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### Placing Health at the Centre of Climate Action

## Kariuki Muigua\*

#### Abstract

The impacts of climate change are being felt across different sectors including health. Climate change has been described as the single biggest health threat facing humanity. The paper critically discusses the link between climate change and health. It argues that climate change is a major threat to human health and well-being. It examines the impacts of climate change on human health and well-being as well as global health systems. The paper proposes measures towards placing health at the centre of climate action in order to ensure good health and well-being for all.

#### 1.0 Introduction

Climate change has been highlighted as the most defining challenge facing humanity<sup>1</sup>. It is a major global concern that is affecting both developed and developing countries in their efforts towards realization of the Sustainable Development agenda<sup>2</sup>. 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 Development<sup>3</sup>. Adverse impacts of climate change such including intense droughts, water scarcity, severe wild fires, rising sea levels, flooding, melting polar ice, catastrophic storms and declining biodiversity are being witnessed across the world threatening the achievement of Sustainable Development<sup>4</sup>. It

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<sup>&</sup>lt;sup>1</sup> United Nations., 'What is Climate Change?' Available at https://www.un.org/en/climatechange/what-is-climate-change (Accessed on 08/12/2023)

<sup>&</sup>lt;sup>2</sup> Muigua. K., 'Achieving Sustainable Development, Peace and Environmental Security.' Glenwood Publishers Limited, 2021

<sup>&</sup>lt;sup>3</sup> United Nations General Assembly., 'Transforming Our World: the 2030 Agenda for Sustainable Development.' 21 October 2015, A/RES/70/1., Available at

https://sustainabledevelopment.un.org/content/documents/21252030%20Agenda%20for%20Sustainablew20Development%20web.pdf (Accessed on 08/12/2023)

<sup>&</sup>lt;sup>4</sup> United Nations., 'What is Climate Change?' Op Cit

has been pointed out 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 wars<sup>5</sup>.

Due to its adverse impacts, tackling climate change has become a top policy agenda at local, national, regional and global levels<sup>6</sup>. The *United Nations Framework Convention on Climate Change* (UNFCCC) acknowledges the vulnerability of all countries to the effects of climate change and calls for special efforts to ease the consequences, especially in developing countries which lack the resources to do so on their own<sup>7</sup>. Further, Sustainable Development Goal 13 urges all countries to take urgent action to combat climate change and its impacts<sup>8</sup>. Climate action is being accelerated across the world with countries embracing adaptation and mitigation techniques towards confronting climate change<sup>9</sup>. Adaptation entails adjustments in ecological, social or economic systems in response to actual or expected climatic stimuli and their effects<sup>10</sup>. It refers to changes in processes, practices and structures to moderate potential damages or to benefit from opportunities associated with climate change<sup>11</sup>. Adaptation techniques can range from building flood defences, setting up early warning systems for cyclones, switching to drought-resistant crops, to redesigning communication systems, business operations and

<sup>5</sup> **T** 

<sup>&</sup>lt;sup>5</sup> 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 08/12/2023)

<sup>&</sup>lt;sup>6</sup> United Nations Department of Economic and Social Affairs., 'Forum on Climate Change and Science and Technology Innovation.' Available at <a href="https://www.un.org/en/desa/forum-climatechangeandscience-and-technology-innovation">https://www.un.org/en/desa/forum-climatechangeandscience-and-technology-innovation</a> (Accessed on 08/12/2023)

<sup>&</sup>lt;sup>7</sup> United Nations Framework Convention on Climate Change., United Nations, 1992., Available at <a href="https://unfccc.int/files/essential\_background/background\_publications\_htmlpdf/application/pdf/conveng.pdf">https://unfccc.int/files/essential\_background/background\_publications\_htmlpdf/application/pdf/conveng.pdf</a> (Accessed on 08/12/2023)

 $<sup>^{\</sup>rm 8}$  United Nations General Assembly., 'Transforming Our World: the 2030 Agenda for Sustainable Development.' SDG 13, Op Cit

<sup>&</sup>lt;sup>9</sup> Muigua. K., 'Taking Urgent Action to Combat Climate Change.' Available at <a href="https://kmco.co.ke/wp-content/uploads/2023/09/Taking-Urgent-Action-to-Combat-Climate-Change.pdf">https://kmco.co.ke/wp-content/uploads/2023/09/Taking-Urgent-Action-to-Combat-Climate-Change.pdf</a> (Accessed on 08/12/2023)

<sup>&</sup>lt;sup>10</sup> United Nations Climate Change., 'Adaptation and Resilience.' Available at <a href="https://unfccc.int/topics/adaptation-and-resilience/the-big-picture/introduction#:~:text=Loss%20and%20damage%20arising%20from,forest%20degradation%2C%20loss%20of%20biodiversity">https://unfccc.int/topics/adaptation-and-resilience/the-big-picture/introduction#:~:text=Loss%20and%20damage%20arising%20from,forest%20degradation%2C%20loss%20of%20biodiversity</a> (Accessed on 08/12/2023)

<sup>11</sup> Ibid

government policies<sup>12</sup>. Climate change mitigation involves reducing greenhouse gas emissions and stopping the problem of climate change from growing<sup>13</sup>. It involves approaches such as embracing renewable sources of energy including solar, wind and hydro power; adopting climate smart agricultural practices; fostering green transport and infrastructure and promoting sustainable waste management<sup>14</sup>. Mitigation envisages transforming key sectors of the economy including energy, industry, transport, food, agriculture and forestry systems in order to reduce greenhouse gas emissions and limit global temperature rise<sup>15</sup>.

The impacts of climate change are being felt across different sectors including health. According to the United Nations, climate change is the single biggest health threat facing humanity<sup>16</sup>. As a result, it has been argued that there is need place health at the centre of climate action<sup>17</sup>.

The paper critically discusses the link between climate change and health. It argues that climate change is a major threat to human health and well-being. It examines the impacts of climate change on human health and well-being as well as global health systems. The paper proposes measures towards placing health at the centre of climate action in order to ensure good health and well-being for all.

### 2.0 Climate Change and Health

According to the United Nations, the impacts of climate change are already harming health, through air pollution, diseases, extreme weather events, forced displacement, pressures on mental health, and increased hunger and poor nutrition in places where

https://www.un.org/en/climatechange/science/causes-effects-climate-

 $\underline{change\#:\sim:text=Climate\%20change\%20is\%20the\%20single,grow\%20or\%20find\%20sufficient\%20food.}$ 

(Accessed on 08/12/2023)

<sup>12</sup> Ibid

 $<sup>^{13}</sup>$  United Nations Climate Change., 'Introduction to Mitigation.' Available at  $\underline{\text{https://unfccc.int/topics/introduction-to-mitigation}} \ (Accessed on 08/12/2023)$ 

<sup>14</sup> Ibid

<sup>&</sup>lt;sup>15</sup> United Nations., 'Goal 13: Take Urgent Action to Combat Climate Change and its Impacts.' Op Cit

<sup>&</sup>lt;sup>16</sup> United Nations., 'Causes and Effects of Climate Change.' Available at

<sup>17</sup> Ibid

people cannot grow or find sufficient food<sup>18</sup>. The World Health Organization (WHO) also identifies climate change as a fundamental threat to human health<sup>19</sup>. According to WHO, climate change affects the physical environment as well as all aspects of both natural and human systems – including social and economic conditions and the functioning of health systems<sup>20</sup>. WHO further asserts that climate change is a threat multiplier, undermining and potentially reversing decades of health progress across the world<sup>21</sup>. It has rightly been pointed out that as climatic conditions change, more frequent and intensifying weather and climate events are observed, including severe storms, extreme heat, floods, droughts and wildfires<sup>22</sup>. WHO points out that these weather and climate hazards affect health both directly and indirectly, increasing the risk of deaths, noncommunicable diseases, the emergence and spread of infectious diseases, and health emergencies<sup>23</sup>. Climate change is therefore a threat health to human health and well-being since it affects the food we eat, the water we drink, the air we breathe, and the weather we experience<sup>24</sup>.

It has been argued that as the global climate crisis worsens, its devastating impacts on human health and well-being will also accelerate<sup>25</sup>. Climate change is increasing heat-related illnesses and deaths; changing the patterns of infectious disease transmission, making deadly disease outbreaks and pandemics more likely; worsening maternal and child health outcomes; and intensifying health impacts from extreme weather events such

<sup>18</sup> Ibid

<sup>&</sup>lt;sup>19</sup> World Health Organization., 'Climate Change and Health.' Available at <a href="https://www.who.int/news-room/fact-sheets/detail/climate-change-and-health">https://www.who.int/news-room/fact-sheets/detail/climate-change-and-health</a> (Accessed on 08/12/2023)

<sup>&</sup>lt;sup>20</sup> Ibid

<sup>&</sup>lt;sup>21</sup> Ibid

<sup>&</sup>lt;sup>22</sup> Ibid

<sup>23</sup> Ibid

<sup>&</sup>lt;sup>24</sup> United States Environmental Protection Agency., 'Climate Impacts on Human Health.' Available at <a href="https://climatechange.chicago.gov/climate-impacts/climate-impacts-human-health#:~:text=Climate%20change%20increases%20the%20risk,or%20liver%20and%20kidney%20damage</a> (Accessed on 08/12/2023)

<sup>&</sup>lt;sup>25</sup> The World Bank., 'Health and Climate Change.' Available at <a href="https://www.worldbank.org/en/topic/health/brief/health-and-climate-change#:~:text=This%20is%20critical%20as%20the,gas%20(GHG)%20emissions%20globally">https://www.worldbank.org/en/topic/health/brief/health-and-climate-change#:~:text=This%20is%20critical%20as%20the,gas%20(GHG)%20emissions%20globally</a> (Accessed on 08/12/2023)

as floods, droughts, wildfires, and windstorms<sup>26</sup>. Further, it has been pointed out that climate shocks and growing stresses such as changing temperature and precipitation patterns, drought, floods and rising sea levels contribute to environmental degradation and affect social determinants of physical and mental health<sup>27</sup>. It has been argued that all aspects and determinants of health are affected by climate change, from clean air, water and soil to food systems and livelihoods<sup>28</sup>. Climate change is rapidly affecting access to basic human needs including food, safe drinking water and sanitation, and clean air therefore affecting both physical and mental health<sup>29</sup>. Climate change is therefore affecting health through direct impacts such as heat waves, droughts, heavy storms, and sea-level rise, and indirect impacts including vector-borne and airways diseases, food and water insecurity, undernutrition, and forced displacements<sup>30</sup>.

Climate change is also affecting global health systems. It has been pointed out that the climate crisis exerts significant strains on health systems, simultaneously increasing demand for health services whilst also impairing the system's ability to respond<sup>31</sup>. Further, according to WHO, climate change is impacting the health workforce and infrastructure, reducing capacity to provide universal health coverage (UHC)<sup>32</sup>.

From the foregoing, it is evident that climate change is major threat to health. The WHO projects that between the years 2030 and 2050, climate change is expected to cause approximately 250, 000 additional deaths per year, from health problems such as undernutrition, malaria, diarrhoea and heat stress alone<sup>33</sup>. It further estimates that the direct damage costs to health as result of climate change (excluding costs in health-determining sectors such as agriculture and water and sanitation) to be between US\$ 2-

<sup>&</sup>lt;sup>26</sup> Ibid

<sup>&</sup>lt;sup>27</sup> World Health Organization., 'Climate Change and Health.' Op Cit

<sup>28</sup> Ibid

<sup>&</sup>lt;sup>29</sup> The World Bank., 'Health and Climate Change.' Op Cit

<sup>&</sup>lt;sup>30</sup> Pan American Heath Organization., 'Climate Change and Health.' Available at <a href="https://www.paho.org/en/topics/climate-change-and-health">https://www.paho.org/en/topics/climate-change-and-health</a> (Accessed on 08/12/2023)

<sup>&</sup>lt;sup>31</sup> The World Bank., 'Health and Climate Change.' Op Cit

<sup>&</sup>lt;sup>32</sup> World Health Organization., 'Climate Change and Health.' Op Cit

<sup>33</sup> Ibid

4 billion per year by 2030<sup>34</sup>. It has rightly been pointed out that the severity of health risks as a result of climate change will depend on the ability of public health and safety systems to address or prepare for these changing threats, as well as factors such as an individual's behavior, age, gender, and economic status<sup>35</sup>. It has been argued that people in developing countries may be the most vulnerable to health risks as a result of climate change<sup>36</sup>. The WHO also asserts that areas with weak health infrastructure mostly in developing countries will be the least able to cope with health risks associated with climate change without assistance to prepare and respond<sup>37</sup>.

Placing health at the centre of climate action is therefore an urgent concern. If left unaddressed, the climate crisis threatens to undo years of progress in development, global health and poverty reduction, and to further widen existing health inequalities between and within populations<sup>38</sup>. It also severely jeopardizes the realization of UHC in various ways, including by compounding the existing burden of disease and by exacerbating existing barriers to accessing health services, often at the times when they are most needed<sup>39</sup>. In addition, it has been asserted that the negative health effects of climate change could drive nearly 40 million people globally into extreme poverty by the year 2030<sup>40</sup>. It is therefore necessary for all countries to place health at the centre of climate action.

#### 3.0 Placing Health at the Centre of Climate Action: Progress and Setbacks

The right to health is at the heart of the United Nation's 2030 Agenda for Sustainable Development<sup>41</sup>. SDG 3 aims to ensure health lives and promote well-being for all at all

<sup>34</sup> Ibid

<sup>&</sup>lt;sup>35</sup> United States Environmental Protection Agency., 'Climate Impacts on Human Health.' Op Cit

<sup>36</sup> Ibid

<sup>&</sup>lt;sup>37</sup> World Health Organization., 'Climate Change and Health.' Op Cit

<sup>38</sup> Ibid

<sup>39</sup> Ibid

<sup>&</sup>lt;sup>40</sup> The World Bank., 'Impact of Climate Change on Health: The Cost of Inaction.' Available at <a href="https://www.worldbank.org/en/news/video/2023/11/30/health-impacts-of-climate-change">https://www.worldbank.org/en/news/video/2023/11/30/health-impacts-of-climate-change</a> (Accessed on 08/12/2023)

<sup>&</sup>lt;sup>41</sup> United Nations., 'Transforming our World: the 2030 Agenda for Sustainable Development.' Op Cit

ages<sup>42</sup>. SDG 3 makes a bold commitment to end the epidemics of AIDS, tuberculosis, malaria and other communicable diseases by 2030<sup>43</sup>. It also aims to achieve universal health coverage, and provide access to safe and affordable medicines and vaccines for all among other targets<sup>44</sup>. SDG 3 acknowledges threats to the climate and the environment as key determinants in achieving good health and well-being for all under the Sustainable Development agenda<sup>45</sup>. It has been pointed out that the 2030 Agenda for Sustainable Development provides an opportunity to address health, human rights, humanitarian responses, climate change and other development challenges in a more integrated manner than ever before<sup>46</sup>. The United Nations Development Programme (UNDP) urges countries to embrace integrated development solutions to addressing the links between health, environmental degradation and climate change<sup>47</sup>.

It has been pointed out that countries are placing health at the centre of climate action by incorporating the themes and targets of SDG 3 in their Nationally Determined Contributions (NDCs) envisaged under the Paris Agreement<sup>48</sup>. Many countries through their NDCs are increasingly prioritising SDG 3 targets such as ending epidemics and communicable diseases, fostering access to Universal Health Care and medicines by linking them to climate-induced health risks prevention, contingency health strategy development, and communicable diseases prevention as key strategies for climate action<sup>49</sup>. Climate change adaptation actions now include those prioritizing health and

<sup>&</sup>lt;sup>42</sup> Ibid, Sustainable Development Goal 3

<sup>43</sup> Ibid

<sup>44</sup> Ibid

<sup>45</sup> Ibid

<sup>&</sup>lt;sup>46</sup> United Nations Development Programme., 'UNDP Support to the Implementation of Sustainable Development Goal 3.' Available at

https://www.undp.org/sites/g/files/zskgke326/files/publications/SDG-3%20Health.pdf (Accessed on 08/12/2023)

<sup>47</sup> Ibid

<sup>&</sup>lt;sup>48</sup> United Nations., 'Discussion on SDG and NDC Implementation: Country Trends and Examples from the NDC Partnership.' Available at

https://www.un.org/sites/un2.un.org/files/technical\_brief\_ndc\_synergies\_conference.pdf (Accessed on 08/12/2023)

<sup>49</sup> Ibid

SDG 3 such as enhancing vaccination and prevention against water and vector borne diseases, and increasing access to clean drinking water; increasing health facilities; and building of infrastructure that protects against heat such as ventilation or shaded areas<sup>50</sup>.

At the regional level, climate change has been identified as a key threat to health in Africa. It has been argued that African countries will suffer health consequences related to the effects of climate change since their people are among the most vulnerable to climatic change in the world<sup>51</sup>. This vulnerability is due in part to existing problems of poverty, weak institutions and armed conflict in the Continent which limit the capacity of African countries to deal with the additional health problems posed by climate change<sup>52</sup>. The impacts of climate change on health in Africa are manifested through health problems including malnutrition, Neglected Tropical Diseases (NTDs), diarrhoea, malaria, and meningitis<sup>53</sup>. These diseases have been identified as climate sensitive and their impacts are likely to worsen in light of the growing climate crisis in Africa<sup>54</sup>.

In light of the foregoing concerns, Africa Union's *Agenda 2063* identifies climate change as key threat to Sustainable Development in Africa<sup>55</sup>. It seeks to foster environmentally sustainable and climate resilient economies and communities in Africa across all sectors including health<sup>56</sup>. Agenda 2063 also seeks to expand access to quality health care services in Africa<sup>57</sup>. It further posits that by the year 2063, every citizen in Africa will have full access to affordable and quality health care services, universal access to sexual and

<sup>&</sup>lt;sup>50</sup> Gonzales-Zuniga., 'SCAN (SDG & Climate Action Nexus) tool: Linking Climate Action and the Sustainable Development Goals.' Available at <a href="https://ambitiontoaction.net/wp-content/uploads/2018/10/Methods\_note\_final.pdf">https://ambitiontoaction.net/wp-content/uploads/2018/10/Methods\_note\_final.pdf</a> (Accessed on 08/12/2023)

<sup>&</sup>lt;sup>51</sup> Climate for Development-Africa. Programme., 'Climate Change and Health in Africa: Issues and Options.' Available at

https://archive.uneca.org/sites/default/files/PublicationFiles/policy\_brief\_12\_climate\_change\_and\_health\_in\_africa\_issues\_and\_options.pdf (Accessed on 08/12/2023)

<sup>52</sup> Ibid

<sup>53</sup> Ibid

<sup>54</sup> Ibid

<sup>&</sup>lt;sup>55</sup> Africa Union., 'Agenda 2063: The Africa we Want.' Available at <a href="https://au.int/sites/default/files/documents/33126-doc-framework\_document\_book.pdf">https://au.int/sites/default/files/documents/33126-doc-framework\_document\_book.pdf</a> (Accessed on 08/12/2023)

<sup>&</sup>lt;sup>56</sup> Ibid

<sup>57</sup> Ibid

reproductive health and rights information, and these services will be available to all women, including young women, adolescents, women with disability, those living with AIDS and all vulnerable groups<sup>58</sup>. It also seeks to combat diseases and illnesses prevalent in the continent including HIV/AIDS, Malaria and Tuberculosis<sup>59</sup>. Achieving the health targets envisaged under Agenda 2063 requires placing health at the centre of climate action.

In addition, the *Africa Heath Strategy* seeks to realize an integrated, inclusive and prosperous Africa free from its heavy burden of disease, disability and premature deaths<sup>60</sup>. The strategy seeks to achieve this vision by strengthening health systems performance, increasing investments in health, improving equity and addressing social determinants of health to reduce priority disease burdens<sup>61</sup>. It also identifies strategic approaches required to achieve its vision which include sustainable improvement in health system performance, leadership and good governance, health financing, expanding social protection to address equity, prioritizing human resources for health, enhancing access to essential medicines, promoting commodity security, strengthening supply systems, and fostering health research and innovation<sup>62</sup>. It has been argued that African governments, coordinating bodies, and other organisations need to address the impact of climate change on health in Africa in order to achieve the health targets of the Continent including those set out under the Africa Health Strategy<sup>63</sup>.

The African Union Climate Change and Resilient Development Strategy and Action Plan also asserts that the realization of Africa's Agenda 2063 cannot be possible without proactive

<sup>58</sup> Ibid

<sup>59</sup> Ibid

<sup>&</sup>lt;sup>60</sup> Africa Union., 'Africa Health Strategy 2016 – 2030.' Available at <a href="https://au.int/sites/default/files/documents/24098-au\_ahs\_strategy\_clean.pdf">https://au.int/sites/default/files/documents/24098-au\_ahs\_strategy\_clean.pdf</a> (Accessed on 08/12/2023)

<sup>61</sup> Ibid

<sup>62</sup> Ibid

 $<sup>^{63}</sup>$  Climate for Development-Africa. Programme., 'Climate Change and Health in Africa: Issues and Options.' Available at

https://archive.uneca.org/sites/default/files/PublicationFiles/policy\_brief\_12\_climate\_change\_and\_health\_in\_africa\_issues\_and\_options.pdf (Accessed on 08/12/2023)

collective Continental efforts aimed at addressing the impacts and encumbrances of climate change, which hampers Africa's integration and development<sup>64</sup>. It acknowledges the effects of climate change on health in Africa<sup>65</sup>. For example, the Strategy posits that a substantial increase in the magnitude of heat waves is projected for most of Africa, with potential effects for health and agriculture<sup>66</sup>. It further asserts that there are increasing climate change threats for ecosystems, biodiversity, human health, food and water security and socio-economic development in Africa due to climate hazards such as increasing temperatures, rising sea levels, extended dry seasons, changing precipitation patterns and more extreme weather events<sup>67</sup>. According to the Strategy, human health in Africa will be negatively affected by climate change and its impacts, which can modify the transmission of diseases such as cholera, malaria meningitis, and zoonotic diseases such as Ebola and coronaviruses<sup>68</sup>. It further asserts that the death rate from climate change is 60 to 80% higher in Africa than it is in the next most vulnerable region (Southeast Asia) due to pre-existing vulnerabilities and the weakened ability of the Continent to adapt to the impacts of climate change<sup>69</sup>. Consequently, the Strategy projects that there will be up to 70,000 additional deaths in Africa by 2030 because of climate change, with malaria and diarrhoea responsible for the largest proportions of these deaths<sup>70</sup>. In addition, the Strategy points out that climate change-induced floods and cyclones can lead to contamination of water supplies, increasing the prevalence of vectorborne diseases in Africa<sup>71</sup>. Placing health at the centre of climate action is a priority agenda under the Strategy<sup>72</sup>. It seeks to integrate climate action and health through

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<sup>&</sup>lt;sup>64</sup> Africa Union., 'African Union Climate Change and Resilient Development Strategy and Action Plan (2022-2032).' Available at <a href="https://au.int/sites/default/files/documents/42276-doc-CC\_Strategy\_and\_Action\_Plan\_2022-2032\_23\_06\_22\_ENGLISH-compressed.pdf">https://au.int/sites/default/files/documents/42276-doc-CC\_Strategy\_and\_Action\_Plan\_2022-2032\_23\_06\_22\_ENGLISH-compressed.pdf</a> (Accessed on 09/12/2023)

<sup>65</sup> Ibid

<sup>66</sup> Ibid

<sup>67</sup> Ibid

<sup>68</sup> Ibid

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<sup>69</sup> Ibid

<sup>70</sup> Ibid

<sup>71</sup> Ibid

<sup>72</sup> Ibid

measures such as transitioning to renewable energy sources due to their direct health benefits in terms of air quality, fostering food security to address the challenges of malnutrition in Africa, protecting and restoring Africa's ecosystems in order to prevent the occurrence and risk of zoonotic and vector-borne diseases, an mainstreaming climate change considerations (including gender, youth and indigenous knowledge considerations) and updated NDC policy actions across sectoral policies including health<sup>73</sup>. The African Union Climate Change and Resilient Development Strategy and Action Plan is pivotal in placing health at the centre of climate action in Africa. There is need to actualize the Strategy in order to foster an integrated approach towards health and climate action in Africa.

At the national level, the *Health Act*<sup>74</sup> of Kenya requires the national health system to ensure that measures for managing environmental risk factors to curtail occurrence and distribution of diseases are put in place and implemented<sup>75</sup>. Such measures include the reduction of morbidity and mortality of waterborne, food-borne and vector transmitted diseases, and mitigating the health effects of climate change<sup>76</sup>. In addition, the *Kenya Health Policy*<sup>77</sup> acknowledges that climate change is a national, regional and global health challenge with adverse impacts on the health sector. The policy seeks to attain the highest possible standard of health for all Kenyans in a responsive manner and sets out the need to address the challenges in the health sector in Kenya including the impacts of climate change<sup>78</sup>. *Kenya's Updated Nationally Determined Contribution*<sup>79</sup> also places health at the centre of climate action. The NDC mentions specific adaptation measures focused on

<sup>73</sup> Tla:

<sup>&</sup>lt;sup>74</sup> Health Act., No. 21 of 2017., Laws of Kenya.

<sup>&</sup>lt;sup>75</sup> Ibid, S 68 (2)

<sup>&</sup>lt;sup>76</sup> Ibid, 68 (2) (b)

<sup>&</sup>lt;sup>77</sup> Kenya Health Policy 2014-2030., Available at

https://publications.universalhealth2030.org/uploads/kenya\_health\_policy\_2014\_to\_2030.pdf (Accessed on 11/12/2023)

<sup>78</sup> Ibid

<sup>&</sup>lt;sup>79</sup> United Nations Framework on Climate Change Secretariat., 'Kenya's Updated Nationally Determined Contribution (NDC).' Available at <a href="https://unfccc.int/sites/default/files/NDC/2022-06/Kenya%27s%20First%20%20NDC%20%28updated%20version%29.pdf">https://unfccc.int/sites/default/files/NDC/2022-06/Kenya%27s%20First%20%20NDC%20%28updated%20version%29.pdf</a> (Accessed on 11/12/2023)

health such as conducting a vulnerability and risk assessment of different climate risks on human health; developing a public awareness and social mobilisation strategy on climate change and health impacts and developing health programmes, protocols and guidance to manage new climate change related impacts on the health sector<sup>80</sup>.

It is therefore evident that there has been some progress towards placing health at the centre of climate action. These efforts have received a major boost following the adoption of the United Nations Climate Change Conference (COP28) Declaration on Climate and Health<sup>81</sup>. The Declaration expresses concern about the negative impacts of climate change on health and stresses the importance of addressing the interactions between climate change and human health and wellbeing in the context of the UNFCCC and the Paris Agreement, as the primary international, intergovernmental fora for the global response to climate change<sup>82</sup>. There is need for all countries to implement the Declaration in order to place health at the centre of climate action.

Despite the foregoing efforts, climate change continues to a major threat to health in all countries. If left unaddressed, the climate crisis threatens to undo years of progress in development, global health and poverty reduction, and to further widen existing health inequalities between and within populations<sup>83</sup>. Placing health at the centre of climate action is therefore an urgent global concern.

#### 4.0 Way Forward

In order to place health at the centre of climate action, it is imperative for countries to ensure that health is central to climate change mitigation and adaptation policies<sup>84</sup>. The COP 28 Declaration on Climate and Health urges countries to strengthen the development and implementation of policies that maximize the health gains from

<sup>80</sup> Ibid

<sup>&</sup>lt;sup>81</sup> World Health Organization., 'COP28 UAE Declaration on Climate and Health.' Available at <a href="https://www.who.int/publications/m/item/cop28-uae-declaration-on-climate-and-health">https://www.who.int/publications/m/item/cop28-uae-declaration-on-climate-and-health</a> (Accessed on 11/12/2023)

<sup>82</sup> Ibid

<sup>83</sup> World Health Organization., 'Climate Change and Health.' Op Cit

<sup>84</sup> Ibid

mitigation and adaptation actions and prevent worsening health impacts from climate change, including through close partnerships with Indigenous Peoples, local communities, women and girls, children and youth, healthcare workers and practitioners, persons with disabilities and the populations most vulnerable to the health impacts of climate change<sup>85</sup>. It is also vital for all countries through their NDCs to prioritise SDG 3 targets such as ending epidemics and communicable diseases, fostering access to Universal Health Care and medicines by linking them to climate-induced health risks prevention, contingency health strategy development, and communicable diseases prevention as key strategies for climate action<sup>86</sup>.

In addition, it is important for countries to pursue climate change adaptation actions prioritizing health and SDG 3 such as enhancing vaccination and prevention against water and vector borne diseases, and increasing access to clean drinking water; increasing health facilities; and building of infrastructure that protects against heat such as ventilation or shaded areas<sup>87</sup>. There is also need for countries to pursue adaptation interventions such as urgent nutrition support, surveillance systems, and emergency response centers in order to cushion the health sector against the adverse impacts of climate change<sup>88</sup>. It has also been pointed out that key intervention strategies required to place health at the centre of climate action include strengthening health systems to predict, detect, prepare, and respond to climate risks and disasters, by, for example, building climate-informed surveillance and early-warning systems, increasing health workforce capacity in climate-health, and climate proofing healthcare infrastructure<sup>89</sup>.

Another key measure towards placing health at the centre of climate action is reducing greenhouse gas emissions from the health sector. It has rightly been observed that the

<sup>85</sup> World Health Organization., 'COP28 UAE Declaration on Climate and Health.' Op Cit

<sup>&</sup>lt;sup>86</sup> United Nations., 'Discussion on SDG and NDC Implementation: Country Trends and Examples from the NDC Partnership.' Op Cit

<sup>&</sup>lt;sup>87</sup> Gonzales-Zuniga., 'SCAN (SDG & Climate Action Nexus) Tool: Linking Climate Action and the Sustainable Development Goals.' Op Cit

<sup>88</sup> The World Bank., 'Health and Climate Change.' Op Cit

<sup>89</sup> Ibid

health sector is not only affected by climate change but also contributes to the magnitude of the crisis, being responsible for around 5 percent of global greenhouse gas emissions<sup>90</sup>. It is therefore essential for all countries to ensure that their health sectors and health systems transition to low-carbon, high-quality service delivery, such as through clean, renewable energy for infrastructure and fleets, and low-carbon medicines and equipment<sup>91</sup>. The COP 28 Declaration on Climate and Health also urges all countries to embrace measures to curb emissions and reduce waste in the health sector, such as by assessing the greenhouse gas emissions of health systems, and developing action plans, nationally determined decarbonization targets, and procurement standards for national health systems, including supply chains<sup>92</sup>. Curbing greenhouse emissions in the health sector is therefore an important approach in placing health at the centre of climate action.

It is also pertinent to ensure that the health sector and health systems are climate resilient. A climate resilient health system is one that is capable to anticipate, respond to, cope with, recover from and adapt to climate-related shocks and stress, so as to bring sustained improvements in population health, despite an unstable climate<sup>93</sup>. Climate resilient health systems provide an opportunity for sustainable human development due to their ability to reduce the effects of climate change on health while promoting better health<sup>94</sup>. WHO urges countries to build better, more climate-resilient and environmentally sustainable health systems by ensuring that core services, environmental sustainability and climate resilience are central components of UHC and primary health care; supporting health systems to leapfrog to cheaper, more reliable and cleaner solutions, while decarbonizing high-emitting health systems; and mainstreaming climate resilience

<sup>&</sup>lt;sup>90</sup> Rodriguez-Jimenez., 'The Carbon Footprint of Healthcare Settings: A Systematic Review.' Available at https://doi.org/10.1111/jan.15671 (Accessed on 11/12/2023)

<sup>91</sup> The World Bank., 'Health and Climate Change.' Op Cit

<sup>92</sup> World Health Organization., 'COP28 UAE Declaration on Climate and Health.' Op Cit

 <sup>&</sup>lt;sup>93</sup> Mosadeghrad. A. M., et al., 'Strategies to Strengthen a Climate-Resilient Health System: A Scoping Review.' Globalization & Health., Volume 19, No. 62 (2023)
 <sup>94</sup> Ibid

and environmental sustainability into health service investments, including the capacity of the health workforce<sup>95</sup>.

Further, there is need to accelerate the realization of the SDGs. It has rightly been argued that climate change is rapidly affecting most of the SDGs especially those relating to access to basic human needs including food, safe drinking water and sanitation, energy, and clean air therefore affecting both physical and mental health%. Actualizing the SDGs and the Sustainable Development agenda can help countries confront climate change while fostering good health and well-being for all. Countries should therefore pursue policies that work towards accelerating achievement of the SDGs, including SDG3; by reducing poverty and hunger; improving health and livelihoods; strengthening social protection systems, promoting food security and improved nutrition, fostering access to clean sources of energy, safe drinking water, and sanitation and hygiene for all; and work towards achieving UHC97.

Finally, there is need to combat inequalities within and among countries in the health sector through measures such as accelerating health financing<sup>98</sup>. It has been pointed out that people in developing countries may be the most vulnerable to health risks as a result of climate change<sup>99</sup>. Further, WHO also asserts that areas with weak health infrastructure mostly in developing countries will be the least able to cope with health risks associated with climate change without assistance to prepare and respond<sup>100</sup>. Finance for health and climate change has been identified as vital in helping developing countries and vulnerable populations to implement health-relevant adaptation and mitigation actions<sup>101</sup>. However, health systems and actors face challenges in accessing finance for

<sup>95</sup> World Health Organization., 'Climate Change and Health.' Op Cit

<sup>96</sup> The World Bank., 'Health and Climate Change.' Op Cit

<sup>&</sup>lt;sup>97</sup> World Health Organization., 'COP28 UAE Declaration on Climate and Health.' Op Cit

<sup>&</sup>lt;sup>99</sup> United States Environmental Protection Agency., 'Climate Impacts on Human Health.' Op Cit

<sup>100</sup> World Health Organization., 'Climate Change and Health.' Op Cit

 $<sup>^{\</sup>rm 101}$  World Health Organization., 'Climate Change and Health.' Available at

https://www.who.int/teams/environment-climate-change-and-health/climate-change-and-health/country-support/finance-for-health-and-climate-change (Accessed on 11/12/2023)

health and climate change activities, particularly in low- and middle-income countries<sup>102</sup>. This challenge underscores the need to better leverage synergies at the intersection of climate change and health in order to improve the efficiency and effectiveness of finance flows<sup>103</sup>. The COP 28 Declaration on Climate and Health proposes measures towards unlocking climate finance for health including encouraging the scaling up of investments in climate and health from domestic budgets, multilateral development banks, multilateral climate funds, health financing institutions, philanthropies, bilateral development agencies, and private sector actors; encouraging international finance providers, including development banks, to strengthen the synergies between their climate and health portfolios, and enhance their support for country-led projects and programs in the health-climate nexus; sharing learnings and best practices on financing and implementing climate-health interventions, and develop a common understanding of existing needs for climate-health finance, grounded in country priorities and needs; and improving monitoring, transparency and evaluation efforts of climate finance, as relevant, including for climate-health initiatives, in order to strengthen common understanding of its efficiency and effectiveness, and to maximize the delivery of positive health outcomes<sup>104</sup>. There is need to unlock climate finance for health in order to place health at the centre of climate action.

Through the foregoing initiatives, countries will be able to place health at the centre of climate action.

#### 5.0 Conclusion

Climate change is major threat to health. All aspects and determinants of health are affected by climate change, from clean air, water and soil to food systems and livelihoods<sup>105</sup>. The impacts of climate change are already harming health, through air

<sup>102</sup> Ibid

<sup>&</sup>lt;sup>103</sup> World Health Organization., 'COP28 UAE Declaration on Climate and Health.' Op Cit

<sup>104</sup> Ibid

<sup>&</sup>lt;sup>105</sup> World Health Organization., 'Climate Change and Health.' Op Cit

pollution, diseases, extreme weather events, forced displacement, pressures on mental health, and increased hunger and poor nutrition in places where people cannot grow or find sufficient food<sup>106</sup>. The climate crisis is also exerting significant strains on health systems, simultaneously increasing demand for health services whilst also impairing the system's ability to respond<sup>107</sup>. It is therefore imperative to place health at the centre of climate action. Efforts to place health at the centre of climate action have received a major boost following the adoption of the COP 28 Declaration on Climate and Health which promises to accelerate mitigation and adaptation actions in the health sector<sup>108</sup>. There is need for countries to implement the Declaration and adopt measures towards placing health at the centre of climate action. This can be achieved by ensuring that health is central to climate change mitigation and adaptation policies; pursuing climate change adaptation actions prioritizing health and SDG 3; reducing greenhouse gas emissions from the health sector; ensuring that the health sector and health systems are climate resilient; accelerating the realization of the SDGs; and unlocking climate finance for health<sup>109</sup>. Placing health at the centre of climate action is an urgent and achievable national, regional and global agenda.

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<sup>&</sup>lt;sup>106</sup> United Nations., 'Causes and Effects of Climate Change.' Op Cit

<sup>&</sup>lt;sup>107</sup> The World Bank., 'Health and Climate Change.' Op Cit

 $<sup>^{\</sup>rm 108}$  World Health Organization., 'COP 28 UAE Declaration on Climate and Health.' Op Cit

<sup>&</sup>lt;sup>109</sup> Ibid; World Health Organization., 'Climate Change and Health.' Op Cit; The World Bank., 'Health and Climate Change.' Op Cit

#### References

Africa Union., 'Africa Health Strategy 2016 – 2030.' Available at https://au.int/sites/default/files/documents/24098-au\_ahs\_strategy\_clean.pdf

Africa Union., 'African Union Climate Change and Resilient Development Strategy and Action Plan (2022-2032).' Available at <a href="https://au.int/sites/default/files/documents/42276-doc-cc\_strategy\_and\_Action\_Plan\_2022-2032\_23\_06\_22\_ENGLISH-compressed.pdf">https://au.int/sites/default/files/documents/42276-doc-cc\_strategy\_and\_Action\_Plan\_2022-2032\_23\_06\_22\_ENGLISH-compressed.pdf</a>

Africa Union., 'Agenda 2063: The Africa we Want.' Available at <a href="https://au.int/sites/default/files/documents/33126-doc-framework\_document\_book.pdf">https://au.int/sites/default/files/documents/33126-doc-framework\_document\_book.pdf</a>

Climate for Development-Africa. Programme., 'Climate Change and Health in Africa: Issues and Options.' Available at <a href="https://archive.uneca.org/sites/default/files/PublicationFiles/policy\_brief\_12\_climatechange\_and\_health\_in\_africa\_issues\_and\_options.pdf">https://archive.uneca.org/sites/default/files/PublicationFiles/policy\_brief\_12\_climatechange\_and\_health\_in\_africa\_issues\_and\_options.pdf</a>

Climate for Development-Africa. Programme., 'Climate Change and Health in Africa: Issues and Options.' Available at <a href="https://archive.uneca.org/sites/default/files/PublicationFiles/policy\_brief\_12\_climatechange\_and\_health\_in\_africa\_issues\_and\_options.pdf">https://archive.uneca.org/sites/default/files/PublicationFiles/policy\_brief\_12\_climatechange\_and\_health\_in\_africa\_issues\_and\_options.pdf</a>

Gonzales-Zuniga., 'SCAN (SDG & Climate Action Nexus) tool: Linking Climate Action and the Sustainable Development Goals.' Available at <a href="https://ambitiontoaction.net/wp-content/uploads/2018/10/Methods\_note\_final.pdf">https://ambitiontoaction.net/wp-content/uploads/2018/10/Methods\_note\_final.pdf</a>

Health Act., No. 21 of 2017., Laws of Kenya.

Kenya Health Policy 2014-2030., Available at <a href="https://publications.universalhealth2030.org/uploads/kenya\_health\_policy\_2014\_to\_2">https://publications.universalhealth2030.org/uploads/kenya\_health\_policy\_2014\_to\_2</a> 030.pdf

Mosadeghrad. A. M., et al., 'Strategies to Strengthen a Climate-Resilient Health System: A Scoping Review.' *Globalization & Health.*, Volume 19, No. 62 (2023)

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

Muigua. K., 'Taking Urgent Action to Combat Climate Change.' Available at <a href="https://kmco.co.ke/wp-content/uploads/2023/09/Taking-Urgent-Action-to-Combat-Climate-Change.pdf">https://kmco.co.ke/wp-content/uploads/2023/09/Taking-Urgent-Action-to-Combat-Climate-Change.pdf</a> (Accessed on 08/12/2023)

Pan American Heath Organization., 'Climate Change and Health.' Available at <a href="https://www.paho.org/en/topics/climate-change-and-health">https://www.paho.org/en/topics/climate-change-and-health</a>

Rodriguez-Jimenez., 'The Carbon Footprint of Healthcare Settings: A Systematic Review.' Available at <a href="https://doi.org/10.1111/jan.15671">https://doi.org/10.1111/jan.15671</a>

The World Bank., 'Health and Climate Change.' Available at <a href="https://www.worldbank.org/en/topic/health/brief/health-and-climate-change#:~:text=This%20is%20critical%20as%20the,gas%20(GHG)%20emissions%20globally</a>

The World Bank., 'Impact of Climate Change on Health: The Cost of Inaction.' Available at <a href="https://www.worldbank.org/en/news/video/2023/11/30/health-impacts-of-climate-change">https://www.worldbank.org/en/news/video/2023/11/30/health-impacts-of-climate-change</a>

United Nations Climate Change., 'Adaptation and Resilience.' Available at <a href="https://unfccc.int/topics/adaptation-and-resilience/the-big-picture/introduction#:~:text=Loss%20and%20damage%20arising%20from,forest%20degradation%2C%20loss%20of%20biodiversity">https://unfccc.int/topics/adaptation-and-resilience/the-big-picture/introduction#:~:text=Loss%20and%20damage%20arising%20from,forest%20degradation%2C%20loss%20of%20biodiversity</a>

United Nations Climate Change., 'Introduction to Mitigation.' Available at <a href="https://unfccc.int/topics/introduction-to-mitigation">https://unfccc.int/topics/introduction-to-mitigation</a>

United Nations Department of Economic and Social Affairs., 'Forum on Climate Change and Science and Technology Innovation.' Available at <a href="https://www.un.org/en/desa/forum-climatechangeandscience-and-technology-innovation">https://www.un.org/en/desa/forum-climatechangeandscience-and-technology-innovation</a>

United Nations Development Programme., 'UNDP Support to the Implementation of Sustainable Development Goal 3.' Available at <a href="https://www.undp.org/sites/g/files/zskgke326/files/publications/SDG-3%20Health.pdf">https://www.undp.org/sites/g/files/zskgke326/files/publications/SDG-3%20Health.pdf</a>

United Nations Framework Convention on Climate Change., United Nations, 1992., Available

<a href="https://unfccc.int/files/essential\_background/background\_publications\_htmlpdf/application/pdf/conveng.pdf">https://unfccc.int/files/essential\_background/background\_publications\_htmlpdf/application/pdf/conveng.pdf</a>

United Nations Framework on Climate Change Secretariat., 'Kenya's Updated Nationally Determined Contribution (NDC).' Available at <a href="https://unfccc.int/sites/default/files/NDC/2022-06/Kenya%27s%20First%20%20NDC%20%28updated%20version%29.pdf">https://unfccc.int/sites/default/files/NDC/2022-06/Kenya%27s%20First%20%20NDC%20%28updated%20version%29.pdf</a>

United Nations General Assembly., 'Transforming Our World: the 2030 Agenda for Sustainable Development.' 21 October 2015, A/RES/70/1., Available at <a href="https://sustainabledevelopment.un.org/content/documents/21252030%20Agenda%20">https://sustainabledevelopment.un.org/content/documents/21252030%20Agenda%20</a> for%20Sustainable%20Development%20web.pdf

United Nations., 'Causes and Effects of Climate Change.' Available at <a href="https://www.un.org/en/climatechange/science/causes-effects-climate-change#:~:text=Climate%20change%20is%20the%20single,grow%20or%20find%20sufficient%20food.">https://www.un.org/en/climatechange/science/causes-effects-climate-change#:~:text=Climate%20change%20is%20the%20single,grow%20or%20find%20sufficient%20food.</a>

United Nations., 'Discussion on SDG and NDC Implementation: Country Trends and Examples from the NDC Partnership.' Available at <a href="https://www.un.org/sites/un2.un.org/files/technical\_brief\_ndc\_synergies\_conference.pdf">https://www.un.org/sites/un2.un.org/files/technical\_brief\_ndc\_synergies\_conference.pdf</a>

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

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

United States Environmental Protection Agency., 'Climate Impacts on Human Health.' Available at <a href="https://climatechange.chicago.gov/climate-impacts/climate-impacts-human-">https://climatechange.chicago.gov/climate-impacts/climate-impacts-human-</a>

health#:~:text=Climate%20change%20increases%20the%20risk,or%20liver%20and%20kidney%20damage

World Health Organization., 'Climate Change and Health.' Available at <a href="https://www.who.int/news-room/fact-sheets/detail/climate-change-and-health">https://www.who.int/news-room/fact-sheets/detail/climate-change-and-health</a>

World Health Organization., 'Climate Change and Health.' Available at <a href="https://www.who.int/teams/environment-climate-change-and-health/climate-change-and-health/country-support/finance-for-health-and-climate-change">https://www.who.int/teams/environment-climate-change-and-health/climate-change-and-health/country-support/finance-for-health-and-climate-change</a>

World Health Organization., 'COP28 UAE Declaration on Climate and Health.' Available at <a href="https://www.who.int/publications/m/item/cop28-uae-declaration-on-climate-and-health">https://www.who.int/publications/m/item/cop28-uae-declaration-on-climate-and-health</a>