reduced by certain human activities⁴⁵. According to the Convention, the conservation of biological diversity is a common concern of humankind⁴⁶. It identifies several ways of conserving biological diversity including in-situ conservation which refers to the conservation of ecosystems and natural habitats and the maintenance and recovery of viable populations of species in their natural

³⁸ Ibid

³⁹ Ibid

⁴⁰ Ibid

⁴¹ Ibid

⁴² Ibid

⁴³ United Nations., 'Convention on Biological Diversity.' Available at <https://www.cbd.int/doc/legal/cbd-en.pdf>, (Accessed on 08/03/2024)

⁴⁴ Ibid, article 1

⁴⁵ Ibid, Preamble

⁴⁶ Ibid

surroundings⁴⁷; and ex-situ conservation which entails the conservation of components of biological diversity outside their natural habitats⁴⁸. As part of in-situ conservation, the Convention on Biological Diversity urges contracting parties to *rehabilitate and restore degraded ecosystems* and promote the recovery of threatened species, inter alia, through the development and implementation of plans or other management strategies (Emphasis added)⁴⁹. It also urges contracting parties to support local populations to develop and implement remedial action in degraded areas where biological diversity has been reduced⁵⁰. Implementing this Convention is therefore necessary in order to combat degradation of biological diversity.

At a continental level, the *African Convention on the Conservation of Nature and Natural Resources*⁵¹ acknowledges the threat of environmental degradation in Africa. According to the Convention, African States are responsible for protecting and conserving their environment and natural resources and for using them in a sustainable manner with the aim to satisfy human needs according to the carrying capacity of the environment⁵². Among the objectives of the Convention is to enhance environmental protection; to foster the conservation and sustainable use of natural resources; and to harmonize and coordinate policies in these fields with a view to achieving ecologically rational, economically sound and socially acceptable development policies and programmes⁵³. The Convention acknowledges the right of all people in Africa to a satisfactory environment favourable to their development; the duty of States, individually and collectively to ensure the enjoyment of the right to development; and the duty of States to ensure that developmental and environmental needs are met in a sustainable, fair and

⁴⁷ Ibid, article 2

⁴⁸ Ibid

⁴⁹ Ibid, article 8 (f)

⁵⁰ Ibid, article 10 (d)

⁵¹ African Union., African Convention on the Conservation of Nature and Natural Resources., Available at https://au.int/sites/default/files/treaties/41550-treatyCharter_ConservationNature_NaturalResources.pdf (Accessed on 08/03/2024)

⁵² Ibid, Preamble

⁵³ Ibid, article II

equitable manner⁵⁴. In order to achieve its objectives, the Convention urges African states to take effective measures to *prevent land degradation*, and to that effect shall develop long-term integrated strategies for the conservation and sustainable management of land resources, including soil, vegetation and related hydrological processes (Emphasis added)⁵⁵. Further, the Convention requires states to ensure that non-agricultural forms of land use, including public works, mining and the disposal of wastes, do not result in erosion, pollution, or any other form of land degradation⁵⁶. Further, in areas affected by land degradation, the Convention requires states to plan and implement *mitigation and rehabilitation measures* (Emphasis added)⁵⁷. The Convention sets out several ways of combating environmental degradation in Africa including conservation and sustainable use of natural resources, and the restoration and rehabilitation of degraded ecosystems⁵⁸. The African Convention on the Conservation of Nature and Natural Resources is therefore instrumental in combating environmental degradation in Africa. It is necessary to implement it in order to achieve this goal.

Further, at a national level, the *Constitution of Kenya*⁵⁹ enshrines the right of every person to a clean and healthy environment⁶⁰. It has been argued that eliminating practices that contribute to deterioration or degradation of the environment can go a long way in promoting the realisation of the right to clean and healthy environment for all⁶¹. In order to achieve this goal, the Constitution requires the state to undertake several measures which include ensuring sustainable exploitation, utilisation, management and

⁵⁴ Ibid, article III

⁵⁵ Ibid, article VI (1)

⁵⁶ Ibid, article VI (3) (c)

⁵⁷ Ibid, article VI (3) (d)

⁵⁸ Ibid

⁵⁹ Constitution of Kenya., 2010., Government Printer, Nairobi

⁶⁰ Ibid, article 42

⁶¹ Muigua. K., 'Reconceptualising the Right to Clean and Healthy Environment in Kenya' Available at <https://kmco.co.ke/wp-content/uploads/2018/08/RIGHT-TO-CLEAN-AND-HEALTHY-ENVIRONMENT-IN-KENYA.docx-7th-september-2015.pdf> (Accessed on 08/03/2024)

conservation of the environment and natural resources, and the equitable sharing of the accruing benefits; working to achieve and maintain a tree cover of at least ten per cent of the land area of Kenya; encouraging public participation in the management, protection and conservation of the environment; protecting genetic resources and biological diversity; establishing systems of environmental impact assessment, environmental audit and monitoring of the environment; and eliminating processes and activities that are likely to endanger the environment⁶². It is therefore necessary for the state to fulfill its obligations in respect of the environment in order to combat environmental degradation in Kenya.

In addition, the *Environmental Management and Co-ordination Act (EMCA)*⁶³ of Kenya seeks to foster the realization of a clean, healthy, and sustainable environment in Kenya by addressing environmental challenges including degradation. In order to realize a clean, healthy, and sustainable environment in Kenya, the Act gives powers to the Environment and Land Court (ELC) to compel the persons responsible for the environmental degradation to *restore the degraded environment* as far as practicable to its immediate condition prior to the damage (Emphasis added)⁶⁴. The Act further mandates the National Environment Management Authority (NEMA) to initiate and evolve procedures and safeguards for the prevention of accidents which may cause environmental degradation and evolve remedial measures where accidents occur; and develop, publish and disseminate manuals, codes or guidelines relating to environmental management and prevention or *abatement of environmental degradation* (Emphasis added)⁶⁵. It also establishes a National Environment Restoration Fund as supplementary insurance for the mitigation of environmental degradation where the perpetrator is not identifiable or where exceptional circumstances require NEMA to intervene towards the control or

⁶² Constitution of Kenya., 2010., article 69 (1)

⁶³ Environmental Management and Co-ordination Act, No. 8 of 1999, Government Printer, Nairobi

⁶⁴ Ibid, S 3 (3) (d)

⁶⁵ Ibid, S 9

mitigation of environmental degradation⁶⁶. The Act further requires the conservation of specific ecosystems from degradation including river basins, lake basins, wetlands, coastal zones, forests, hilly and mountainous areas, and the ozone layer⁶⁷. Effective implementation of EMCA is thus key in combating environmental degradation in Kenya. NEMA also has a key role to play in combating environmental degradation in Kenya. It has issued several regulations towards achieving this objective such as the *Environmental (Impact Assessment and Audit) Regulations*⁶⁸; *Water Quality Regulations*⁶⁹; *Wetlands Regulations*⁷⁰; and *Waste Management Regulations*⁷¹. Effective implementation of these Regulations is needed in order to address the challenge of environmental degradation in Kenya.

Despite the foregoing attempts, it has been noted that the problem of environmental degradation continues to mount at the global, continental, and national levels⁷². According to UNEP, destruction of nature has far-reaching consequences⁷³. Damaged and degraded ecosystems worsen climate change, undermine food security and put people and communities at risk⁷⁴. Environmental degradation is a major problem which hinders the realization of SDGs relating to combating poverty, achieving food security, promoting good health and well-being, ensuring access to clean water and sanitation, achieving clean and affordable energy for all, combating climate change, fostering the blue economy, and ensuring sustainable use of terrestrial ecosystems⁷⁵. It is therefore

⁶⁶ Ibid, S 25

⁶⁷ Ibid

⁶⁸ Environmental (Impact Assessment and Audit) Regulations, Legal Notice No. 101, Government Printer, Nairobi

⁶⁹ Environmental Management and Co-Ordination (Water Quality) Regulations, 2006, Legal Notice No. 120, Government Printer, Nairobi

⁷⁰ Environmental Management and Co-Ordination (Wetlands, River Banks, Lake Shores and Sea Shore Management) Regulations, 2009, Legal Notice No. 19, Government Printer, Nairobi

⁷¹ Environmental Management and Co-Ordination (Waste Management) Regulations 2006, Legal Notice No. 121

⁷² United Nations Environment Programme., 'Facts about the Nature Crisis' Available at <https://www.unep.org/facts-about-nature-crisis> (Accessed on 08/03/2024)

⁷³ Ibid

⁷⁴ Ibid

⁷⁵ Ibid

necessary to combat environmental degradation for posterity of both humanity and nature.

3.0 Way Forward

One of the key approaches towards combating environmental degradation is the restoration and rehabilitation of damaged or degraded ecosystems⁷⁶. These are practices aimed at returning ecosystems to a healthy state as was before such ecosystems were degraded⁷⁷. Restoration has been defined as a process of improvement of degraded land and ecosystems on a large scale that rebuilds ecological integrity and enhances people's lives⁷⁸. It aims to recover the ecological functionality and enhance human well-being in deforested and degraded landscapes and ecosystems⁷⁹. Rehabilitation on the other hand seeks to reverse ill effects on the environment and natural resources as a result of ill-effects such as loss of biodiversity, land capability loss, landscape destabilization, nutrient impoverishment, overgrazing, and soil organic carbon loss among others⁸⁰. These processes are essential in the recovery of ecosystems that have been degraded or destroyed, as well as conserving the ecosystems that are still intact⁸¹. It has been noted that healthier ecosystems, with richer biodiversity, yield greater benefits such as more fertile soils, bigger yields of timber and fish, and larger stores of greenhouse gases⁸². It is therefore necessary to restore and rehabilitate degraded ecosystems in order ensure a healthier, cleaner, and safer, and sustainable environment⁸³. This can be achieved through approaches such as restoring forest landscapes through reforestation, agroforestry, embracing regenerative agricultural practices, improved protection and

⁷⁶ Mentis. M., 'Environmental Rehabilitation of Damaged Land' *Forest Ecosystems.*, Volume 7, No. 19 (2020)

⁷⁷ Ibid

⁷⁸ Food and Agriculture Organization., 'The Key Role of Forest and Landscape Restoration in Climate Action.' Available at <https://www.fao.org/documents/card/en/c/cc2510en> (Accessed on 08/03/2024)

⁷⁹ Ibid

⁸⁰ Mentis. M., 'Environmental Rehabilitation of Damaged Land' Op Cit

⁸¹ United Nations Environment Programme., 'Decade on Ecosystem Restoration' Available at <https://www.unep.org/explore-topics/ecosystems-and-biodiversity/what-we-do/decade-ecosystem-restoration> (Accessed on 08/03/2024)

⁸² Ibid

⁸³ Ibid

management of landscapes and ecosystems, eliminating invasive species in order to curtail their impact on ecosystems, and planting endangered vegetation⁸⁴.

In addition, it is imperative to transform food systems to become more sustainable and resilient in order to reverse environmental degradation, restore ecosystems and ensure food and nutritional security⁸⁵. It has been noted that agriculture has altered the face of the planet more than any other human activity⁸⁶. For example, the use of pesticides and fertilizers has resulted in serious air and water pollution⁸⁷. It has been argued that current food systems have been following the “cheaper food paradigm”, with a goal of producing more food at lower costs through increasing inputs such as fertilizers, pesticides, energy, land and water⁸⁸. This approach leads to a vicious circle: the lower cost of food production creates a bigger demand for food that must also be produced at a lower cost through more intensification and further land clearance⁸⁹. This has resulted in environmental degradation due to over cultivation, deforestation in order to acquire more land for farming, loss of biodiversity and the threat of climate change with the global food system estimated to account for nearly thirty per cent of total human-produced emissions⁹⁰. Therefore, it is necessary to change global food systems through measures such as changing global dietary patterns, protecting and setting aside land for nature, and farming in a more nature-friendly and biodiversity-supporting way in order to combat environmental degradation arising from agricultural practices⁹¹.

⁸⁴ United Nations Environment Programme., ‘In Africa, Restoring Ecosystems is Central to Green Recovery’ Available at <https://www.unep.org/news-and-stories/story/africa-restoring-ecosystems-central-green-recovery>

⁸⁵ United Nations Environment Programme., ‘Facts about the Nature Crisis’ Op Cit

⁸⁶ Ibid

⁸⁷ Food and Agriculture Organization., ‘Agriculture and the Environment: Changing Pressures, Solutions and Trade-Offs’ Available at <https://www.fao.org/3/y4252e/y4252e14.htm> (Accessed on 08/03/2024)

⁸⁸ United Nations Environment Programme., ‘Our Global Food System is the Primary Driver of Biodiversity Loss’ Available at <https://www.unep.org/news-and-stories/press-release/our-global-food-system-primary-driver-biodiversity-loss> (Accessed on 08/03/2024)

⁸⁹ Ibid

⁹⁰ Ibid

⁹¹ Ibid

It is also necessary to combat land degradation and desertification⁹². The phenomenon of desertification has been identified as one of greatest environmental challenges of our time⁹³. It has been noted that desertification is not necessarily the natural expansion of existing deserts but rather the degradation of land over time due to practices such as over-cultivation, overgrazing, deforestation and poor irrigation techniques⁹⁴. Further, it has been observed that although desertification is primarily man-made, it is exacerbated by the extreme weather, such as droughts as a result of climate change⁹⁵. Desertification is a major problem that results in environmental degradation through loss of biodiversity, loss of productive land resulting in poverty and hunger, and climate change⁹⁶. It is therefore vital to address the problem of desertification. This calls for rehabilitation of land to restore soil fertility, embracing sustainable water management practices, curbing land degradation through tree-planting efforts, and restoring degraded land⁹⁷.

In addition, it has been observed that there is need to halt and reverse biodiversity loss⁹⁸. The loss of biodiversity has been identified as among the triple planetary crisis alongside pollution and climate change⁹⁹. It has been noted that biodiversity is the baseline for everything on the planet and its loss impacts food supplies and access to clean water therefore impacting the survival of both humanity and nature¹⁰⁰. According to UNEP, species are now disappearing hundreds, or even thousands, of times faster than the

⁹² United Nations., 'World Day to Combat Desertification and Drought, 17 June' Available at <https://www.un.org/en/observances/desertification-day> (Accessed on 08/03/2024)

⁹³ Ibid

⁹⁴ United Nations Environment Programme., 'From Chile to China: The Global Battle against Desertification' Available at <https://www.unep.org/news-and-stories/story/chile-china-global-battle-against-desertification#:~:text=For%20nearly%2050%20years%2C%20UNEP,take%20coordinated%20action%20against%20desertification.> (Accessed on 08/03/2024)

⁹⁵ Ibid

⁹⁶ Earth. Org., 'Desertification: Causes, Effects, And Solutions' Available at <https://earth.org/what-is-desertification/> (Accessed on 08/03/2024)

⁹⁷ Ibid

⁹⁸ United Nations Climate Change., 'What is the Triple Planetary Crisis?' Op Cit

⁹⁹ Ibid

¹⁰⁰ Ibid

natural background rate of extinction¹⁰¹. The loss of biodiversity impacts food security, availability of medicines, fresh air and water, shelter, and a clean and healthy environment in which to live¹⁰². It is therefore critical to halt and reverse the loss of biodiversity¹⁰³. There is an urgent need for all countries to place biodiversity at the heart of the environment and development decision-making to enable enlightened choices for people and the planet¹⁰⁴.

There is also need to tackle pollution¹⁰⁵. This problem results in environmental degradation by straining ecosystems and reducing or even eliminating populations of sensitive species¹⁰⁶. Further, it has been noted that contamination as a result of pollution may reverberate along the food chain causing mass environmental destruction. For example, the use herbicides and pesticides in agricultural land may result in these chemicals being absorbed into rivers that flow through protected areas, causing poisoning of wildlife and fish¹⁰⁷. Further, it has been noted that air pollution is already the most significant environmental health risk and a major cause of death and disability, and its future impact is likely to be even worse without adequate measures¹⁰⁸. It is estimated that outdoor air pollution may cause between 6 million and 9 million premature deaths a year worldwide by 2060, and cost 1 per cent of global Gross Domestic Product (GDP) as a result of sick days, medical bills and reduced agricultural output¹⁰⁹. Pollution is therefore a major cause of environmental degradation which affects food

¹⁰¹ United Nations Environment Programme., 'UNEP and Biodiversity' Available at <https://www.unep.org/unep-and-biodiversity> (Accessed on 08/03/2024)

¹⁰² Ibid

¹⁰³ Ibid

¹⁰⁴ Ibid

¹⁰⁵ Muigua. K., 'Safeguarding the Environment through Effective Pollution Control in Kenya' Available at <https://kmco.co.ke/wp-content/uploads/2020/09/Safeguarding-the-Environment-through-Effective-Pollution-Control-in-Kenya-Kariuki-Muigua-28th-SEPT-2019.pdf> (Accessed on 08/03/2024)

¹⁰⁶ Ibid

¹⁰⁷ Ibid

¹⁰⁸ Organisation for Economic Co-operation and Development., 'Air Pollution and Environmental Degradation' Available at <https://www.oecd-ilibrary.org/sites/ede592e3-en/index.html?itemId=/content/component/ede592e3-en> (Accessed on 08/03/2024)

¹⁰⁹ Ibid

security and safety, air and water quality, and the health of humanity and nature¹¹⁰. Addressing pollution is therefore not only an environmental priority, but also a prerequisite for the achievement of the SDGs¹¹¹. It is therefore necessary to tackle pollution through approaches such as effective waste management, enforcement of laws and policies on pollution, public empowerment and participation, and embracing incentive-based approaches¹¹². Tackling pollution is an important approach in combating environmental degradation.

Finally, there is an urgent need to combat climate change which is the most pressing issue facing humanity today¹¹³. The impacts of climate change are already being manifested all over the world through increased intensity and severity of droughts, water scarcity, wildfires, rising sea levels, flooding, melting polar ice, catastrophic storms and declining biodiversity¹¹⁴. It has been noted that climate change is likely to exacerbate gradual processes of environmental degradation and the frequency and intensity of natural disasters, both slow-onset (such as desertification, drought, coastal erosion) and sudden onset (including tropical storms, flash floods)¹¹⁵. Further, it has been correctly asserted that climate change and environmental degradation each occur in parallel, as well as the relationship between them becoming a vicious cycle, with climate change inducing environmental degradation and biodiversity loss, which then further exacerbates climate change¹¹⁶. It is therefore necessary to tackle climate change in order to combat

¹¹⁰ United Nations Environment Programme., 'Beat Pollution' Available at <https://www.unep.org/beatpollution/> (Accessed on 08/03/2024)

¹¹¹ Ibid

¹¹² Muigua, K., 'Safeguarding the Environment through Effective Pollution Control in Kenya' Op Cit

¹¹³ United Nations Climate Change., 'What is the Triple Planetary Crisis?' Op Cit

¹¹⁴ Ibid

¹¹⁵ International Organization for Migration., 'Climate Change, Environmental Degradation, and Migration' Available at https://www.iom.int/sites/g/files/tmzbd1486/files/jahia/webdav/shared/shared/mainsite/microsites/IDM/workshops/climate-change-2011/background_paper.pdf (Accessed on 08/03/2024)

¹¹⁶ United Nations Development Programme., 'Climate Change, Environmental Degradation, Conflict, and Displacement in the Arab States Region' Available at https://www.undp.org/sites/g/files/zskgke326/files/202306/climate_environmental_security_rbas_policy_brief_may_2023.pdf (Accessed on 08/03/2024)

environmental degradation¹¹⁷. Further, combating environmental degradation plays a key role in tackling climate change¹¹⁸. SDG 13 urges all countries to take urgent action to combat climate change and its impacts¹¹⁹. It is therefore necessary for all countries to embrace and strengthen climate change mitigation and adaptation actions in order to combat environmental degradation¹²⁰.

4.0 Conclusion

Environmental degradation is a major global challenge that threatens attainment of Sustainable Development¹²¹. It is causing and also worsening the triple planetary crisis of climate change, loss of biodiversity, and pollution¹²². Environmental degradation is hindering the realization of all SDGs including those relating to combating poverty, achieving food security, promoting good health and well-being, ensuring access to clean water and sanitation, achieving clean and affordable energy for all, combating climate change, fostering the blue economy, and ensuring sustainable use of terrestrial ecosystems¹²³. Environmental degradation is still prevalent all over the world as evidenced by cases of land misuse, soil erosion and loss, desertification, wildland fires, destruction of biodiversity, deforestation, mangrove destruction, land, water and air pollution¹²⁴. It is necessary to combat environmental degradation for posterity of both nature and humankind. In order to achieve this goal, there is need to restore and rehabilitate damaged or degraded ecosystems¹²⁵; transform food systems to become more sustainable and resilient¹²⁶; combat land degradation and desertification¹²⁷; halt and

¹¹⁷ Ibid

¹¹⁸ Ibid

¹¹⁹ United Nations General Assembly., 'Transforming Our World: the 2030 Agenda for Sustainable Development.' 21 October 2015, A/RES/70/1. Sustainable Development Goal 13

¹²⁰ United Nations Development Programme., 'Climate Change, Environmental Degradation, Conflict, and Displacement in the Arab States Region' Op Cit

¹²¹ Lee. W. H., Husaini. D. H., & Lean. H. H., 'The Renewable Energy-Water-Environment Nexus' Op Cit

¹²² United Nations Climate Change., 'What is the Triple Planetary Crisis?' Op Cit

¹²³ United Nations Environment Programme., 'Facts about the Nature Crisis' Op Cit

¹²⁴ United Nations Office for Disaster Risk Reduction., 'Environmental Degradation from Conflict' Op Cit

¹²⁵ Mentis. M., 'Environmental Rehabilitation of Damaged Land' Op Cit

¹²⁶ United Nations Environment Programme., 'Facts about the Nature Crisis' Op Cit

¹²⁷ United Nations., 'World Day to Combat Desertification and Drought, 17 June' Op Cit

reverse biodiversity loss¹²⁸; tackle pollution¹²⁹; and take urgent action to combat climate change and its impacts¹³⁰. Combating environmental degradation for posterity is an ideal we need to achieve for the benefit of both humanity and nature.

¹²⁸ United Nations Climate Change., 'What is the Triple Planetary Crisis?' Op Cit

¹²⁹ Muigua. K., 'Safeguarding the Environment through Effective Pollution Control in Kenya' Op Cit

¹³⁰ United Nations General Assembly., 'Transforming Our World: the 2030 Agenda for Sustainable Development.' 21 October 2015, A/RES/70/1. Sustainable Development Goal 13

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