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Taking Urgent Action to Combat Climate Change

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Abstract

The paper probes the global response towards climate change. It examines measures adopted towards combating climate change at the global, regional and national levels including legal, institutional and policy approaches. It also explores the idea of climate action and the role of other stakeholders in confronting climate change. The paper further discusses the efficacy of the measures adopted towards tackling climate change and suggests recommendations towards enhancing the global response to climate change.

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1.0 Introduction

Climate change refers to the long term shift in global or regional climate patterns and is often associated with the rise in global temperatures from the mid-20th century to present¹. It has also been described as the global phenomenon of climate transformation characterized by the changes in the usual climate of the planet (regarding temperature, precipitation, and wind) that are especially caused by human activities². The *United Nations Framework Convention on Climate Change* (UNFCCC) defines climate change as a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods³. Climate change therefore refers to longterm shifts in temperatures and weather patterns. It has been observed that such shifts can be natural, due to factors such as changes in the sun's activity or large volcanic eruptions⁴. However, human activities have been the main drivers of climate change due to the burning of fossil fuels like coal, oil and gas⁵. Human activities have increased the concentration of atmospheric carbon dioxide resulting to the greenhouse effect which contributes to global warming and climate change⁶.

Climate change is an undesirable phenomenon that affects realization of the Sustainable Development agenda across the world by affecting the sustainability of the planet's ecosystems, the stability of the global economy and the future of humankind⁷. The consequences of climate change such as intense droughts, water scarcity, severe fires, rising sea levels, flooding, melting polar ice, catastrophic storms and declining

¹ National Geographic., 'Climate Change.' Available at https://education.nationalgeographic.org/resource/climate-change/ (Accessed on 20/09/2023)

² Climate Change., 'Meaning, Definition, Causes, Examples and Consequences.' Available at https://youmatter.world/en/definition/climate-change-meaning-definition-causes-and-consequences/ (Accessed on 20/09/2023)

³ United Nations Framework Convention on Climate Change., United Nations, 1992., Available at https://unfccc.int/resource/docs/convkp/conveng.pdf (Accessed on 20/09/2023)

⁴ United Nations., 'What is Climate Change?' Available at

https://www.un.org/en/climatechange/what-is-climate-change (Accessed on 20/09/2023)

⁵ Ibid

⁶ Ibid

⁷ Climate Change., 'Meaning, Definition, Causes, Examples and Consequences.' Op Cit

biodiversity are being witnessed across the world⁸. Rising temperatures caused by climate change have made storms and droughts more severe⁹. For example, climate change has resulted in the worst drought in 40 years in the Horn of Africa after five consecutive years of below-average rainfall¹⁰. The drought has affected approximately 50 million people resulting in food insecurity, displacement of people and further threatening human health as a result of malnutrition¹¹.

Further, catastrophic storms brought about by climate change have destroyed lives and homes¹². From June to October 2022, Pakistan suffered extreme flooding which resulted in the deaths of over 1,700 people, destroyed around 2 million homes, and swept away almost half the country's cropland¹³. The flooding was caused by heavier than usual monsoon rains and melting glaciers in the country's northern region that followed a severe heat wave all which are factors linked to climate change¹⁴. Recently, in September 2023, Libya suffered devastating floods that resulted in the death of over 5,000 people and destruction of property¹⁵. Climate change has been attributed as one of the causes of the flooding by intensifying the severity of Storm Daniel that resulted in the severe rainfalls¹⁶.

In addition, sea level rise threatens low-lying areas such as small island nations. It has been observed that sea level rise, increasing temperatures and frequency and intensity of

⁸ United Nations., 'What is Climate Change?' Available at https://www.un.org/en/climatechange/what-is-climate-change (Accessed on 20/09/2023)

⁹ UN Women., 'SDG 13: Take Urgent Action to Combat Climate Change and its Impacts.' Available at https://www.unwomen.org/en/news/in-focus/women-and-the-sdgs/sdg-13-climate-action (Accessed on 20/09/2023)

¹⁰ Harvey. F., 'Human-Driven Climate Crisis Fuelling Horn of Africa Drought – Study.' Available at https://www.theguardian.com/environment/2023/apr/27/human-driven-climate-crisis-fuelling-horn-of-africa-drought-study (Accessed on 20/09/2023)

¹¹ Ibid

 $^{^{\}rm 12}$ UN Women., 'SDG 13: Take Urgent Action to Combat Climate Change and its Impacts.' Op Cit

¹³ Giles. M., 'The Principles of Climate Justice at CoP27.' Available at https://earth.org/principles-ofclimatejustice/#:~:text=That%20response%20should%20be%20based,the%20consequences%20of%20climate%20change (Accessed on 20/09/2023)

¹⁴ Ibid

¹⁵ Marshall. M., 'Libya Floods: How Climate Change Intensified the Death and Devastation.' Available at https://www.nature.com/articles/d41586-023-02899-6 (Accessed on 20/09/2023)

¹⁶ Ibid

tropical cyclones, and storm surges are some of the climate change impacts facing island nations, some of which are in low-lying areas of just 5 meters above sea level at the highest point making them more vulnerable to these impacts¹⁷. Climate change therefore hinders the Sustainable Development agenda by affecting human health, food security, housing, safety and work while simultaneously threatening the environment and natural ecosystems¹⁸.

Due to the foregoing concerns, climate change has been described as the most defining challenge of our time¹⁹. It is the main global challenge that is affecting both developed and developing countries in their efforts towards realization of the Sustainable Development agenda²⁰. The United Nations 2030 Agenda for Sustainable Development acknowledges that climate change is one of the greatest challenges of our time and its adverse impacts undermine the ability of all countries to achieve Sustainable Development²¹. It has been argued that if left unchecked, climate change will undo a lot of the development progress made over the past years and will also provoke mass migrations that will lead to instability and wars²². Climate change has thus risen to the top of the policy agenda, at local, national, and global levels²³. There have been global calls on governments and all other stakeholders to put in place measures towards responding to the threat of climate change and ensuring that economies are climate resilient²⁴. Urgent and transformative action is required to combat climate change and

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¹⁷ Bafana. B., 'Climate Change is No 'Future Scenario' for Pacific Island Nations; Climate Change is 'Real' Available at https://reliefweb.int/report/world/climate-change-no-future-scenario-pacific-islandnations-climate-change-real (Accessed on 20/09/2023)

¹⁸ United Nations., 'What is Climate Change?' Op Cit

¹⁹ Muigua. K., 'Achieving Sustainable Development, Peace and Environmental Security.' Glenwood Publishers Limited, 2021

²⁰ Ibid

 $^{^{21}}$ United Nations General Assembly., 'Transforming Our World: the 2030 Agenda for Sustainable Development.' 21 October 2015, A/RES/70/1

²² United Nations., 'Goal 13: Take Urgent Action to Combat Climate Change and its Impacts.' Available at https://www.un.org/sustainabledevelopment/climate-change/ (Accessed on 20/09/2023)

²³ United Nations Department of Economic and Social Affairs., 'Forum on Climate Change and Science and Technology Innovation.' Available at https://www.un.org/en/desa/forum-climate-change-and-technology-innovation (Accessed on 20/09/2023)

²⁴ Muigua. K., 'Achieving Sustainable Development, Peace and Environmental Security.' Op Cit

achieve Sustainable Development²⁵. Responding to climate change is one of the fundamental goals under the United Nation's 2030 Agenda for Sustainable Development²⁶. Sustainable Development Goal 13 calls upon countries to take urgent actions towards combating climate change and its impacts²⁷.

The paper probes the global response towards climate change. It examines measures adopted towards combating climate change at the global, regional and national levels include legal, institutional and policy approaches. It also explores the idea of climate action and the role of various stakeholders in confronting climate change. The paper further discusses the efficacy of the measures adopted towards tackling climate change and suggests recommendations towards enhancing the global response to climate change.

2.0 Global Response to Climate Change

The threat of climate change has resulted in international, regional and national responses aimed at confronting the problem²⁸. The 2030 Agenda for Sustainable Development emphasizes the need to protect 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 generations²⁹. Sustainable Development Goal (SDG) 13 urges all countries to take urgent action to combat climate change and its impacts through several mechanisms³⁰. These include strengthening resilience and adaptive capacity to climate-related hazards and natural disasters in all countries; integrating climate change

²⁵ United Nations., 'Goal 13: Take Urgent Action to Combat Climate Change and its Impacts.' Op Cit

²⁶ United Nations General Assembly., 'Transforming Our World: the 2030 Agenda for Sustainable Development.' Op Cit

²⁷ Ibid, Sustainable Development Goal, 13

²⁸ Muigua. K., 'Achieving Sustainable Development, Peace and Environmental Security.' Op Cit

²⁹ United Nations General Assembly., 'Transforming Our World: the 2030 Agenda for Sustainable Development.' Op Cit

³⁰ United Nations., 'Sustainable Development Goal 13' Available at https://sdgs.un.org/goals/goal13 (Accessed on 21/09/2023)

measures into national policies, strategies and planning; improving education, awareness-raising, human, and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning; implementing the commitment undertaken by developed country parties to the UNFCCC to mobilize jointly \$ 100 billion annually by 2020 to support developing countries and promoting mechanisms for raising capacity for effective climate change-related planning and management in least developed countries and small island developing states, including focus on women, youth and local and marginalized communities³¹. SDG 13 therefore sets the global threshold towards responding to climate change by stipulating actions designed to help all countries take urgent action to combat climate change.

The *United Nations Framework Convention on Climate Change* (UNFCCC) is the primary international, intergovernmental forum for negotiating the global response to climate change³². The UNFCCC entered into force on 21st March 1994 as the first international legal instrument that focuses on climate change and sets out measures towards addressing the problem³³. The objective of the UNFCCC is to stabilize greenhouse gas concentrations at a level that would prevent dangerous anthropogenic (human induced) interference with the climate system³⁴. It states that such a level should be achieved within a time-frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened, and to enable economic development to proceed in a sustainable manner³⁵.

The Convention acknowledges the vulnerability of all countries to the effects of climate change and calls for special efforts to ease the consequences, especially in developing

³¹ Ibid

³² United Nations General Assembly., 'Transforming Our World: the 2030 Agenda for Sustainable Development.' Op Cit

³³ United Nations Framework Convention on Climate Change., 'What is the United Nations Framework Convention on Climate Change?' Available at https://unfccc.int/process-and-meetings/what-is-the-united-nations-framework-convention-on-climate-change (Accessed on 20/09/2023)

³⁴ United Nations Framework Convention on Climate Change., United Nations, 1992., Available at https://unfccc.int/resource/docs/convkp/conveng.pdf (Accessed on 20/09/2023)

³⁵ Ibid, Article 2

countries which lack the resources to do so on their own³⁶. Industrialized nations agree under the Convention to support climate change activities in developing countries by providing financial support for action on climate change above and beyond any financial assistance they already provide to these countries³⁷. Among the key principles of the Convention is the idea of *Common But Differentiated Responsibilities*(CBDR)³⁸. Under this principle, parties should protect the climate system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities³⁹. The UNFCCC further enshrines various commitments by member states towards confronting climate change. These include promoting and cooperating in the development, application and diffusion, including transfer, of technologies, practices and processes aimed at combating climate change; cooperating in preparing for adaptation to the impacts of climate change; taking climate change considerations into account in social, economic and environmental policies; promoting and cooperating in scientific, technological, technical, socio-economic and other research on climate change and promoting and cooperating in education, training and public awareness related to climate change⁴⁰. The UNFCCC is therefore an important milestone in the global response towards climate change. The UNFCCC gave birth to the Kyoto Protocol⁴¹ and Paris Agreement⁴² which have enhanced the global response to climate change.

The *Kyoto Protocol* to the UNFCCC was adopted on 11th December 1997⁴³. The Protocol operationalizes the UNFCCC by committing industrialized countries and economies in

³⁶ Ibid

³⁷ Ibid

³⁸ Ibid, Article 3 (1)

³⁹ Ibid

⁴⁰ Ibid, Article 4

⁴¹ United Nations Framework Convention on Climate Change., 'Kyoto Protocol to the United Nations Framework Convention on Climate Change.' Available at

https://unfccc.int/resource/docs/convkp/kpeng.pdf (Accessed on 20/09/2023)

⁴² United Nations Framework Convention on Climate Change., 'Paris Agreement.' Available at https://unfccc.int/sites/default/files/english_paris_agreement.pdf (Accessed on 20/09/2023)

⁴³ United Nations Framework Convention on Climate Change., 'Kyoto Protocol to the United Nations Framework Convention on Climate Change.' Op Cit

transition to limit and reduce greenhouse gases (GHG) emissions in accordance with agreed individual targets⁴⁴. The Protocol only binds developed countries, and places a heavier burden on them under the principle of *Common But Differentiated Responsibilities and respective capabilities* since it recognizes that they are largely responsible for the current high levels of greenhouse gas emissions in the atmosphere⁴⁵. It requires these countries to implement measures and policies geared towards achieving their emission limitation and reduction commitments towards combating climate change⁴⁶. These include enhancement of energy efficiency; promotion of sustainable forms of agriculture in light of climate change considerations; research on, and promotion, development and increased use of, new and renewable forms of energy, of carbon dioxide sequestration technologies and of advanced and innovative environmentally sound technologies and cooperation between states to enhance the individual and combined effectiveness of their policies and measures adopted towards confronting climate change⁴⁷.

During the first commitment period of the Kyoto Protocol which ran from 2008 to 2012, 37 industrialized countries and economies in transition and the European Community committed to reduce greenhouse gas emissions to an average of five percent against 1990 levels⁴⁸. During the second commitment period, Parties committed to reduce greenhouse gas emissions by at least eighteen percent below 1990 levels in the eight-year period from 2013 to 2020⁴⁹. The Kyoto Protocol establishes flexible market mechanisms which are based on the trade of emissions permits to help countries achieve emission reduction targets including International Emissions Trading, Clean Development Mechanism and Joint Implementation⁵⁰.

⁴⁴ United Nations Climate Change., 'What is the Kyoto Protocol?' Available at https://unfccc.int/kyoto_protocol (Accessed on 21/09/2023)

⁴⁵ Ibid

⁴⁶ United Nations Framework Convention on Climate Change., 'Kyoto Protocol to the United Nations Framework Convention on Climate Change.' Article 2

⁴⁷ Ibid

⁴⁸ United Nations Climate Change., 'What is the Kyoto Protocol?' Op Cit

⁴⁹ Ibid

⁵⁰ United Nations Framework Convention on Climate Change., 'Kyoto Protocol to the United Nations Framework Convention on Climate Change.' Op Cit

The *Paris Agreement* is a legally binding international treaty on climate change⁵¹. It was adopted by 196 Parties at the United Nations Climate Change Conference (COP 21) in Paris, France, on 12th December 2015 and entered into force on 4th November 2016⁵². The Agreement seeks to strengthen the global response to the threat of climate change, in the context of Sustainable Development and efforts to eradicate poverty through holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels; increasing the ability to adapt to the adverse impacts of climate change and foster climate resilience and low greenhouse gas emissions development, in a manner that does not threaten food production; and making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development⁵³.

The Paris Agreement also requires parties to prepare, communicate and maintain successive national climate action plans known as Nationally Determined Contributions (NDCs) that they intend to achieve which entail inter alia their emission reduction targets⁵⁴. Each successive NDC is meant to reflect an increasingly higher degree of ambition compared to the previous version⁵⁵. The Paris Agreement further requires parties to pursue domestic mitigation measures, with the aim of achieving the objectives of such NDCs⁵⁶. The Agreement further acknowledges the special circumstances of developing countries some which are more vulnerable to the effects of climate change and requires developed countries to support them in their efforts to confront climate change through measures such as provision of financial resources and technology transfer⁵⁷. The Paris Agreement represents a major milestone in enhancing the global

⁵¹ United Nations Climate Change., 'The Paris Agreement.' Available at https://unfccc.int/process-and-meetings/the-paris-agreement (Accessed on 21/09/2023)

⁵² Ibid

⁵³ Paris Agreement., Article 2 (1)

⁵⁴ Ibid, Article 4 (2)

⁵⁵ Ibid

⁵⁶ Ibid

⁵⁷ Ibid, Articles 9 (1) & 10

response to climate change because for the first time, a binding agreement brings all nations together to combat climate change and adapt to its effects⁵⁸.

3.0 Combating Climate Change in Africa

Combating climate change is also a matter of priority in Africa. Despite its low contribution to greenhouse gas emissions with just about two to three percent of global emissions, Africa remains the most vulnerable continent to the impacts of climate change⁵⁹. It has been pointed out that Africa faces exponential collateral damage from the impacts of climate change posing systemic risks to its economies, infrastructure investments, water and food systems, public health, agriculture, and livelihoods, threatening to undo its modest development gains and slip the continent into higher levels of extreme poverty⁶⁰. The vulnerability of Africa to the impacts of climate change is compounded by the fact that 95% Sub-Saharan Africa depends on rain-fed agriculture and that a large share of its Gross Domestic Product (GDP) and employment is dependent on climate sensitive agricultural sectors including farming, herding and fishing⁶¹. Climate change is therefore a major threat to the attainment of the Sustainable Development agenda in Africa. Climate change is harming food security, ecosystems and economies, fueling displacement and migration and worsening the threat of conflict over dwindling resources including land, water and pastures⁶². The impacts of climate change including heatwaves, heavy rains, floods, tropical cyclones, and prolonged droughts are having devastating impacts on communities and economies in Africa, with increasing numbers of people at risk⁶³. Taking urgent action to combat climate change is therefore

⁵⁸ United Nations Climate Change., 'The Paris Agreement.' Op Cit

⁵⁹ African Development Bank Group., 'Climate Change in Africa.' Available at https://www.afdb.org/en/cop25/climate-change-africa (Accessed on 21/09/2023) 60 Ibid

⁶¹ Ibid

⁶² World Meteorological Organization., 'Africa Suffers Disproportionately from Climate Change.' Available at https://public.wmo.int/en/media/press-release/africa-suffers-disproportionately-fromclimate-change (Accessed on 21/09/2023) 63 Ibid

vital in Africa if the continent is to realize the SDGs⁶⁴. Laws and policies on climate change have been adopted at regional and national levels towards strengthening the response towards climate change in Africa.

In the East African Region, the East African Community Climate Change Policy⁶⁵ recognizes the adverse impacts of climate change as a major challenge to socio-economic development globally. According to the Policy, the African continent including the East African region is particularly vulnerable to climate change since its impacts affect key economic drivers in the continent such as water resources, agriculture, energy, transport, health, forestry, wildlife, land and infrastructure, disaster risk management among others⁶⁶. The purpose of the policy is to foster Sustainable Development within the East African region through harmonized and coordinated regional strategies, programmes and actions to respond to climate change⁶⁷. It sets out several measures aimed at confronting climate change in the region which include establishing a regional framework to guide the harmonization, coordination and implementation of climate change initiatives amongst partner states; identifying priority adaptation and mitigation action areas and roles of partner states and other stakeholders to address climate change in the region; promoting public awareness and socio-economic importance of climate change including vulnerability, impacts, risks, and response measures in the region; and promoting capacity building efforts through inter alia education, training, research, technology development and transfer, information and knowledge management⁶⁸. It is imperative to realize the vision of this policy in order to effectively combat climate change in the East African region.

⁶⁴ African Development Bank Group., 'Climate Change in Africa.' Op Cit

⁶⁵ East African Community., 'East African Community Climate Change Policy.' Available at https://www.eac.int/environment/climate-change/eac-climate-change-policy-framework (Accessed on 21/09/2023)

⁶⁶ Ibid

⁶⁷ Ibid

⁶⁸ Ibid

Tackling climate change is also a pertinent issue in Kenya due to its devastating impacts in the country. Kenya's economy is largely dependent on tourism and rain fed agriculture which are both susceptible to climate change and extreme weather events⁶⁹. It has been observed that increasing heat and prolonged droughts are contributing to severe crop and livestock losses, leading to famine, food insecurity, displacement of people, and other threats to human health and wellbeing in Kenya⁷⁰. Adverse impacts of climate change such as extreme drought has affected economic activities including pastoralism in the northern parts of Kenya due to dwindling of natural resources including water and pasture⁷¹. Drought has also resulted in death of wildlife in rangeland ecosystems in the northern parts of Kenya affecting tourism activities⁷². Further, Kenya's predominantly low-lying coastline and surrounding islands are at a great risk from sea level rise, with significant implications for the fisheries sector and storm surge protection⁷³. Climate change is therefore a major hindrance in the achievement of Sustainable Development agenda.

Kenya enacted the *Climate Change Act*⁷⁴ in order to enhance the national response to climate change and achieve low carbon climate development for Sustainable Development⁷⁵. The Act sets out several ways of achieving this goal such as mainstreaming climate change responses into development planning, decision making and implementation; build national resilience and enhancing adaptive capacity to the impacts of climate change; formulating programmes and plans to enhance the resilience and adaptive capacity of human and ecological systems to the impacts of climate change; mainstreaming intergenerational and gender equity in all aspects of climate change

⁶⁹ Climatelinks., 'Climate Change in Kenya.' Available at https://www.climatelinks.org/countries/kenya (Accessed on 21/09/2023)

⁷⁰ Ibid

⁷¹ Mokku. J., 'Climate Change Destroys the Livelihoods of Kenyan Pastoralists.' Available at https://www.un.org/africarenewal/magazine/january-2023/climate-change-destroys-livelihoods-kenyan-pastoralists (Accessed on 21/09/2023)

⁷² Ibid

⁷³ Climatelinks., 'Climate Change in Kenya.' OpCit

⁷⁴ Climate Change Act., No. 11 of 2016, Government Printer, Nairobi

⁷⁵ Ibid, S 3(1)

responses; promoting low carbon technologies, improving efficiency and reducing emissions intensity by facilitating approaches and uptake of technologies that support low carbon, and climate resilient development; and facilitating capacity development for public participation in climate change responses through awareness creation, consultation, representation and access to information⁷⁶.

The Climate Change Act has since been amended by the Climate Change (Amendment) Act⁷⁷ 2023 in order to enhance climate change mitigation and adaption measures in Kenya through the concept of carbon trading. The Amendment Act introduces the idea of carbon trading in Kenya and defines a carbon market as a mechanism that enables and allows public and private entities to transfer and transact emission reduction units, mitigation outcomes or offsets generated through carbon initiatives, programmes and projects subject to compliance of national and international laws⁷⁸. It also introduces the concept of carbon offset which refers to a reduction or removal of emissions of carbon dioxide or other greenhouse gases made in order to compensate for emissions made elsewhere⁷⁹. The Amended Act further requires national and county governments to provide guidance in the development and implementation of carbon markets and nonmarket approaches in compliance with international obligations⁸⁰. The amended Climate Change Act is an important milestone in fostering low carbon development in Kenya by providing the legal framework for carbon trading. Although the Climate Change Act, 2016 was intended to enhance national response to climate change and provided mechanisms and measures to achieve low carbon climate-resilient development, it did not envisage the concept of carbon trading⁸¹. Kenya has also formulated a National Climate

⁷⁶ Ibid, S 3 (2)

⁷⁷ Climate Change (Amendment) Act, 2023, Government Printer, Nairobi

⁷⁸ Ibid, S 2

⁷⁹ Ibid

⁸⁰ Ibid, S 3

⁸¹ Section 3 of the Climate Change Act, 2016 stipulates mechanisms and measures to enhance climate change resilience and low carbon development for the Sustainable Development of Kenya. However, it does not embrace the idea of carbon trading

Change Policy⁸² and a National Climate Change Action Plan⁸³ (NCCAP) 2023-2027 to strengthen its response to climate change. It is vital for the country to implement these legal instruments and take urgent actions to combat climate change in order to foster Sustainable Development.

4.0 Taking Urgent Action to Combat Climate Change: Progress and Challenges

SDG 13 encapsulates several targets that are vital in helping countries take urgent action to combat climate change. These include strengthening resilience and adaptive capacity to climate-related hazards and natural disasters in all countries; integrating climate change measures into national policies, strategies and planning; improving education, awareness-raising, human, and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning; implementing the commitment undertaken by developed country parties to the UNFCCC to mobilize jointly \$ 100 billion annually by 2020 to support developing countries in the context of meaningful mitigation actions and promoting mechanisms for raising capacity for effective climate change-related planning and management in least developed countries and small island developing states, including focus on women, youth and local and marginalized communities.⁸⁴ There has been progress towards meeting these targets as a means of taking urgent action to combat climate change at the global, regional and national levels.

There have been efforts towards strengthening resilience and adaptive capacity to climate-related hazards and natural disasters as envisaged under SDG 13.185. Resilience has been defined as the ability of a system, community or society at risk to withstand, absorb, adapt to, and recover from the effects of disaster in a timely and effective manner, including by preserving and restoring basic structures and functions through risk

⁸² Sessional Paper No. 5 of 2016., 'National Climate Change Framework Policy.' Available at http://aiap.or.ke/wp-content/uploads/2018/10/Climate-Change-Framework-PolicyMay2017.pdf (Accessed on 21/09/2023)

⁸³ Ministry of Environment, Climate Change and Forestry., 'Draft Strategic Plan: 2023-2027' Available at https://www.environment.go.ke/wp-content/uploads/2023/05/MoECCF-Strategic-Plan-Draft07.05.2023-updated.pdf (Accessed on 21/09/2023)

⁸⁴ United Nations., 'Sustainable Development Goal 13' Op Cit

⁸⁵ Ibid, SDG 13.1

management⁸⁶. It has been observed that climate change is a slow but irreversible process, and therefore it is important not only to mitigate the effects of climate change by limiting greenhouse gas emissions, but also to strengthen resilience and the capacity to adapt to climate change⁸⁷. This has been achieved through raising awareness of climate threats and risks, increasing the level of preparedness of both communities and civil protection providers for natural disasters, improving early warning and public awareness systems and practices, and introducing nature-based solutions among other ways⁸⁸.

In addition, there has been progress towards integrating climate change measures into national policies, strategies and planning as enshrined under SDG 13.289. These has been achieved through measures such as enactment and adoption of laws and policies on climate change. In Kenya, the *Climate Change Act*⁹⁰, the *National Climate Change Policy*⁹¹ and the *National Climate Change Action Plan*⁹² (*NCCAP*) 2023-2027 have been adopted to strengthen the country's legal regime on climate change. The country's development blueprint, *Vision* 2030, further recognizes the threat of climate change in Kenya and seeks to integrate climate change considerations into development planning⁹³. Integrating climate change considerations into national policies, strategies and planning has enabled countries to pursue low carbon development through measures such as embracing renewable sources of energy, climate resilient agricultural practices and sustainable transport and infrastructure as part of the development agenda⁹⁴.

https://vision2030.go.ke/wp-content/uploads/2018/05/Sessional-paper-No.-10-of-2012-On-Kenya-Vision-2030.pdf (Accessed on 21/09/2023)

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⁸⁶ United Nations Development Programme., 'Strengthening Resilience to Natural Disasters in Ukraine.' Available at https://www.undp.org/sites/g/files/zskgke326/files/migration/ua/Strengthening-resilience-to-natural-disasters.pdf (Accessed on 21/09/2023)

⁸⁷ Ibid

⁸⁸ Ibid

⁸⁹ United Nations., 'Sustainable Development Goal 13.2' Op Cit

⁹⁰ Climate Change Act., No. 11 of 2016, Government Printer, Nairobi, Op Cit

⁹¹ Sessional Paper No. 5 of 2016., 'National Climate Change Framework Policy.' Op Cit

⁹² Ministry of Environment, Climate Change and Forestry., 'Draft Strategic Plan: 2023-2027' Op Cit

⁹³ Republic of Kenya., 'Sessional paper On Kenya Vision 2030.' Available at https://vision2030.go.ke/wp-content/uploads/2018/05/Sessional-paper-No.-10

⁹⁴ Muigua. K., 'Enhancing Low Carbon Development for Sustainability.' Available at http://kmco.co.ke/wp-content/uploads/2023/09/Enhancing-Low-Carbon-Development-for-Sustainability-.pdf (Accessed on 21/09/2023)

SDG 13.3 further sets out improving education, awareness-raising, human, and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning as one of the ways of taking urgent action to combat climate change 95. It has been asserted that educational initiatives play a pertinent role in combating climate change by raising awareness of Sustainable Development and the natural world, including the impacts of climate change 96. Education gives people the knowledge and tools they need to adapt to the impacts of climate change and the risks it poses to lives, livelihoods and well-being 97. It can also be a powerful driver for more Sustainable Development, including a transition to greener societies 98. It is thus vital to build knowledge and capacity at all levels in order to combat climate change 99.

One of the key tools geared towards taking urgent action to combat climate change as envisaged under SDG 13is implementing the commitment undertaken by developed country parties to the UNFCCC to mobilize jointly \$ 100 billion annually by 2020 to support developing countries in the context of meaningful mitigation actions¹⁰⁰. Despite being a global phenomenon, some people and communities are more vulnerable to climate impacts, especially people and communities living in small island nations and developing countries¹⁰¹. This situation is compounded by the fact that such communities and countries have contributed very little to climate change therefore raising justice

⁹⁵ United Nations., 'Sustainable Development Goal 13.3' Op Cit

⁹⁶ Sustainable Development Goal 13: Climate Action., Available at https://www.gcint.org/sdg-13-climate-

action#:~:text=13.3%20Improve%20education%2C%20awareness%2Draising,impact%20reduction%20and%20early%20warning.&text=Our%20educational%20initiatives%20raise%20an,the%20impacts%20of%20climate%20change. (Accessed on 21/09/2023)

⁹⁷ Global Partnership for Education., 'Confronting Climate Change through Education.' Available at https://www.globalpartnership.org/node/document/download?file=document/file/2023-04-confronting-climate-change-through-education.pdf (Accessed on 21/09/2023)

⁹⁸ Ibid

⁹⁹ The Global Goals., '13: Climate Action.' Available at https://www.globalgoals.org/goals/13-climate-action/ (Accessed on 21/06/2023)

¹⁰⁰ United Nations., 'Sustainable Development Goal 13.a' Op Cit

¹⁰¹ Sultana. F., 'Critical Climate Justice' Available at

https://www.farhanasultana.com/wpcontent/uploads/Sultana-Critical-climate-justice.pdf (Accessed on 21/09/2023)

concerns¹⁰². Climate finance is therefore seen as a vital tool in enhancing the capacity of developing countries to respond to climate change and foster Sustainable Development¹⁰³. There has been progress towards fostering climate finance in developing countries through initiatives such as funding from the UNFCCC through the Green Climate Fund, funding from developed countries and international and regional financial institutions such as the World Bank and the African Development Bank and national initiatives including public and private funding¹⁰⁴. Further, at COP 27, a breakthrough agreement was reached to provide loss and damage funding for vulnerable countries hit hard by floods, droughts and other climate disasters¹⁰⁵.

Further, under the principle of Common but Differentiated Responsibilities (CBDR), everyone is to act on climate change but justice demands that those who have contributed more to the problem assume a greater responsibility for solving it ¹⁰⁶. The principle therefore requires developed countries to first and fast in cutting emissions and also to provide financial support to countries with more limited means so they can keep up with enormous financial burdens as climate change accelerates ¹⁰⁷. Pursuant to this principle, at COP 15 held in Copenhagen Denmark in 2009, developed countries committed to a collective goal of mobilizing \$ 100 billion annually by 2020 for climate action in developing countries ¹⁰⁸. However, developed countries have failed to deliver on the

¹⁰² Ibid

¹⁰³ Hill. A.,& Babin. M 'Why Climate Finance is Critical for Accelerating Global Action.' Available at https://www.cfr.org/in-brief/why-climate-finance-critical-accelerating-global-action (Accessed on 21/09/2023)

¹⁰⁴ Muigua. K., 'Unlocking Climate Finance for Development.' Available at http://kmco.co.ke/wp-content/uploads/2023/08/Unlocking-Climate-Finance-for-Development.pdf (Accessed on 21/09/2023)

¹⁰⁵ United Nations Framework Convention on Climate Change., 'Decision -/CP.27 -/CMA.4: Funding Arrangements for Responding to Loss and Damage Associated with the Adverse Effects of Climate Change, Including a Focus on Addressing Loss and Damage.' Available at

https://unfccc.int/sites/default/files/resource/cma4_auv_8f.pdf (Accessed on 21/09/2023)

¹⁰⁶ United Nations., 'Finance and Justice.' Available at

https://www.un.org/en/climatechange/raisingambition/climate-finance (Accessed on 21/09/2023) ¹⁰⁷ Ibid

¹⁰⁸ United Nations Framework Convention on Climate Change., 'COP 15 – Decisions.' Available at https://unfccc.int/process-and-meetings/conferences/past-conferences/copenhagen-climate-change-conference-december-2009/cop-15/cop-15-decisions (Accessed on 21/09/2023)

agreed target of \$100 billion annually by 2020¹⁰⁹. This has resulted in inadequacy, imbalance and unpredictability of climate finance flows to developing countries affecting implementation of mitigation and adaptation measures¹¹⁰. There is need for developed countries to realize their climate finance commitments pursuant to the principle of common but differentiated responsibilities in order to enable developing countries take urgent actions to combat climate change.

Finally, SDG 13.b requires countries to promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries and small island developing states, including focus on women, youth and local and marginalized communities¹¹¹. It has been observed that the impacts of climate change are more severe on certain groups including women since they depend more heavily on natural resources like water and firewood, meaning that if these items become scarce, they may need to travel further to access them¹¹². In addition, gender inequalities within communities may leave women more vulnerable to the immediate aftermath of natural disasters occasioned by the effects of climate change, or excluded from the decisionmaking table when disaster risk reduction solutions and other climate change responses are designed and implemented¹¹³. The youth are also more vulnerable to the effects of climate change since they are likely to experience the negative effects of climate change for many years compared to older generations¹¹⁴. In addition, marginalized people including persons with disabilities may be severely affected by the effects of climate change due to the difficulty in accessing vital resources in case of food insecurity and water scarcity and difficulties in responding to emergencies in case of disasters associated

¹⁰⁹ Kone. T., 'For Africa to meet its Climate Goals, Finance is Essential.' Available at https://climatepromise.undp.org/news-and-stories/africa-meet-its-climate-goals-finance-essential (Accessed on 21/09/2023)

¹¹⁰ Ibid

¹¹¹ United Nations., 'Sustainable Development Goal 13.b' Op Cit

¹¹² Pearse. R., 'Gender and Climate Change.' WIREs Climate Change, 2016

¹¹³ Ibid

¹¹⁴ United Nations Children's Fund., 'What is Climate Justice? And what can we do Achieve It?' Available at https://www.unicef.org/globalinsight/what-climate-justice-and-what-can-we-do-achieve-it (Accessed on 21/09/2023)

with climate change such a floods¹¹⁵. It has been pointed out that these groups have a right to all capacities needed to protect themselves, and to participate in decisions with profound implications for people and the planet¹¹⁶. It has also been argued that women can play a fundamental role in climate action and offer valuable insights into better managing the climate and its risks through their experiences and traditional knowledge as stewards of many natural resources¹¹⁷. There has been progress towards realizing this goal through measures such as gender-inclusive climate-change-related planning; public and community participation in climate action; and enhancing specialized support for least developed countries and small island developing states through finance, technology and capacity-building, for mechanisms for raising capacities for effective climate change-related planning and management, including focusing on women, youth and local and marginalized communities¹¹⁸.

Despite the progress made towards combating climate change, the threat is still present. It has been asserted that due to rising greenhouse gas emissions, climate change is occurring at rates much faster than anticipated¹¹⁹. This situation increasing the frequency and intensity of extreme weather events such as heat waves, severe droughts, floods and tropical cyclones, aggravating water management problems, reducing agricultural productivity and food security, increasing health risks, damaging vital infrastructure and interrupting the provision of basic services such as water and sanitation, education, energy and transport¹²⁰. Climate change is therefore a major threat to the realization of

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¹¹⁵ Almomani. S., 'Climate Justice for People with Disabilities.' Available at https://www.worldforgottenchildren.org/blog/climate-justice-for-people-with-disabilities/154 (Accessed on 21/09/2023)

 $^{^{116}}$ United Nations Women., 'SDG 13: Take Urgent Action to Combat Climate Change and its Impacts.' Available at https://lac.unwomen.org/en/noticias-y-eventos/en-la-mira/women-and-the-sdgs/sdg-13-climate-action (Accessed on 21/09/2023)

¹¹⁷ Ibid

¹¹⁸ Sustainable Development Goals Data., 'SDG 13: Climate Action.' Available at https://sdg.data.gov/13-b-1/ (Accessed on 21/09/2023)

¹¹⁹ United Nations., 'Goal 13: Take Urgent Action to Combat Climate Change and its Impacts.' Available at https://www.un.org/sustainabledevelopment/climate-change/ (Accessed on 21/09/2023)

 $^{^{120}}$ United Nations Environment Programme., 'Goal 13: Climate action.' Available at

https://www.unep.org/explore-topics/sustainable-development-goals/why-do-sustainable-development-goals-matter/goal-13 (Accessed on 21/09/2023)

the global Sustainable Development agenda. According to the United Nations, if left unchecked, climate change will undo a lot of the development progress made over the past years and will also provoke mass migrations that will lead to instability and wars¹²¹. There is need for countries to take urgent action to combat climate change. The United Nations asserts that urgent and transformative action going beyond mere plans and promises is crucial in combating climate change¹²².

5.0 Way Forward

It is imperative for the world to take urgent action to combat climate change. This can be achieved through the measures discussed below.

5.1 Building Climate Resilient and Low Carbon Economies

In order to effectively combat climate change, it is imperative for countries to take urgent actions and build climate resilient and low-carbon economies¹²³. Resilience has been defined as the ability of a system, community or society at risk to withstand, absorb, adapt to, and recover from the effects of disaster in a timely and effective manner, including by preserving and restoring basic structures and functions through risk management¹²⁴. Low carbon development refers to forward-looking national economic development plans or strategies that encompass low-emission and/or climate-resilient economic growth¹²⁵. The objective of low-carbon development is to reduce greenhouse gas emissions, exploit low-carbon energy, and ensure economic growth¹²⁶. Low carbon and climate resilient development can accelerate efforts towards combating climate

 $^{^{121}}$ United Nations., 'Goal 13: Take Urgent Action to Combat Climate Change and its Impacts.' Op Cit 122 Ibid

 $^{^{\}rm 123}$ African Development Bank Group., 'Climate Change in Africa.' Op Cit

¹²⁴ United Nations Development Programme., 'Strengthening Resilience to Natural Disasters in Ukraine.' Op Cit

¹²⁵ United Nations., 'Low Carbon Development.' Available at https://sustainabledevelopment.un.org/index.php?menu=1448#:~:text=The%20concept%20of%20low%20carbon,low%2Dcarbon%20growth%20plans (Accessed on 22/09/2023)

¹²⁶ Yuan. H, Zhou. P, & Zhou. D., 'What is Low-Carbon Development? A Conceptual Analysis.' *Energy Procedia*, 5 (2011) 1706–1712

change by strengthening national climate change coordination processes; contributing towards fostering access to clean and efficient energy sources; improving national and local decision making on climate change interventions and contributing towards minimizing the impacts of extreme climate events for improved and resilient livelihoods¹²⁷. Governments at national and local levels have an important role to play in building climate-resilient and low carbon economies by integrating climate change measures into national policies, strategies, and planning¹²⁸. This will ensure that climate change concerns guide the development process towards achieving climate-resilient and low carbon economies¹²⁹.

5.2 Enhancing Climate Change Mitigation and Adaptation Efforts

It is also vital for countries to accelerate their efforts towards climate change mitigation and adaptation. Mitigation and adaptation are vital tools in enhancing global, national and local responses to climate change¹³⁰. Climate change mitigation involves reducing greenhouse gas emissions and stopping the problem of climate change from growing¹³¹. Adaptation on the other hand involves learning how to live with the existing threat of climate change and protecting humanity from the future effects of climate change¹³². It is vital for countries to transform their energy, industry, transport, food, agriculture and forestry systems in order to limit global temperature rise¹³³. Embracing renewable sources of energy such as solar, wind and hydro power; climate smart agricultural practices; green transport and infrastructure and sustainable waste management are

¹²⁷ United Nations Development Programme., 'Low Emissions and Climate Resilient Development In Kenya (LECRD).' Available at https://www.undp.org/kenya/projects/low-emission-and-climate-resilient-development-kenya-lecrd (Accessed on 22/09/2023)

¹²⁸ Council of Europe., 'SDG 13: Take Urgent Action to Combat Climate Change and its Impacts.' Available at https://www.coe.int/en/web/congress/goal-13 (Accessed on 22/09/2023) ¹²⁹ Ibid

 $^{^{130}}$ World Vision., 'How is the World Responding to Climate Change?' Available at https://www.worldvision.com.au/docs/default-source/school-resources/how-is-the-worldrespondingto-climate-change.pdf?sfvrsn=32021b89_0 (Accessed on 22/09/2023)

¹³¹ Ibid

¹³² Ibid

¹³³ United Nations., 'Goal 13: Take Urgent Action to Combat Climate Change and its Impacts.' Op Cit

essential practices in enhancing climate change mitigation¹³⁴. It is also vital for countries to fulfill their emission reduction commitments as envisaged under the Paris Agreement by strengthening their Nationally Determined Contributions (NDCs) and taking bold, immediate steps towards reducing emissions in order to realize low carbon development and confront climate change¹³⁵. It is therefore vital for countries to take urgent action to combat climate change by investing in climate change mitigation and adaptation.

5.3 Improving Climate Education

In order to effectively combat climate change, it is vital to improve education, awareness-raising, and human and institutional capacity¹³⁶. Education plays a pertinent role in combating climate change by raising awareness of Sustainable Development and the natural world, including the impacts of climate change¹³⁷. It gives people the knowledge and tools they need to adapt to the impacts of climate change and the risks it poses to lives, livelihoods and well-being¹³⁸. Education can encourage people to change their attitudes and behavior and make informed decisions that are vital in combating climate change such as adoption of renewable sources of energy, embracing sustainable waste management and use of sustainable agricultural practices¹³⁹. In addition, education increases 'climate literacy' which is vital in helping people understand, respond and adapt to climate change and its impacts¹⁴⁰. Education is thus a vital tool in combating climate change. It is therefore vital for all stakeholders including governments, Non-Governmental Organizations (NGOs), schools and local community organizations to

¹³⁴ Muigua. K., 'Reflections on Confronting Climate Change in Africa.' Available at http://kmco.co.ke/wp-content/uploads/2023/08/Reflections-on-Confronting-Climate-Change-in-Africa.pdf (Accessed on 22/09/2023)

¹³⁵ United Nations., 'For a Livable Climate: Net-Zero Commitments Must be Backed by Credible Action,' Available at https://www.un.org/en/climatechange/net-zero-coalition (Accessed on 22/09/2023)

¹³⁶ Council of Europe., 'SDG 13: Take Urgent Action to Combat Climate Change and its Impacts.' Op Cit

 $^{^{\}rm 137}$ Sustainable Development Goal 13: Climate Action., Op Cit

¹³⁸ Ibid

¹³⁹ United Nations., 'Education is Key to Addressing Climate Change.' Available at https://www.un.org/en/climatechange/climate-solutions/education-key-addressing-climate-change (Accessed on 22/09/2023)

¹⁴⁰ Ibid

undertake educational and public awareness campaigns on climate change, and to ensure public participation in programmes and information access on the issue¹⁴¹.

5.4 Unlocking Climate Finance

Further, there is an urgent need for the world to unlock climate finance at the international, regional and national levels in order to effectively combat climate change¹⁴². Finance plays a vital role in the climate agenda by enhancing the mitigation and adaptation capabilities of countries especially in the developing world¹⁴³. However, the current global climate finance landscape falls way short of what is required to mitigate the worst impacts of climate change and to deal with the unavoidable consequences¹⁴⁴. A critical concern in the climate finance landscape is that developed countries have failed to deliver on an agreed climate finance target of \$100 billion annually by 2020 resulting in inadequacy, imbalance and unpredictability of climate finance flows to developing countries thus affecting implementation of mitigation and adaptation measures¹⁴⁵.

There is need for all stakeholders including the UNFCCC through its entities such as the Green Climate Fund, developed countries and international and regional financial institutions such as the World Bank to enhance access to climate finance in order to aid developing countries in their climate mitigation and adaptation strategies¹⁴⁶. Further, the Loss and Damage Fund adopted at COP 27 should be actualized in order to promote access to finance needed to respond to the loss and damage associated with climate

¹⁴¹ United Nations., 'Education is Key to Addressing Climate Change.' Available at https://www.un.org/en/climatechange/climate-solutions/education-key-addressing-climate-change (Accessed on 22/09/2023)

¹⁴² Muigua. K., 'Unlocking Climate Finance for Development.' Available at http://kmco.co.ke/wp-content/uploads/2023/08/Unlocking-Climate-Finance-for-Development.pdf (Accessed on 22/09/2023)

¹⁴³ Steckel. J. C., 'From Climate Finance toward Sustainable Development Finance.' WIREs Climate Change, 2017

¹⁴⁴ Hong. H., Karolyi. G. A., & Scheinkman. J.A., 'Climate Finance.' *Review of Financial Studies*, Volume 33, Issue 3 (2020)

¹⁴⁵ Kone. T., 'For Africa to meet its Climate Goals, Finance is Essential.' Op Cit

¹⁴⁶ Muigua. K., 'Unlocking Climate Finance for Development.' Op Cit

change¹⁴⁷. It is also imperative for developing countries to unlock climate finance at the national level by strengthening public and private initiatives¹⁴⁸. Through these initiatives, developing countries and the world at large will have access to finance which can then be channeled into urgent actions needed to combat climate change including mitigation, adaptation and responding to loss and damage associated with climate change¹⁴⁹.

5.5 Embracing Inclusive Participation in Climate Action

It is imperative to embrace inclusive participation in climate action and climate decision making by giving voice to women, youth and marginalized communities including persons with disabilities¹⁵⁰. These groups are more vulnerable to the impacts of climate change due to several factors including gender roles and disparities, age and ability to access vital resources and respond to the impacts of climate change¹⁵¹. It has been asserted that inclusive climate action is pivotal in reducing the effects of climate change on the most vulnerable and ensuring the benefits and burdens of climate action are equitably distributed¹⁵². Women can play a fundamental role in climate action and offer valuable insights into better managing the climate and its risks through their experiences and traditional knowledge as stewards of many natural resources¹⁵³. Further, youth can play a pertinent role in climate action since they are more concerned about the long term impacts of climate change compared to older generations¹⁵⁴. Further, due to their vulnerability, the adverse impacts of climate change require adequate measures that take into account the specific requirements of persons with disabilities and ensure their

¹⁴⁷ Muigua. K., 'Interrogating the Viability and Efficacy of the COP 27 Loss and Damage Fund.' Available at http://kmco.co.ke/wp-content/uploads/2023/09/Interrogating-the-Viability-and-Efficacy-of-the-COP-27-Loss-and-Damage-Fund.pdf (Accessed on 22/09/2023)

¹⁴⁸ Muigua. K., 'Unlocking Climate Finance for Development.' Op Cit

¹⁴⁹ Ibid

¹⁵⁰ United Nations., 'Sustainable Development Goal 13.b' Op Cit

¹⁵¹ USAID., 'Inclusive Climate Action: An Emerging Perspective.' Available at https://pdf.usaid.gov/pdf_docs/PA00VPHQ.pdf (Accessed on 22/09/2023)

¹⁵² Ibid

¹⁵³ Ibid

¹⁵⁴ United Nations Children's Fund., 'What is Climate Justice? And what can we do Achieve It?' Available at https://www.unicef.org/globalinsight/what-climate-justice-and-what-can-we-do-achieve-it (Accessed on 21/09/2023)

participation in disaster response planning for emergency situations and evacuations, humanitarian emergency response and healthcare services¹⁵⁵. It is therefore necessary to foster inclusive participation in climate action in order to effectively combat climate change.

6.0 Conclusion

Climate change is an undesirable phenomenon that affects realization of the Sustainable Development agenda across the world by affecting the sustainability of the planet's ecosystems, the stability of the global economy and the future of humankind ¹⁵⁶. It is the most defining challenge of our time and the main global challenge that is affecting both developed and developing countries in their efforts towards realization of the Sustainable Development agenda ¹⁵⁷. If left unchecked, climate change will undo a lot of the development progress made over the past years and will also provoke mass migrations that will lead to instability and wars ¹⁵⁸. Sustainable Development Goal 13 calls upon countries to take urgent actions towards combating climate change and its impacts ¹⁵⁹. It is imperative for all countries to answer this call by building climate resilient and low carbon economies, enhancing climate change mitigation and adaptation efforts, improving climate education, unlocking climate finance and embracing inclusive participation in climate action ¹⁶⁰. The time is now for the world to take urgent action to combat climate change.

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¹⁵⁵ Office of the High Commissioner for Human Rights., 'The Impact of Climate Change on the Rights of Persons with Disabilities.' Available at https://www.ohchr.org/en/climate-change/impact-climate-change-rights-persons-

<u>disabilities#:~:text=The%20adverse%20impacts%20of%20climate,for%20emergency%20situations%20and%20evacuations%2C</u> (Accessed on 22/09/2023)

¹⁵⁶ Climate Change., 'Meaning, Definition, Causes, Examples and Consequences.' Op Cit

¹⁵⁷ Muigua. K., 'Achieving Sustainable Development, Peace and Environmental Security.' Op Cit

¹⁵⁸ United Nations., 'Goal 13: Take Urgent Action to Combat Climate Change and its Impacts.' Op Cit

¹⁵⁹ United Nations., 'Sustainable Development Goal 13' Op Cit

¹⁶⁰ United Nations., 'Goal 13: Take Urgent Action to Combat Climate Change and its Impacts.' Op Cit

References

African Development Bank Group., 'Climate Change in Africa.' Available at https://www.afdb.org/en/cop25/climate-change-africa

Almomani. S., 'Climate Justice for People with Disabilities.' Available at https://www.worldforgottenchildren.org/blog/climate-justice-for-people-with-disabilities/154

Bafana. B., 'Climate Change is No 'Future Scenario' for Pacific Island Nations; Climate Change is 'Real' Available at https://reliefweb.int/report/world/climate-change-no-future-scenario-pacific-islandnations-climate-change-real

Climate Change (Amendment) Act, 2023, Government Printer, Nairobi

Climate Change Act., No. 11 of 2016, Government Printer, Nairobi

Climate Change., 'Meaning, Definition, Causes, Examples and Consequences.' Available at https://youmatter.world/en/definition/climate-change-meaning-definition-causes-and-consequences/

Climatelinks., 'Climate Change in Kenya.' Available at https://www.climatelinks.org/countries/kenya

Council of Europe., 'SDG 13: Take Urgent Action to Combat Climate Change and its Impacts.' Available at https://www.coe.int/en/web/congress/goal-13

Council of Europe., 'SDG 13: Take Urgent Action to Combat Climate Change and its Impacts.' Available at https://www.coe.int/en/web/congress/goal-13

East African Community., 'East African Community Climate Change Policy.' Available at https://www.eac.int/environment/climate-change/eac-climate-change-policy-framework

Giles. M., 'The Principles of Climate Justice at CoP27.' Available at https://earth.org/principles-

ofclimatejustice/#:~:text=That%20response%20should%20be%20based,the%20consequences%20of%20climate%20change

Global Partnership for Education., 'Confronting Climate Change through Education.' Available

https://www.globalpartnership.org/node/document/download?file=document/file/2023-04-confronting-climate-change-through-education.pdf

Harvey. F., 'Human-Driven Climate Crisis Fuelling Horn of Africa Drought - Study.' Available at https://www.theguardian.com/environment/2023/apr/27/human-driven-climate-crisis-fuelling-horn-of-africa-drought-study

Hill. A.,& Babin. M 'Why Climate Finance is Critical for Accelerating Global Action.' Available at https://www.cfr.org/in-brief/why-climate-finance-critical-accelerating-global-action

Hong. H., Karolyi. G. A., & Scheinkman. J.A., 'Climate Finance.' Review of Financial Studies, Volume 33, Issue 3 (2020)

Kone. T., 'For Africa to meet its Climate Goals, Finance is Essential.' Available at https://climatepromise.undp.org/news-and-stories/africa-meet-its-climate-goals-finance-essential

Marshall. M., 'Libya Floods: How Climate Change Intensified the Death and Devastation.' Available at https://www.nature.com/articles/d41586-023-02899-6

Ministry of Environment, Climate Change and Forestry., 'Draft Strategic Plan: 2023-2027'

Available at https://www.environment.go.ke/wp-content/uploads/2023/05/MoECCF-Strategic-Plan-Draft07.05.2023-updated.pdf

Mokku. J., 'Climate Change Destroys the Livelihoods of Kenyan Pastoralists.' Available at https://www.un.org/africarenewal/magazine/january-2023/climate-change-destroys-livelihoods-kenyan-pastoralists

Muigua. K., 'Achieving Sustainable Development, Peace and Environmental Security.' Glenwood Publishers Limited, 2021

Muigua. K., 'Enhancing Low Carbon Development for Sustainability.' Available at http://kmco.co.ke/wp-content/uploads/2023/09/Enhancing-Low-Carbon-Development-for-Sustainability-.pdf

Muigua. K., 'Interrogating the Viability and Efficacy of the COP 27 Loss and Damage Fund.' Available at http://kmco.co.ke/wp-content/uploads/2023/09/Interrogating-the-Viability-and-Efficacy-of-the-COP-27-Loss-and-Damage-Fund.pdf

Muigua. K., 'Reflections on Confronting Climate Change in Africa.' Available at http://kmco.co.ke/wp-content/uploads/2023/08/Reflections-on-Confronting-Climate-Change-in-Africa.pdf (Accessed on 22/09/2023)

Muigua. K., 'Unlocking Climate Finance for Development.' Available at http://kmco.co.ke/wp-content/uploads/2023/08/Unlocking-Climate-Finance-for-Development.pdf

Muigua. K., 'Unlocking Climate Finance for Development.' Available at http://kmco.co.ke/wp-content/uploads/2023/08/Unlocking-Climate-Finance-for-Development.pdf

National Geographic., 'Climate Change.' Available at https://education.nationalgeographic.org/resource/climate-change/

Office of the High Commissioner for Human Rights., 'The Impact of Climate Change on the Rights of Persons with Disabilities.' Available at https://www.ohchr.org/en/climate-change/impact-climate-change-rights-persons-disabilities#:~:text=The%20adverse%20impacts%20of%20climate,for%20emergency%20situations%20and%20evacuations%2C

Pearse. R., 'Gender and Climate Change.' WIREs Climate Change, 2016

Republic of Kenya., 'Sessional paper On Kenya Vision 2030.' Available at https://vision2030.go.ke/wp-content/uploads/2018/05/Sessional-paper-No.-10-of-2012-On-Kenya-Vision-2030.pdf

Sessional Paper No. 5 of 2016., 'National Climate Change Framework Policy.' Available at http://aiap.or.ke/wp-content/uploads/2018/10/Climate-Change-Framework-PolicyMay2017.pdf

Steckel. J. C., 'From Climate Finance toward Sustainable Development Finance.' WIREs Climate Change, 2017

Sultana. F., 'Critical Climate Justice' Available at https://www.farhanasultana.com/wpcontent/uploads/Sultana-Critical-climate-justice.pdf

Sustainable Development Goal 13: Climate Action., Available at https://www.gcint.org/sdg-13-climate-action#:~:text=13.3%20Improve%20education%2C%20awareness%2Draising,impact%2 Oreduction%20and%20early%20warning.&text=Our%20educational%20initiatives%20ra

ise%20an,the%20impacts%20of%20climate%20change.

Sustainable Development Goals Data., 'SDG 13: Climate Action.' Available at https://sdg.data.gov/13-b-1/

The Global Goals., '13: Climate Action.' Available at https://www.globalgoals.org/goals/13-climate-action/

United Nations Children's Fund., 'What is Climate Justice? And what can we do Achieve It?' Available at https://www.unicef.org/globalinsight/what-climate-justice-and-what-can-we-do-achieve-it

United Nations Children's Fund., 'What is Climate Justice? And what can we do Achieve It?' Available at https://www.unicef.org/globalinsight/what-climate-justice-and-what-can-we-do-achieve-it

United Nations Climate Change., 'The Paris Agreement.' Available at https://unfccc.int/process-and-meetings/the-paris-agreement

United Nations Climate Change., 'What is the Kyoto Protocol?' Available at https://unfccc.int/kyoto_protocol

United Nations Department of Economic and Social Affairs., 'Forum on Climate Change and Science and Technology Innovation.' Available at https://www.un.org/en/desa/forum-climate-change-andscience-and-technology-innovation

United Nations Development Programme., 'Low Emissions and Climate Resilient Development In Kenya (LECRD).' Available at https://www.undp.org/kenya/projects/low-emission-and-climate-resilient-development-kenya-lecrd

United Nations Development Programme., 'Low Emissions and Climate Resilient Development In Kenya (LECRD).' Available at https://www.undp.org/kenya/projects/low-emission-and-climate-resilient-development-kenya-lecrd

United Nations Development Programme., 'Strengthening Resilience to Natural Disasters in Ukraine.' Available at https://www.undp.org/sites/g/files/zskgke326/files/migration/ua/Strengthening-resilience-to-natural-disasters.pdf

United Nations Environment Programme., 'Goal 13: Climate action.' Available at https://www.unep.org/explore-topics/sustainable-development-goals/why-do-sustainable-development-goals-matter/goal-13

United Nations Framework Convention on Climate Change., 'COP 15 – Decisions.' Available at https://unfccc.int/process-and-meetings/conferences/past-conferences/copenhagen-climate-change-conference-december-2009/cop-15/cop-15-decisions

United Nations Framework Convention on Climate Change., 'Decision -/CP.27 - /CMA.4: Funding Arrangements for Responding to Loss and Damage Associated with

the Adverse Effects of Climate Change, Including a Focus on Addressing Loss and Damage.' Available at https://unfccc.int/sites/default/files/resource/cma4_auv_8f.pdf

United Nations Framework Convention on Climate Change., 'Kyoto Protocol to the United Nations Framework Convention on Climate Change.' Available at https://unfccc.int/resource/docs/convkp/kpeng.pdf

United Nations Framework Convention on Climate Change., 'Paris Agreement.' Available at https://unfccc.int/sites/default/files/english_paris_agreement.pdf

United Nations Framework Convention on Climate Change., 'What is the United Nations Framework Convention on Climate Change?' Available at https://unfccc.int/process-and-meetings/what-is-the-united-nations-framework-convention-on-climate-change

United Nations Framework Convention on Climate Change., United Nations, 1992., Available at https://unfccc.int/resource/docs/convkp/conveng.pdf

United Nations Framework Convention on Climate Change., United Nations, 1992., Available at https://unfccc.int/resource/docs/convkp/conveng.pdf

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

United Nations Women., 'SDG 13: Take Urgent Action to Combat Climate Change and its Impacts.' Available at https://www.unwomen.org/en/news/in-focus/women-and-the-sdgs/sdg-13-climate-action

United Nations Women., 'SDG 13: Take Urgent Action to Combat Climate Change and its Impacts.' Available at https://lac.unwomen.org/en/noticias-y-eventos/en-lamira/women-and-the-sdgs/sdg-13-climate-action

United Nations., 'Education is Key to Addressing Climate Change.' Available at https://www.un.org/en/climatechange/climate-solutions/education-key-addressing-climate-change

United Nations., 'Education is Key to Addressing Climate Change.' Available at https://www.un.org/en/climatechange/climate-solutions/education-key-addressing-climate-change

United Nations., 'Finance and Justice.' Available at https://www.un.org/en/climatechange/raisingambition/climate-finance

United Nations., 'For a Livable Climate: Net-Zero Commitments Must be Backed by Credible Action,' Available at https://www.un.org/en/climatechange/net-zero-coalition

United Nations., 'Goal 13: Take Urgent Action to Combat Climate Change and its Impacts.' Available at https://www.un.org/sustainabledevelopment/climate-change/

United Nations., 'Goal 13: Take Urgent Action to Combat Climate Change and its Impacts.' Available at https://www.un.org/sustainabledevelopment/climate-change/

United Nations., 'Low Carbon Development.' Available at https://sustainabledevelopment.un.org/index.php?menu=1448#:~:text=The%20conce pt%20of%20low%20carbon,low%2Dcarbon%20growth%20plans

United Nations., 'Sustainable Development Goal 13' Available at https://sdgs.un.org/goals/goal13

United Nations., 'What is Climate Change?' Available at https://www.un.org/en/climatechange/what-is-climate-change

United Nations., 'What is Climate Change?' Available at https://www.un.org/en/climatechange/what-is-climate-change

USAID., 'Inclusive Climate Action: An Emerging Perspective.' Available at https://pdf.usaid.gov/pdf_docs/PA00VPHQ.pdf

World Meteorological Organization., 'Africa Suffers Disproportionately from Climate Change.' Available at https://public.wmo.int/en/media/press-release/africa-suffers-disproportionately-from-climate-change

World Vision., 'How is the World Responding to Climate Change?' Available at https://www.worldvision.com.au/docs/default-source/school-resources/how-is-the-worldrespondingto-climate-change.pdf?sfvrsn=32021b89_0

Yuan. H, Zhou. P, & Zhou. D., 'What is Low-Carbon Development? A Conceptual Analysis.' *Energy Procedia*, 5 (2011) 1706–1712