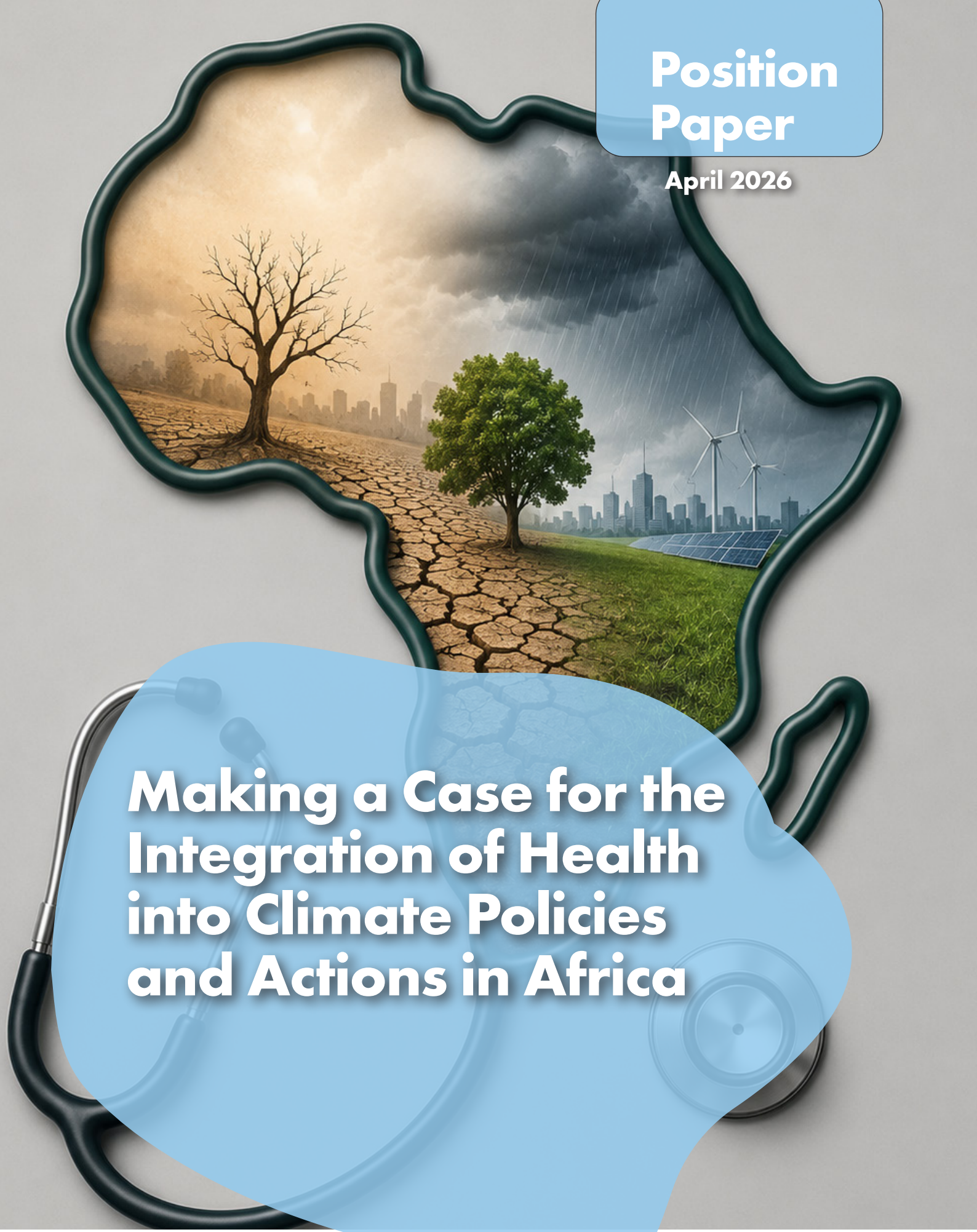
Position Paper

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Making a Case for the Integration of Health into Climate Policies and Actions in Africa

AFIDEP
African Institute for Development Policy

amref health africa

PACJA
PANAFRICAN CLIMATE JUSTICE ALLIANCE

> There is growing recognition among key global and regional stakeholders in Africa that the ongoing global climate crisis is a health crisis.

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List of Abbreviations

AFIDEP	African Institute for Development Policy
Africa CDC	Africa Centres for Disease Control and Prevention
AGN	African Group of Negotiators
AGNES	African Group of Negotiators Expert Support
AIDS	Acquired Immunodeficiency Syndrome
AMREF	AMREF Health Africa
CHANCE	Climate Change and Health Research Network
CVD	Cardiovascular Disease
DHIS2	District Health Information Software 2
G20	Group of Twenty
GHG	Greenhouse Gas
HIV	Human Immunodeficiency Virus
H-NAP	Health National Adaptation Plan
PACJA	Pan-African Climate Justice Alliance
PPCH	Pan-African Platform on Climate Change and Health
SRHR	Sexual and Reproductive Health and Rights
UN OCHA	United Nations Office for the Coordination of Humanitarian Affairs
UNFCCC	United Nations Framework Convention on Climate Change
WASH	Water, Sanitation and Hygiene
WHO	World Health Organization

Executive Summary

The recognition of the relationship between the environment and human health dates back many years. However, over the last few years, there has been a growing appreciation of the unique threat that climate change poses to human health. In this position paper, we examined the pathways through which climate change affects health in Africa; reviewed the policy landscape to identify gaps; highlighted the main barriers impeding climate-health integration; and identified opportunities for integrating the two sectors.

The ultimate objective of this position paper is to make a case for integrated climate-health policies and actions across Africa. We undertook a desk review of scientific and grey literature as well as key policy documents on climate change and health in Africa. We also relied on our experience and involvement in key climate change and health initiatives and platforms in Africa.

The results revealed that climate change broadly affects health through direct and indirect pathways. In the main; extreme heat, floods, cyclones, droughts, and air pollution are the climatic events that severely impact health outcomes in Africa. These extreme climatic events have been found to increase the risk of heat stroke, pre-term births, respiratory diseases, injuries and deaths. For example, between October 2025 and February 2026, flooding caused injuries to 1,400 people and killed 374 others in Southern Africa. Climate change affects health indirectly by changing disease ecologies and the conditions in which people live. This includes accelerating the transmission of vector-borne diseases such as Malaria and Dengue fever through altering temperature and rainfall patterns, as well as increasing malnutrition by disrupting agricultural productivity. Beyond physical health, climate change has also been indirectly linked to mental health and Sexual and Reproductive Health and Rights outcomes.

We observed that policies for climate-health integration in Africa are quite recent and limited to a few countries. Even then, gaps exist in the few policies including the omission of critical areas of health such as SRHR. The major barrier to the optimal integration of health into climate policies and actions are:

(i) inadequate domestic and external funding,

(ii) limited capacity and involvement of health stakeholders in climate negotiations and policy discourses,

(iii) weak and fragmented institutions, and

(iv) limited data/evidence.

The main opportunities for integrating climate change and health policies and action include:

(i) the growing climate-health research,

(ii) changing policy landscape towards integrated policies and actions,

(iii) emerging technological and data revolution that support integration, and

(iv) increasing climate-health communities of practices and networks in Africa.

Background

In the last one year, the African Institute for Development Policy (AFIDEP), AMREF Health Africa, the Pan-African Climate Justice Alliance (PACJA) and the Rockefeller Foundation have worked collaboratively to amplify and influence policies on climate change and health in Africa through research, evidence synthesis and stakeholder engagement. As part of this collaboration, we synthesised available evidence to identify the main pathways through which climate change affects health in Africa as well as examine existing policy responses. We also present available opportunities for climate-health integration in Africa.

The ultimate objective of this position paper is to make a case for the integration of health into climate change policies and actions in Africa. The evidence and arguments advanced in this paper were set against the background of the G20 Health Ministerial Declaration on Climate Change, Health and Equity, the Global Action Plan on Climate Change and Health and Africa's Strategic Framework on Climate Change and Health.[1–3] We also situated our discussion within the current momentum in Africa for integrated climate and health responses.

Introduction

The recognition of the interconnection between the environment and human health date back thousands of years. However, assessments of the relative contribution of the environment to diseases have differed significantly, ranging from as low as 13% to as high as 90%.[4,5] These variations emerge mainly due to differences in the definition of environment across studies. Even though climate change has for a long-time been included in the broad definition of the environment, there is growing recognition of its unique threat and influence in magnifying the risk posed by other environmental factors.

The United Nations Framework Convention on Climate Change (UNFCCC) defines climate change as "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 periods".[6] Despite the significant attention on climate change as a global crisis, assessment of its impact on health is fairly recent. The Lancet special issue on the impact of climate change on health in 2009 is probably the first significant consideration of this issue.[7] There is growing recognition among key global and regional stakeholders in Africa that the ongoing global climate crisis is a health crisis. WHO projects an increase in global deaths due to climate change by 250,000 annually between 2030 and 2050.[8] A recent study projects that climate change could result in 123 million additional malaria cases and 532,000 additional deaths in Africa between 2024 and 2050 under current control levels.[9]

Although available evidence has established that climate change affects health, the evidence base on the impacts and pathways through which climate change affects health in Africa is emerging and scanty. Yet, this evidence is critical for amplifying and making a case for the integration of health into Africa's climate agenda.

Objective

The overall objective of this position paper was to make a case for the integration of health into climate change policies and interventions in Africa. Specifically, the paper examined;

1. Causal pathways through which climate change affect health in Africa
2. Climate change and health policy landscape in Africa to identify gaps
3. Barriers to optimal integration of climate change and health in Africa
4. Opportunities for integrating climate change and health in Africa



WHO defines the environmental factors to include "exposure to pollution and chemicals (e.g., air, water, soil, products), physical exposures (e.g., noise, radiation), the built environment, other anthropogenic changes (e.g., climate change, vector breeding places), related behaviours and the work environment

Methodology/ Approach

We undertook a desk review and synthesis of both published and grey literature. Specifically, the literature comprised scientific evidence published in peer reviewed journals as well as evidence in programme and project reports. In addition, we reviewed regional and national policy documents and strategies on climate change and health with the aim of identifying gaps and opportunities for accelerated integration. Beyond the desk review, we obtained feedback from key members of the Pan-African Platform on Climate Change and Health (PPCH) based on their experience about the state of climate change and health in Africa.

Key Findings

Climate-Health causal pathways in Africa

The evidence base linking climate change to adverse health outcomes in Africa is emerging.10 There are several pathways through which climate change affects human health, and these often operate simultaneously and reinforce one another. These pathways can be broadly grouped into direct and indirect and causal pathways.

Direct Causal Pathways

Direct causal pathways are diseases or adverse health outcomes that emerge directly from physical changes in the climate system. The main physical changes in the climate system that pose direct threats to human health are extreme heat, other extreme weather events such as floods, cyclones and droughts, and poor air quality.

Extreme heat is increasingly emerging as a major health threat in many parts of Africa.[11,12] There is evidence that the Sahel, Horn of Africa and parts of Southern Africa are experiencing heightened frequency and intensity of heat waves—a sustained period (typically ≥2–3 consecutive days) of unusually high temperatures relative to local climate.[11,13] The rising frequency and intensity of heat waves in Africa has been linked to diseases ranging from heat exhaustion to heat strokes, and is also associated with increased risk of mortality. For instance, a study of manual labourers in two South African localities (Johannesburg and Upington) linked high summer temperatures to dehydration, skin irritations, headaches, exhaustion, sinusitis, and dizziness.[14] Extreme heat has also been found to increase the risk of meningitis, preterm births, congenital anomalies and gestational diabetes.[15,16] Research from Climate Impact Lab projects an increase in heat-related deaths in Africa in 2050 compared to the 2001-2010 mortality rate, with nine of the ten most affected countries being African (Niger, Burkina Faso, Djibouti, Chad, Mauritania, Sudan, Mali, Togo and Somalia). The population sub-groups in Africa that are mostly vulnerable to extreme heat related morbidity and mortality are infants (0-4 years), children (5-12 years), young adolescents (13-19 years) and the elderly (50 years and above.[17]

There is robust evidence that links climate change induced extreme weather events such as floods, cyclones and droughts to Africa's disease ecology and humanitarian disasters.[18,19] Floods are produced by excessive rainfalls, quick snowmelts or storm surges from tropical cyclones or tsunami's in coastal regions, and they are generally classified as flash floods, river floods or coastal floods. It is estimated that the frequency of floods in sub-Saharan Africa has increased nearly tenfold between 2010 and 2019, compared to a 1970-1979 baseline.[20] Floods have been linked to rising cases of cholera, malaria, sleeping sickness and various arboviruses.[20] The interaction of floods with inadequate waste management systems which contaminates water and food is often the causal pathway to diarrhoea and cholera outbreaks in Africa. Between 2000 and 2023, about 2.7 million cases and 63,182 deaths from cholera were reported from 44 African countries, and these were often linked to flooding and limited access to basic water and sanitation services.[20] Floods are also directly linked to injuries and deaths. Estimates from the United Nations Office for the Coordination of Humanitarian Assistance (UN OCHA) shows that severe flooding in Southern Africa between October 2025 and February 2026 caused injuries to about 1,400 people and killed 374 others.[18]

Aside floods, there is evidence of increasing frequency and intensity of droughts in Africa due to climate change.[21] Droughts alter the quantity and quality of water available for human consumption and agricultural purposes, thus causing diarrhoeal diseases (including cholera), infant mortality, malnutrition and poor mental health outcomes including stress and traumas.[22,23] For example, between 2016 and 2017, severe drought in the Horn of Africa increased suspected cases of cholera to 75,414, and this increase was nearly five-fold compared to the previous year.[24] Using data from 34 African countries for the period 1992-2019, Wang et al. (2025) found that severe drought increased in the risk of infant mortality.[22]

Air pollution, a causal factor of climate change, is a well-documented environmental risk factor for cardiovascular diseases. Major air pollutants include particulate matter (PM), nitrogen dioxide (NO_2), sulphur dioxide (SO_2), and ozone (O_3). In Africa, domestic fuels (wood and biomass), open burning of agricultural waste, and motor vehicle and industry emissions all contribute significantly to air pollution levels.[25] Domestic fuels used to be the primary source of air pollution in Africa, but with rapid urbanisation and increased motorisation, transport-related emissions have increased dramatically, accounting for



an estimated 40% of all air pollution sources on the continent.[26] Africa's top ten countries for PM emissions are the Central African Republic, South Sudan, Rwanda, Burundi, Niger, Mali, Madagascar, Tanzania, Uganda, and Guinea-Bissau, where almost 97% of the population cooks with solid fuels.[27]

While Africa is already facing the problem of air pollution, climate change is exacerbating the situation by making the environment drier and hotter. According to the 2024 World Heart Report, air pollution causes 1.9 million deaths from cardiovascular disease (CVD) and slightly less than one million strokes per year.[26] However, quite alarming is the fact Africa severely lacks the air pollution monitoring infrastructure required to identify the scope of the problem and effectively advise policymakers on how to tackle this catastrophe.

Indirect Causal Pathways

In addition to the direct causal pathways, climate change also affects human health indirectly through altering ecological systems and the conditions in which people live. It is known that climate change induced shifts in temperature and rainfall patterns alter the habitats of vectors such mosquitoes and ticks, thus increasing the transmission of vector-borne diseases such as malaria and dengue fever. One study that modelled changes in malaria suitability across Africa under future warming scenarios found that tropical highlands such as parts of Kenya, Uganda, Rwanda and Ethiopia, which were hitherto too cool for the Anopheles mosquito, would become ideal zones for malaria transmission due to global warming.

Furthermore, there is strong evidence of the intersection of climate change, agriculture and malnutrition across Africa.[28,29] Specifically, results from a recent systematic review shows significant decline in staple crop yield due to prolonged droughts and other extreme climatic events.[29] Climate change is projected to reduce the yields of major staple food crops such as maize, millet and sorghum by between 20% and 30% in many African countries by 2050.[30,31] Extreme climatic events due to climate change also threatens the livestock sector, with increasing temperature resulting in the decline of animal product production and increased morbidity and mortality of livestock.[32,33] Climate-induced disruptions in the food value chain and market access further exacerbates the already precarious malnutrition situation in many African countries. There is evidence of worsening malnutrition in sub-Saharan Africa, with an estimated 123 million people (equivalent to 12% of the sub-region's population) projected to be acutely food insecure—suffering from high malnutrition and unable to meet their minimum food consumption needs.[34] Malnutrition disproportionately affects children under five years, consequently hurting early childhood development, educational attainment and future earning potential.

Beyond physical health, there is emerging evidence demonstrating that climate change is a major risk factor for poor mental health across Africa.[35–37] The effects of climate change on mental health occur via psychological trauma and stress from experiencing climate change induced extreme climatic events such as floods, droughts, heat waves and cyclones. Displacements, economic losses, food insecurity and other major disruptions from extreme climatic events also result in anxiety, stress and even depression. For example, one study conducted in a rural and an urban setting in Ghana found that exposure to flood events significantly increased the risk of mental distress.[38] Another study among small holder farmers living with HIV/AIDS in Kenya found high levels of stress, fear, worry, anxiety and sadness due to climate-related economic insecurity.[39] While the adverse impacts of climate change on mental health affects all population sub-groups, the most vulnerable groups are usually adolescents, young adults and women.[35]

One area of health that is often ignored in the discourse on climate change and health is sexual and reproductive health and rights (SRHR). Majority of the evidence on the intersection of climate change and health is focused on the direct impacts on reproductive health—maternal and new-born health.[40] There is emerging evidence linking climate change to sexual and gender-based violence including child marriage and physical violence. One study that analysed data from the 2014 and 2022 Kenya Demographic and Health Survey found a significant positive association between high temperatures and child marriage in Kenya, and the areas where this risk was particularly high included Mandera East, Mandera North, and Samburu North.[41] While climate change induced extreme weather events do not directly cause child marriage, they exacerbate the drivers of this harmful practices including poverty and food insecurity. Intimate partner violence can also be exacerbated by climatic disasters such as droughts and floods.[42] A number of studies in Africa have further linked extreme climatic events to the increased risk of sexual transmitted infections and HIV/AIDS.[42,43] This is because such climatic events amplify the risk of multiple sexual partnerships, unprotected sexual intercourse and decreased access to antiretroviral therapy and contraceptive services.

Even as climate change increases demand for healthcare services through its effect on the health outcomes outlined above, it also limits access to healthcare by disrupting the delivery of essential health services and damaging health infrastructure. Climate change-related extreme weather events such as cyclones and storms have been shown to disrupt laboratory services, supplies of medication and ambulance services as well as staff and patient travels to health facilities. In 2023, Cyclone Freddy which affected Malawi, Mozambique, Zimbabwe, South Africa and Madagascar destroyed about 100 health facilities in Mozambique.[44] These climate-induced disruptions amplify the already existing inequalities in access to healthcare services in Africa.

Climate Change and Health Policy Landscape in Africa

Although there is research linking climate change to health outcomes in Africa, policies integrating health into climate policies and actions in the continent are fairly recent and limited to a few countries.

At the regional level, the most comprehensive policy framework designed to integrate health into climate change interventions through coordinated and evidence-informed actions is the Strategic Framework for Climate Change and Health developed by Africa CDC is 2025.[1] This strategic framework prioritises interventions aimed at addressing five critical climate-related health vulnerabilities:

(a) vector-borne and zoonotic diseases ,

(b) heat-waves and extreme temperatures,

(c) food and nutrition insecurity,

> **Our review of the climate and health policy landscape further shows that Kenya is the only country that developed a standalone climate change and health strategy (2024-2029), other than H-NAPs**

(d) waterborne diseases and

(e) airborne diseases.

While this framework is a major milestone and provides a unified continental response to the adverse impacts of climate change on health, a critical review of the policy document reveals important omissions and strategic blind spots. Firstly, the policy frames the intersection of climate change and health around infectious disease outbreak, omitting critical aspects of health including mental health and SRHR. Yet, our review of the evidence, for this position paper, demonstrates significant impacts of climate change on these critical aspects of health. This omission is thus a missed opportunity to comprehensively address health as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity."

Secondly, the framework focuses almost exclusively on adaptation and building resilience to the impacts of climate change on health, ignoring the fact that the health sector is a significant contributor to greenhouse gas emissions in Africa. It is estimated that the health sector contributes to about 10% of Africa's annual greenhouse gas emission[45]. The emission of GHG from the health sector in Africa is via fuel to power health facilities, incineration of medical waste and importation of medical supplies and pharmaceuticals. Given the highly unreliable national power grids in many African countries, the health sector often relies on heavy-duty diesel generators to power health facilities, thus emitting significant volumes of localised CO^2 and particulate matter into the atmosphere. Also, due to lack of advanced eco-friendly medical waste processing technologies in Africa, the health sector in the continent mainly relies on open-air burning and inefficient onsite incinerators to dispose off clinical waste. Furthermore, a disproportionately higher percentage of Africa's emissions footprint from the health sector is through the transportation and supply chain of medical commodities and pharmaceuticals. This is because the continent imports between 70% and 90% of its pharmaceuticals and medical supplies.

At the national, a number of African countries have designed Health National Adaptation Plans (H-NAPS) to bridge the historical gaps between climate change and health, and to build climate-resilient, low-carbon health systems. Uganda is one of the few African countries to develop a comprehensive H-NAP, with the goal of strengthening the "adaptative capacity

of the health system to climate change." The specific objectives of the Uganda H-NAP include;

(a) establish a national coordination framework for climate and health adaptation,

(b) mainstream and integrate climate and health in the programmes of Ministries, Departments and Agencies (MDAs) and non-state actors

(c) prioritise actions to address the impacts of climate change on health

(d) promote the generation and use of evidence in climate and health decision-making, and

(e) advocate for resource mobilisation and allocation for the implementation of context-specific climate and health adaptation measures.

While the H-NAP of Uganda and the few African countries with such policies are quite comprehensive in addressing all aspects of health including mental health and SRHR, these policies are heavily focused on adaptation measures. This is despite the effect of localised emission affecting health, and the fact that the health sector is major contributor to GHG emissions in Africa.

Our review of the climate and health policy landscape further shows that Kenya is the only country that developed a standalone climate change and health strategy (2024-2029), other than H-NAPs. This is also the only policy in the continent that extends climate health actions to include mitigation measures. One of the key focus areas of the Kenya Climate Change and Health Strategy aims to promote a low-carbon footprint in healthcare.[46] The specific measures proposed in the strategy to promote low-carbon footprint in healthcare include the adoption of clean energy sources including clean household cooking fuels and transition to wind power generation and solarisation of health facilities. Although this policy is well-written and captures critical aspects of climate and health intersection in Kenya, what remains to be seen is seen is commitment to resource mobilisation and actual implementation of the strategy.

Overall, the current climate-health policy landscape in Africa is promising, but there is uneven progress in the formulation of country-specific climate change and health policies.



Barriers to optimal Integration of Climate Change and Health in Africa

Notwithstanding the growing momentum aimed at integrating climate change and health in Africa, there are key barriers preventing the optimal integration of the two sectors. These include the following:

- **Funding and financing barriers:** Limited domestic and external funding is probably the greatest impediment to the optimal integration of climate change and health in Africa. According to the African Development Bank (AfDB), African countries require between $7 and $15 billion annual expenditure by 2030 to create resilient health systems. But current funding levels fall well below this requirement. There is evidence that health related initiatives receive less than 1% to 2% of global climate adaptation funds.[47] Also, the health sector in many African countries are organised around rigid and vertical budgets that are strictly earmarked for specific diseases such as HIV/AIDS, Tuberculosis and Malaria. Thus, these budgets cannot be easily repurposed to covers aspects of climate-health integration including climate sensitive disease surveillance and climate-proofing health facilities. Furthermore, most African countries do not have dedicated budget lines for integrating climate change and health. These financial barriers hamper the optimal integration of climate change and health in the continent.

- **Limited capacity of health stakeholders in climate policy discussions and resource mobilisation:** Although the linkages between climate change and health is well established, stakeholders in the health sector in Africa do not have adequate capacity to engage in resource mobilisation processes and climate change policy discussions at national and global levels. For instance, most health stakeholders in Africa have limited capacity to engage in climate negotiations or complete the stringent processes required to access climate funding.

- **Weak and fragmented institutions:** Historically, climate change and health have been designed and operated as separate sectors in Africa, and the institutional mechanisms for integrating them are quite weak. While the emerging climate-health policies in Africa have advocated for the establishment of coordination mechanisms for climate-health integration, most countries still do not have such mechanisms in place. Most African countries currently rely on "technical working groups" and "steering committees" to coordinate the integration of their climate-

health actions. Such coordination mechanisms often do not have permanent operational structures or legal basis to mobilise financial resources and human resources for the integration of climate change and health actions.

- **Data and evidence gaps:** Inadequate data and limited contextual evidence is one of the major barriers to optimal integration of climate change and health in Africa. African countries lack comprehensive contextual data showing a causal link between climatic events and health outcomes. Thus, many countries rely on global models for decision-making instead of relevant local contextual evidence. Also, meteorological data systems in the continent are rarely integrated with health data systems, making it difficult for health systems to predict, prepare and respond to climate-sensitive health issues. WHO estimates that only 14% of sub-Saharan African countries have fully functional health surveillance systems that are capable of integrating climate-related health data.[1]

Opportunities for Integrating Climate Change and Health in Africa

It is evident that concrete actions are required to integrate climate change and health in order to address the increasing climate-related health crisis in Africa. There are opportunities for the integration of climate change and health in the region including:

1. **Increased climate-health nexus research in Africa:** Over the last decade, there has been a notable increase in evidence generation and synthesis on climate change and health in Africa. Much of the research has been disproportionately focused on the intersections of climate change and infectious diseases as well as WASH. Research on the intersection of climate change and mental health as well as SRHR is an emerging frontier. Geographically, contributions to climate change and health research output are concentrated in countries like South Africa, Ghana, Nigeria, Kenya, Uganda and Ethiopia. The rapidly growing field of climate change and health research in Africa is an opportunity to bridge the evidence gaps, and translate such evidence into concrete actions.

2. **Shifting policy landscape:** Although only about 30% of African countries have policies or strategies for integrating health into climate actions, the last two years has witnessed the development of model policies/strategies that can serve as templates for other countries. For example, the Africa CDC Climate Change and Health Strategic Framework (2025) can serve as a vital tool to guide African countries in the design and formulation of their domestic climate change and health policies and programmes. Also, the Kenya Climate Change and Health Strategy (2024-2029) is also an opportunity for Africa to integrate mitigation actions into their climate policies, programmes and financing mechanism.

3. **Leveraging emerging technological/data revolution:** While the historical lack of integrated climate change and health data infrastructure is a challenge; ironically, African countries have an opportunity to build modern data systems without having to dismantle any legacy infrastructure. For example, African countries have an opportunity to integrate real-time meteorological data into the existing District Health Information System (DHIS2) platforms. Early warning systems can also be localised, integrated and automated to facilitate adequate predictions, preparations and responses.

4. **Leveraging on shifting mandates of global organisations and geopolitics to unlock funding:** The changing mandate of key global health organisations such as Global Fund and Gavi is an opportunity for African countries to access and utilise funds from previously restricted funding streams for integrated climate-health interventions. Funding for digital health infrastructure can also be leveraged to equip health facilities with off-grid solar power to improve health care while at the same time reducing emissions from diesel powered generators and adapting to climate change. Furthermore, the African Union and key regional climate change stakeholders such as the African Group of Negotiators (AGN) can leverage on its geopolitical influence to unlock strict grant-based funding to support investment in climate-health integration.

5. **Leveraging on emerging communities of practice and networks to amplify climate-health integration and strengthen capacity:** Africa is experiencing a rapid expansion of communities of practice and networks aimed at advocating for climate-health integration, sharing lessons of best practices and strengthening capacity for transdisciplinary research and policy uptake. Key among the flagship networks and initiatives include the Pan-African Platform on Climate and Health (convened by AFIDEP, AMREF Health Africa and PACJA), the Climate Change and Health Research Network (CHANCE) and the African Group of Negotiators Expert Support (AGNES). AFIDEP has also recently launched a virtually-based community of practice aimed at fostering interdisciplinary collaborations and sharing lessons and best practices for climate-health solutions in Africa. The recent Wellcome Trust funded Climate and Health Excellence Centres is major opportunity to strengthen the capacity of African institutions in applied and translational research for climate-health integration. Furthermore, AMREF Health Africa has designed curriculum to build the capacity of African experts in climate resilience and global health advocacy. These initiatives and networks provide a timely opportunity for bridging the evidence gaps, strengthening capacity and amplifying Africa's voice in global climate and health discourses and policy actions.

Conclusion

Over the last few years, there has been a noticeable increase in research and policy actions on the intersections of climate change and health in Africa. The rapid changes in research and policies in Africa have been set against broader global policy shifts including the G20 Health Ministerial Declaration on Climate Change, Health and Equity and the Global Action Plan on Climate Change and Health. Our synthesis of the evidence demonstrate that climate change affects health in Africa through both direct and indirect pathways. Climatic events such as extreme heat, floods, cyclones and droughts have been directly linked to heat strokes, meningitis, preterm births, injuries and deaths. climate change also affects human health indirectly by altering disease ecologies and the conditions in which people live. Thus, climate changed increases the transmission, prevalence and intensity of diseases such AS Malaria and Cholera as well as other health outcomes including malnutrition, poor mental health and SRHR.



Despite the strong evidence linking climate change and health in Africa, policies and strategies for climate and health action are fairly recent and still emerging. In fact, most African countries are yet to develop comprehensive policies and programmes that integrate the two sectors. The main barriers to the integration of climate change and health in Africa include: (i) limited domestic and external funding, (ii) inadequate capacity and limited involvement of health stakeholders in climate change negotiations and policy discourses, (iii) weak and fragmented institutional arrangements, and (iv) limited data and evidence gaps to guide policy actions. There are emerging opportunities for overcoming these barriers and fostering the integration of climate change and health in Africa. Key among these opportunities are: (i) the growing field of climate-health research, (ii) changing policy landscape towards integrated climate-health actions, (iii) emerging technological and data revolution that support ample integration, and the (iv) increasing climate-health communities of practices and networks in Africa.

Beyond reducing the burden of diseases and deaths from climate change, the integration of climate change and health in Africa have related social and economic benefits. These include reducing the cost of healthcare, promoting equity and gender equality and accelerating economic growth through a healthy workforce.

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