

Taking Collective Action to Eliminate Air Pollution

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Abstract

A safe and healthy environment is a core human right. This right has been recognized by the United Nations General Assembly which affirms the importance of the right to a clean, healthy and sustainable environment for the full enjoyment of all human rights. Despite its importance, several factors affect the attainment of the right to a clean, healthy, and sustainable environment including the triple planetary crisis of climate change, biodiversity loss, and pollution. The Resolution by the United Nations General Assembly acknowledges that the pollution of air, land and water interferes with the enjoyment of a clean, healthy and sustainable environment. Tackling all forms of pollution including air pollution is therefore necessary for effective realization of the right to a clean, healthy, and sustainable environment. This paper critically discusses the need to combat air pollution. It argues that air pollution is a major threat to the full realization of the right to a clean, healthy, and sustainable environment. The paper explores the nature, causes, and effects of air pollution. It further suggests approaches towards eliminating air pollution for effective realization of the right to a clean, healthy, and sustainable environment.

1.0 Introduction

A safe and healthy environment is fundamental human right¹. It has been noted that every person has the right to a clean, healthy and sustainable environment². Since human rights and the environment are interdependent, the right to a clean, healthy and sustainable environment is necessary for the full enjoyment of a wide range of human rights, including the rights to life, health, food, water and sanitation and development,

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¹ United Nations Development Programme., 'What is the Right to a Healthy Environment?' Available at <https://www.undp.org/sites/g/files/zskgke326/files/2023-01/UNDP-UNEP-UNHCHR-What-is-the-Right-to-a-Healthy-Environment.pdf> (Accessed on 09/09/2024)

² Ibid

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among others³. In addition, the enjoyment of all human rights, including the rights to information, participation and access to justice, is of great importance to the protection of the environment⁴. It has been noted that this right entails substantive elements including clean air; a safe and stable climate; access to safe water and adequate sanitation; and healthy biodiversity and ecosystems⁵. It also contains procedural elements such as access to information, the right to participate in decision-making, and access to justice and effective remedies⁶.

The right to a clean, healthy, and sustainable environment has been recognized by the United Nations General Assembly as a core human right⁷. The Resolution by the United Nations General Assembly affirms the importance of the right a clean, healthy and sustainable environment for the full enjoyment of all human rights⁸. The Resolution calls upon states, international organizations, business enterprises and other relevant stakeholders to adopt policies, to enhance international cooperation, strengthen capacity-building and continue to share good practices in order to scale up efforts to ensure a clean, healthy and sustainable environment for all⁹. The Resolution by the United Nations General Assembly is expected to have a trickle-down effect, prompting countries to enshrine the right to a healthy environment in national constitutions and regional treaties, and encouraging states to implement those laws¹⁰. The Resolution has also been described as a powerful new tool to address the human rights impacts of climate change, biodiversity loss and pollution and ensure rights-based environmental action¹¹.

³ Ibid

⁴ Ibid

⁵ Ibid

⁶ Ibid

⁷ United Nations General Assembly., 'The Human Right to a Clean, Healthy and Sustainable Environment' A/76/L.75

⁸ Ibid

⁹ Ibid

¹⁰ United Nations Environment Programme., 'In Historic Move, UN Declares Healthy Environment a Human Right' Available at <https://www.unep.org/news-and-stories/story/historic-move-un-declares-healthy-environment-human-right> (Accessed on 09/09/2024)

¹¹ United Nations Development Programme., 'What is the Right to a Healthy Environment?' Available at <https://www.undp.org/publications/what-right-healthy-environment> (Accessed on 09/09/2024)

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Despite its recognition, several challenges undermine the achievement of the right to a clean, healthy, and sustainable environment. It has been noted that global crises including climate change, loss of biodiversity, and pollution, represent some of the biggest threats to humanity, severely affecting the exercise and enjoyment of all human rights including the right to a clean, healthy, and sustainable environment¹². The Resolution by the United Nations General Assembly acknowledges that the pollution of air, land and water interferes with the enjoyment of a clean, healthy and sustainable environment¹³. Tackling all forms of pollution including air pollution is therefore necessary for effective realization of the right to a clean, healthy, and sustainable environment¹⁴.

This paper critically discusses the need to combat air pollution. It argues that air pollution is a major threat to the full realization of the right to a clean, healthy, and sustainable environment. The paper explores the nature, causes, and effects of air pollution. It further suggests approaches towards eliminating air pollution for effective realization of the right to a clean, healthy, and sustainable environment.

2.0 Air Pollution: Causes and Effects

According to the United Nations Environment Programme (UNEP), pollution is the indirect or direct alteration of the biological, thermal, physical, or radioactive properties of any medium in such a way as to create a hazard or potential hazard to human health or to the health, safety or welfare of any living species¹⁵. Pollution has also been defined as the presence of substances and/or heat in environmental media (air, water, land) whose nature, location, or quantity produces undesirable environmental effects¹⁶. It has been noted that as the world's population continues to increase and resource use

¹² United Nations Development Programme., 'What is the Right to a Healthy Environment?' Op Cit

¹³ United Nations General Assembly., 'The Human Right to a Clean, Healthy and Sustainable Environment' Op Cit

¹⁴ Ibid

¹⁵ United Nations Environment Programme., 'Pollution' Available at <https://leap.unep.org/en/knowledge/glossary/pollution#:~:text=The%20indirect%20or%20direct%20alteration,welfare%20of%20any%20living%20species.%20> (Accessed on 09/09/2024)

¹⁶ United Nations Office for Disaster Risk Reduction., 'Pollution' Available at <https://www.undrr.org/understanding-disaster-risk/terminology/hips/tl0028> (Accessed on 09/09/2024)

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intensifies, pollution is ever more extensive, pervasive, and persistent¹⁷. Pollution affects our health through the food we eat, the water we drink and the air we breathe¹⁸. Factors such as industrialisation, use of pesticides and nitrogen-based fertilizers, crop residues in agriculture, urbanization, forest fires, desert dust, and unsustainable waste management have intensified environmental health risks and pollution, especially in low- and middle-income countries¹⁹. Pollution of all types hinder development outcomes²⁰.

Air pollution entails the contamination of the indoor or outdoor environment by any chemical, physical or biological agent that modifies the natural characteristics of the atmosphere²¹. The main drivers of air pollution include emissions from the burning of fossil fuels for energy and transport, and the burning of traditional fuels for household cooking, as well as agricultural and waste burning²². UNEP notes that air pollution comes from many sources – from cookstoves and kerosene lamps to coal-fired power plants, vehicle emissions, industrial furnaces, wildfires, and sand and dust storms²³. The problem of air pollution is most prevalent in urban areas, particularly in Africa and Asia²⁴.

Air pollution has been described as one of the greatest environmental risks to health²⁵. The World Health Organization (WHO) estimates that air pollution in both cities and

¹⁷ United Nations Environment Programme., 'Towards a Pollution-Free Planet' Available at <https://www.unep.org/beatpollution/> (Accessed on 09/09/2024)

¹⁸ Ibid

¹⁹ World Bank Group., 'Pollution' Available at <https://www.worldbank.org/en/topic/pollution> (Accessed on 09/09/2024)

²⁰ Ibid

²¹ World Health Organization., 'Air Pollution' Available at https://www.who.int/health-topics/air-pollution#tab=tab_1 (Accessed on 09/09/2024)

²² United Nations Environment Programme., 'Collective Action Needed to Improve Quality of the Air we Share' Available at <https://www.unep.org/news-and-stories/story/collective-action-needed-improve-quality-air-we-share#:~:text=Other%20ways%20to%20address%20air,reducing%20trash%20and%20crop%20burning> (Accessed on 09/09/2024)

²³ United Nations Environment Programme., 'Why Does Air Matter?' Available at <https://www.unep.org/topics/air/why-does-air-matter> (Accessed on 09/09/2024)

²⁴ Ibid

²⁵ World Health Organization., 'Ambient (Outdoor) Air Pollution' Available at [https://www.who.int/news-room/fact-sheets/detail/ambient-\(outdoor\)-air-quality-and-health](https://www.who.int/news-room/fact-sheets/detail/ambient-(outdoor)-air-quality-and-health) (Accessed on 09/09/2024)

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rural areas causes over 4.2 million premature deaths worldwide per year²⁶. This mortality is due to exposure to fine particulate matter, which causes cardiovascular and respiratory disease, and cancers²⁷. It has further been noted that environmental contamination significantly contributes to non-infectious diseases like cancer and respiratory illnesses²⁸.

Due to its effects, air pollution has been described as the most-pressing environmental health crisis of our time²⁹. It is estimated that approximately nine in ten people around the world breathe unclean air, which increases the risk of asthma, heart disease and lung cancer³⁰. Air pollution impacts everyone, with people living in low- and middle-income countries bearing most of the burden³¹. In addition, women and young children are more vulnerable to air pollution³². It has been noted that close to half of pneumonia deaths among children under 5 are due to household air pollution³³.

In addition to its adverse impacts, air pollution is also linked to climate change³⁴. Air pollution is intricately linked with climate change since both problems come largely from the same sources, such as emissions from burning fossil fuels³⁵. Many of the drivers of air pollution (such as combustion of fossil fuels) are also sources of greenhouse gas emissions that cause climate change³⁶. Air pollution is strongly correlated with the worsening climate crisis, and it impacts ecosystems, threatening food security and economic

²⁶ Ibid

²⁷ Ibid

²⁸ United Nations Environment Programme., 'Pollution and Health' Available at <https://www.unep.org/topics/chemicals-and-pollution-action/pollution-and-health> (Accessed on 09/09/2024)

²⁹ United Nations Environment Programme., 'Five Cities Tackling Air Pollution' Available at <https://www.unep.org/news-and-stories/story/five-cities-tackling-air-pollution> (Accessed on 09/09/2024)

³⁰ Ibid

³¹ United Nations Environment Programme., 'Collective Action Needed to Improve Quality of the Air we Share' Op Cit

³² Ibid

³³ Ibid

³⁴ National Institute of Environmental Health Sciences., 'Air Pollution and Your Health' Available at <https://www.niehs.nih.gov/health/topics/agents/air-pollution> (Accessed on 09/09/2024)

³⁵ Ibid

³⁶ World Health Organization., 'Air Pollution' Op Cit

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productivity³⁷. Therefore, policies to reduce air pollution offer a win-win strategy for both climate and health, lowering the burden of disease attributable to air pollution, as well as contributing to the near- and long-term mitigation of climate change³⁸. As a result, it has been noted that air pollution and climate change should be tackled jointly, with a focus on protecting peoples' health particularly in low- and middle-income countries in order to strengthen human capital and reduce poverty³⁹.

Curbing air pollution is therefore vital for global health and prosperity.

3.0 Taking Collective Action to Eliminate Air Pollution

It is imperative to eliminate air pollution in order to achieve the right to a clean, healthy, and sustainable environment towards sustainability. According to UNEP, addressing all forms of pollution including air pollution is not only an environmental priority, but also a priority for the achievement of the Sustainable Development Goals⁴⁰. Further, it has been noted that tackling air pollution can bring significant benefits for economies, human health, and the climate⁴¹.

Eliminating air pollution requires collective action⁴². The impacts of air pollution can be spread over national boundaries⁴³. As a result, it has been pointed out that air pollution is not only a challenge at national levels but it is also a regional and global challenge since air pollutants stay sufficiently long in the atmosphere to be transported across administrative boundaries and national borders while also contributing to climate

³⁷ United Nations Environment Programme., 'Collaboration Key to Securing Clean Air for All, Experts Say' Available at <https://www.unep.org/news-and-stories/story/collaboration-key-securing-clean-air-all-experts-say> (Accessed on 09/09/2024)

³⁸ World Health Organization., 'Air Pollution' Op Cit

³⁹ World Bank Group., 'What You Need to Know About Climate Change and Air Pollution' Available at <https://www.worldbank.org/en/news/feature/2022/09/01/what-you-need-to-know-about-climate-change-and-air-pollution> (Accessed on 09/09/2024)

⁴⁰ United Nations Environment Programme., 'Towards a Pollution-Free Planet' Op Cit

⁴¹ United Nations Environment Programme., 'Why Does Air Matter?' Op Cit

⁴² United Nations Environment Programme., 'Collective Action Needed to Improve Quality of the Air we Share' Op Cit

⁴³ Ibid

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change⁴⁴. Therefore, curbing air pollution requires multilateral cooperation and collective action at the regional and global levels⁴⁵. Since air pollution has no boundaries, collective action by governments, Non-Governmental Organizations (NGOs), businesses, civil society and the public at large is key to delivering clean air for all⁴⁶.

In order to take collective action to eliminate air pollution, it is imperative for all stakeholders including governments and the private sector to accelerate the energy transition by upscaling investments in renewable sources of energy⁴⁷. One of the major causes of air pollution is emissions from the burning of fossil fuels for energy and transport, and the burning of traditional fuels for household cooking⁴⁸. Therefore, eliminating air pollution requires collective action to end reliance on fossil fuels and invest in alternative sources of energy that are clean, accessible, affordable, sustainable, and reliable⁴⁹. Renewable sources of energy- which are available in abundance all over the world, provided by the sun, wind, water, waste, and heat from the Earth - are replenished by nature and emit little to no greenhouse gases or pollutants into the air⁵⁰. Therefore, developing renewable energy could jointly reduce air pollution, greenhouse gas emissions, and bring air pollution-related health co-benefits⁵¹. It is therefore

⁴⁴ Ibid

⁴⁵ Collective Action on Climate, Biodiversity, Pollution Vital., Available at <https://nation.africa/kenya/blogs-opinion/blogs/collective-action-on-climate-biodiversity-pollution-vital-4533948> (Accessed on 11/09/2024)

⁴⁶ Clean Air Fund., '6 Cross-Sector Collaborations Tackling Air Pollution' Available at <https://www.cleanairfund.org/news-item/cross-sector-collaborations/> (Accessed on 11/09/2024)

⁴⁷ Xie. Y., 'Large-Scale Renewable Energy Brings Regionally Disproportional Air Quality and Health Co-Benefits in China' Available at <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10432202/> (Accessed on 11/09/2024)

⁴⁸ United Nations Environment Programme., 'Collective Action Needed to Improve Quality of the Air we Share' Op Cit

⁴⁹ United Nations., 'Renewable Energy - Powering a Safer Future' Available at <https://www.un.org/en/climatechange/raising-ambition/renewable-energy> (Accessed on 11/09/2024)

⁵⁰ Ibid

⁵¹ Xie. Y., 'Large-Scale Renewable Energy Brings Regionally Disproportional Air Quality and Health Co-Benefits in China' Op Cit

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imperative to shift to renewable energy and modern bioenergy, and adopt cleaner cooking fuels in order to eliminate air pollution⁵².

It is also necessary to take collective action towards improving air quality data and monitoring⁵³. Air quality data and monitoring is crucial for understanding and addressing air pollutants⁵⁴. Through air quality data and monitoring, it is possible to understand the causes of air pollution and how it impacts people, places and the planet⁵⁵. Through access to reliable data and monitoring, it is possible to identify air pollution hotspots and take targeted action to protect and improve human and environmental well-being⁵⁶. At the global level, the *World Health Organization Global Air Quality Guidelines*⁵⁷ provides a framework for assessing air quality and reducing levels of air pollutants in order to decrease the enormous health burden resulting from exposure to air pollution worldwide⁵⁸. Further, at a national level, Kenya has enacted *Air Quality Regulations*⁵⁹ which provide for the prevention, control and abatement of air pollution in order to ensure clean and healthy ambient air. It is imperative to ensure compliance with these standards in order to improve air quality data and monitoring at the global and national levels towards eliminating air pollution. It is also vital to invest in science and technology including sensing technologies in order to improve air quality data and monitoring as a prerequisite for combating air pollution⁶⁰.

⁵² United Nations Environment Programme., 'Collective Action Needed to Improve Quality of the Air we Share' Op Cit

⁵³ Clean Air Fund., '6 Cross-Sector Collaborations Tackling Air Pollution' Op Cit

⁵⁴ Ibid

⁵⁵ United Nations Environment Programme., 'How is Air Quality Measured?' Available at <https://www.unep.org/news-and-stories/story/how-air-quality-measured#:~:text=Some%20use%20lasers%20to%20scan,nitrogen%20dioxide%20and%20sulfur%20dioxide> (Accessed on 11/09/2024)

⁵⁶ Ibid

⁵⁷ World Health Organization., 'Global Air Quality Guidelines' Available at <https://iris.who.int/bitstream/handle/10665/345329/9789240034228-eng.pdf?sequence=1> (Accessed on 11/09/2024)

⁵⁸ Ibid

⁵⁹ Environmental Management and Co-ordination Act., The Environmental Management and Coordination (Air Quality) Regulations, 2014, Legal Notice No. 34

⁶⁰ Global Clean Air., 'Innovative Air Quality Monitoring' Available at <https://globalcleanair.org/innovative-air-quality-monitoring/> (Accessed on 11/09/2024)

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Finally, there is need for international cooperation towards an integrated climate and clean air policy⁶¹. The *Convention on Long-Range Transboundary Air Pollution*⁶² establishes a common framework for transboundary cooperation on air pollution. The Convention sets out the general principles of international cooperation for air pollution abatement including air quality management, research and development, and exchange of information⁶³. There is need for international cooperation on these among other standards in order to strengthen laws and policies and eliminate air pollution globally. There is also need to foster international cooperation towards combating climate change⁶⁴. Since air pollution and climate change are interconnected, efforts to combat climate change by avoiding or limiting greenhouse gas emissions are also important in tackling air pollution⁶⁵. Tackling climate change by reducing greenhouse gas emissions therefore provides dual benefits of better air quality and improved health in localities and the global benefit of mitigating climate change⁶⁶.

4.0 Conclusion

Air pollution is one of the most-pressing environmental health crisis of our time⁶⁷. Air pollution results in premature deaths worldwide while also increasing the risk of asthma, heart disease and lung cancer⁶⁸. Air pollution also contributes to climate change⁶⁹. Eliminating air pollution is therefore important for global health and prosperity. Since air pollution has no boundaries, collective action by all stakeholders including governments, NGOs, businesses, civil society and the public at large is key in curbing air pollution and

⁶¹ Clean Air Fund., '6 Cross-Sector Collaborations Tackling Air Pollution' Op Cit

⁶² 1979 Convention on Long-Range Transboundary Air Pollution., Available at <https://unece.org/sites/default/files/2021-05/1979%20CLRTAP.e.pdf> (Accessed on 11/09/2024)

⁶³ Ibid

⁶⁴ United Nations Climate Change., 'Air Quality Sinks as Climate Change Accelerates' Available at <https://unfccc.int/news/air-quality-sinks-as-climate-changeaccelerates#:~:text=%E2%80%9CAs%20the%20globe%20warms%2C%20wildfires,says%20WMO%20Secretary%20General%20Prof.> (Accessed on 11/09/2024)

⁶⁵ Ibid

⁶⁶ World Bank Group., 'What You Need to Know About Climate Change and Air Pollution' Op Cit

⁶⁷ United Nations Environment Programme., 'Five Cities Tackling Air Pollution' Op Cit

⁶⁸ United Nations Environment Programme., 'Five Cities Tackling Air Pollution' Op Cit

⁶⁹ National Institute of Environmental Health Sciences., 'Air Pollution and Your Health' Op Cit

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delivering clean air for all⁷⁰. Eliminating air pollution therefore requires collective action towards accelerating the energy transition by upscaling investments in renewable sources of energy⁷¹; improving air quality data and monitoring⁷²; international cooperation on clean air policy⁷³; and combating climate change⁷⁴.

It is necessary to take collective action to eliminate air pollution in order to achieve the right to a clean, healthy, and sustainable environment at all levels.

⁷⁰ Clean Air Fund., '6 Cross-Sector Collaborations Tackling Air Pollution' Op Cit

⁷¹ Xie. Y., 'Large-Scale Renewable Energy Brings Regionally Disproportional Air Quality and Health Co-Benefits in China' Op Cit

⁷² Clean Air Fund., '6 Cross-Sector Collaborations Tackling Air Pollution' Op Cit

⁷³ Ibid

⁷⁴ United Nations Climate Change., 'Air Quality Sinks as Climate Change Accelerates' Op Cit

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