

Advancing Climate and Health Action through the G20

1. Background

With South Africa hosting the G20, Wellcome recognized the importance of understanding pan-African priorities and translating them into policy actions within the G20 forum. To achieve this, **Wellcome convened two cross-sectoral consultations, bringing together over fifty thought leaders working on the climate and health nexus and infectious diseases to identify their priorities and provide recommendations for policymakers.**

These consultations were co-designed with anchor partners, **who played a crucial role in shaping the agenda, selecting participants, and ensuring a diverse range of perspectives**—including academics, private sector leaders, policymakers, and civil society organizations (CSOs). The sessions began with an overview of anchor partners' work and a presentation of the current landscape, followed by breakout discussions where small groups highlighted key challenges and introduced policy recommendations for G20 policymakers. For the Climate and Health consultation, **we are grateful to the Africa Health Business (AHB), African Medical and Research Foundation (AMREF), and the Africa Research and Impact Network (ARIN) for their role as anchor partners.**

Recent political developments have placed climate funding at greater risk than ever. The United States has withdrawn from key initiatives, including the Loss and Damage Fund—a priority of the G20 Environment and Climate Sustainability Working Group—and the Paris Agreement¹. Meanwhile, the United Kingdom is reducing its aid budget from 0.5% of GNI in 2025 to 0.3% by 2027 to prioritize defence spending. **In this context, it is crucial to understand how decision-makers can maximize the efficiency of existing funding while also ensuring that these challenges are factored into discussions at the upcoming G20 meetings.** While the recommendations outlined in this document were formulated before these shifts, they remain highly relevant. As political priorities shift, the challenge of securing sustainable funding for climate and health becomes even more critical.

This document summarizes the outcomes of the Climate and Health consultation, aligning expert insights with some of the G20's priorities to ensure that decision-makers are informed of key issues and expert perspectives. While this document reflects the outcomes of the consultation, it does not represent the full spectrum of expert priorities or the individual priorities of any institution.

2. Context

Health is fundamental to achieving the 17 sustainable development goals (SDG) and fostering a sustainable future. An integrated approach to health is essential to make meaningful progress and should encompass **interconnected issues such as climate change, poverty and inequality**. International platforms like the G20 offer unique opportunities to convene thought leaders and policymakers to chart pathways for achieving the SDGs by 2030.

¹<https://www.reuters.com/world/us/united-states-quits-board-un-climate-damage-fund-letter-shows-2025-03-07/>

Climate change is a core determinant of health. It exacerbates environmental risks that directly impact human well-being, such as air pollution, poor sanitation, exposure to radiation, infectious diseases and other environmental hazards. According to the World Health Organization's 2016 report, "Preventing Disease Through Healthy Environments," **23% of global deaths are attributable to environmental factors².**

While there is minimal data linking climate change and health to support evidence-based decision-making, especially in the Global South, some existing research underscores the growing threats posed by climate change. For instance, the frequency and intensity of extreme weather events have risen drastically, **with a 61% increase in extreme precipitation events between 2014-2023 compared to 1961-1990³.** Moreover, the burning of fossil fuels and increased wildfires release pollutants that exacerbate respiratory conditions such as asthma and chronic obstructive pulmonary disease⁴. Climate indirectly threatens water and food security, undermining the concept of stable homes and may affect human well-being⁵.

Projections highlight the need to shift from a business-as-usual approach to one that prioritizes saving lives, enhancing productivity and supporting economic growth. By 2050, climate change is expected to impose unprecedented strain on global healthcare systems, causing **14.5 million deaths and \$12.5 trillion in economic losses⁶.** Additionally, **climate-induced impacts are expected to contribute an extra \$1.1 trillion in healthcare costs**, further burdening already overstretched infrastructure, medical resources and human capacity. The evidence is clear enough—leaders need to integrate climate considerations into health policymaking to mitigate these risks⁷.

Thought leaders have stressed the importance of equity in addressing climate and health challenges. Many countries in the Global South are trapped in repaying their debt, hampering their ability to respond to the impacts and costs of the climate crisis. At the same time, these countries are often more vulnerable to climate change without historically being the most significant contributors to emissions. Most countries across Africa have been responsible for less than 0.01% of all emissions over the last 266 years.⁸ Despite their minimal contribution, the Global South bears the brunt of climate change impacts⁹. **Africa suffered 733,585 deaths and \$43 billion in economic losses due to climate-related disasters**

² Zarocostas, J. (2006). Millions of deaths from environmental causes are preventable, says WHO. *BMJ*, 332(7555), 1412.3. <https://doi.org/10.1136/bmj.332.7555.1412-b>

³ The 2024 report of the *Lancet* Countdown on health and climate change: facing record-breaking threats from delayed action Romanello, Marina et al. *The Lancet*, Volume 404, Issue 10465, 1847 - 1896 [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(24\)01822-1/abstract](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(24)01822-1/abstract)

⁴ Huan Minh Tran, Feng-Jen Tsai, Yueh-Lun Lee, Jer-Hwa Chang, Li-Te Chang, Ta-Yuan Chang, Kian Fan Chung, Han-Pin Kuo, Kang-Yun Lee, Kai-Jen Chuang, Hsiao-Chi Chuang, The impact of air pollution on respiratory diseases in an era of climate change: A review of the current evidence, *Science of The Total Environment*, Volume 898, 2023, <https://doi.org/10.1016/j.scitotenv.2023.166340>.

⁵ Myers, S. S., & Bernstein, A. (2011). The coming health crisis: indirect health effects of global climate change. *F1000 Biology Reports*, 3. <https://doi.org/10.3410/b3-3>

⁶ World Economic Forum, Quantifying the Impact of Climate Change on Human Health(2024) https://www3.weforum.org/docs/WEF_Quantifying_the_Impact_of_Climate_Change_on_Human_Health_2024.pdf

⁷ Anwar, A., Anwar, S., Ayub, M., Nawaz, F., Hyder, S., Khan, N., & Malik, I. (2019, December 1). *Climate Change and Infectious Diseases: Evidence from Highly Vulnerable Countries*. <https://pmc.ncbi.nlm.nih.gov/articles/PMC6974868/>

⁸ Tiya Foundation, Key Facts about Emissions leading to Climate Change and Environmental Issues, <https://tiyafoundation.com/Page/EmissionsAndClimateChange#:~:text=In%20contrast%2C%20most%20countries%20are%20contributors%20in%20a%20historical%20context>.

⁹ Akashi, H., Ishizuka, A., Lee, S., Irie, M., Oketani, H., & Akashi, R. (2019b). The role of the G20 economies in global health. *Global Health & Medicine*, 1(1), 11–15. <https://doi.org/10.35772/ghm.2019.01008>

between 1970 and 2021¹⁰. As the health impacts of climate change intensify, Global South countries must scale up adaptation policies to protect communities and economies from current and future crises. Locally-led adaptation—where communities shape and drive responses—is particularly crucial in building long-term resilience. However, despite their effectiveness, grassroots solutions are vastly underfunded due to the insufficient flow of climate finance.

The G20 nations collectively account for approximately 72% of global carbon dioxide emissions, a key driver of climate change. This positions them with a critical responsibility to lead global mitigation and adaptation efforts. Beyond reducing their emissions, G20 countries must support Global South countries in scaling up climate-adaptation strategies through financial and technical assistance. Addressing climate change requires a dual approach—mitigation and adaptation to build resilience.

The Brazil **G20 Health Ministerial Declaration recognised the need to integrate climate data into health policymaking, setting a precedent for future discussions**. It specifically emphasised the need for more climate-resilient, low-carbon, sustainable health systems to adapt to and mitigate the impact of climate change¹¹. Under South Africa's G20 presidency, guided by the theme "Solidarity, Equality, and Sustainability," there is a unique opportunity to prioritise interconnected actions on climate and health.

This policy brief urges the Environment, Climate, and Sustainability Working Group to take decisive action on climate and health. The group's priority on climate change and air quality represents a vital opportunity to integrate and amplify the priorities outlined in this policy paper.

3. Cross-sectoral Challenges

Building on this issue, thought leaders provided insights into the challenges they encounter and areas where improvements are needed. Key cross-sectoral challenges identified by thought leaders during the consultations included the need for **increased financing**, focusing on improving investment flows, fostering innovation and developing sustainable financing mechanisms. **Health workforce capacity was identified as a critical area of concern**, especially in many African countries, where limited capacity often relegates them to secondary recipients of international health funding, technical assistance and decision-making authority. Rather than being primary implementers of health initiatives, countries depend on partnerships with Western partners. This structural dependency was noted as a significant contributor to delays in addressing health challenges.

Thought leaders also stressed the importance of **including affected communities in research agenda-setting and policy development** to ensure local challenges and solutions are effectively integrated. Furthermore, **the lack of accessible, reliable data remains a major obstacle for teams working on these issues**.

Lastly, consultations highlighted the critical need for **greater collaboration among governments, policymakers and scientists**. The current tendency to work in silos hampers progress and weakens the

¹⁰ Viglione, G. (2023, June 22). *In-depth: How climate change affects health in Africa*. Carbon Brief. <https://www.carbonbrief.org/in-depth-how-climate-change-affects-health-in-africa/>

¹¹ FIND. (2024, November 1). *FIND intervention statement at the G20 High-level Meeting on climate change, health and equity - FIND*. <https://www.finddx.org/publications-and-statements/statement/find-intervention-statement-at-the-g20-high-level-meeting-on-climate-change-health-and-equity/#:~:text=30%20October%202024%2C%20Rio%20de%20Janeiro%2C%20Brazil&text=The%20Ministerial%20Declaration%20on%20Climate,translate%20this%20commitment%20into%20action.>

overall effectiveness of health initiatives. A more coordinated, inclusive approach is essential to address global health challenges. **Additionally, consultations pointed out the gap in synthesizing knowledge, with policymakers often struggling to translate technical research into actionable policies.** Universities could act as a third party to help have dynamic discussions between sectors.

Thought leaders also highlighted the importance of engaging the private sector by fostering partnerships and creating incentives for private investment. Such collaboration can accelerate the development and implementation of innovative solutions.

Thought leaders further underscored **that South Africa's G20 presidency should leverage the expertise of Africa CDC, encouraging it to convene and prioritise locally-driven solutions, as well as build on existing frameworks such as the WMO and WHO joint Climate and Health Programme.** Additionally, G20 discussions should encourage a dual approach that balances both mitigation and adaptation policies, ensuring that climate and health considerations are fully integrated into national strategies.

4. Climate and Health Consultation Recommendations

Based on this consultation, and reflecting South Africa's priorities for the G20 Environment, Climate, and Sustainability Working Group (ECWG), African thought leaders urge G20 leaders to take the following action:

Sub-Priority - Adaptation- Climate Resilient Development and Loss and Damage

- **Equity must be at the core of G20 countries' overall approach to addressing climate and health challenges**, recognizing that the most vulnerable groups—often in low- and middle-income countries—bear the greatest burden of climate-related health impacts despite contributing the least to global emissions. Equity also requires fostering global collaboration that amplifies the voices of affected communities in decision-making processes, ensuring that solutions are not imposed but co-developed. G20 leaders should prioritize climate finance mechanisms that support adaptation and resilience through the loss and damage fund, ensuring that funding reaches frontline communities and healthcare systems that are most at risk.
- **The Environment, Climate, and Sustainable Working Group should discuss climate-resilient health systems** through the healthcare workforce trained to respond to climate emergencies, infrastructure that can withstand extreme weather events, tools that can detect, prevent, test, and treat climate-sensitive diseases, robust supply chains, and early warning systems. G20 countries need to have Vulnerability and Adaptation Assessments to help identify the extent and magnitude of likely health risks due to climate change and suggest targeted priority policies and programmes to mitigate these risks.
- **To address the knowledge gaps, the ECSWG should help develop a framework for robust health information systems that integrate climate, health and environmental data to support decision-making.** Climate change requires that routine health data collection integrate data from other sectors to forecast and plan for disease outbreaks. Establishing data and knowledge-sharing platforms thus enabling different sectors to share information to inform planning, forecasting and procurement is a solution.

Sub-Priority - Air Quality

- **Thought leaders urge leaders to embed air pollution as a central component of national health policies.** In 2021 alone, toxic air is estimated to have caused 8.1 million premature deaths, making air pollution the second-leading risk factor for death worldwide¹².
- The ECSWG should encourage G20 member states to work towards meeting WHO Air Quality Guidelines (2021) and interim guidelines, reporting on progress to WHO. Action aimed at reducing air pollution presents a unique opportunity for a dual-benefit strategy- improving population health and resilience to both non-communicable and infectious diseases while reducing healthcare costs. **Air pollution is often referred to as Africa’s “silent killer”: It now causes more deaths in Africa each year than HIV/AIDS and Malaria combined. In 2019 alone, air pollution led to the loss of 2.3 million healthy life years across the continent due to illness and disability.**
- **Thought leaders recommend building low-carbon health systems** by prioritizing the adoption of sustainable energy solutions, such as solar power facilities, and transitioning to energy-efficient public transport systems like compressed natural gas buses, which directly improve health outcomes by reducing emissions.

Sub-Priority- Climate Finance and a just transition for all

- **The ECSWG should encourage members to embed health outcomes in NDCs and NAPs,** set ambitious 2035 emissions-reduction targets within national plans, and establish sustainable financing mechanisms that integrate climate resilience into national health budgets.
- **The ECSWG should push for more financing for climate and health initiatives. The G20 SA presidency needs to advocate for increased funding for climate change resilience in Africa-**including research and development and partnerships with the private sector. Health systems often struggle with insufficient financing to effectively prepare and respond to climate-related health challenges.

5. Annex 1: Participant Organizations

Africa CDC	Gawani Africa: Strategy	South Africa Healthcare Federation
Africa Health Care Federation (FOASPS)	Infectious Diseases Institute Makerere University	Stellenbosch University
African Coalition on Green Growth	International Climate Change Development Initiative Africa	Swiss Tropical and Public Health Institute
African Population and Health Research Center (APHRC)	JNC International	The Clean Air Fund

¹² Abraham, S., Melling, B., Parenti, C., Dilworth, E., Sloley, A., Tan, V., Climate Policy Initiative, Clean Air Fund, & Climate Policy Initiative. (n.d.). *The state of Global Air Quality Funding 2024*.
<https://s40026.pcdn.co/wp-content/uploads/State-of-Global-Air-Quality-Funding-2024-UPDATED.pdf>



African Sustainable Development Advisors	Liverpool School of Tropical Medicine	University of Cape Town (UCT)
BroadReach Healthcare	Malawi Human Rights Youth Network	University of Pretoria (UP)
Centre for Community and Youth Development in Malawi	Nigeria Health Watch	University of the Witwatersrand, Johannesburg
DNDI	PharmAccess	World Meteorological Organization
Ethiopian Public Health Institute	Prosperia	YADNET Africa
Eva Pharma	Science For Africa Foundation	Africa Research and Impact Network (ARIN)