



Climate Change and Health

Exploring the Global South's Leadership

Executive Summary

Climate change poses a significant threat to global health, marked by unpredictable weather events, heat waves, and diseases. The impact is disproportionately felt in the Global South, impacting vulnerable communities, due to underinvestment in indicators and limited evidence. This hinders economic growth and the health of working-age populations, making the recognition and solving for climate change implications on the health of populations non-negotiable.

There is however growing recognition of the core issues and a genuine interest in finding credible solutions to foster better mitigation and subsequent adaptation. The global impact of the pandemic underscored the urgency for collaborative action among countries, serving as a wake-up call to collectively address and find solutions. Countries in the developing world have moved swiftly on digital access and e-governance, ensuring that there is improvement in data availability that will potentially improve surveillance.

Existing Multilateral Action

- **The World Health Assembly** has been integral in addressing the impact of climate change on health. The forward-looking Global Strategy on Health, Environment, and Climate Change called for an integrated approach addressing upstream health determinants and it noted the lack of institutional mechanisms for broader climate change interactions.
- **The G20**, over its multiple iterations has recognised climate change as a growing concern, with the Indian Presidency for the first time explicitly prioritising the climate and health agenda in its health track discussions. The G20's pivotal role in directing multilateral agencies, influencing member nations, and adopting One Health principles, positions it as an important stage for channelling development finance, establishing institutional frameworks, and facilitating coordinated efforts between stakeholders in the realms of climate and health at the global level.
- **Recent COP discussions**, particularly COP26, elevated health considerations, which had historically not been a central topic at COP discussions. This has led to the establishment of the Alliance for Transformative Action on Climate Change and Health (ATACH), with stronger cooperation between the ATACH secretariat and WHO over the years. COP28 is set to give this crucial nexus an unprecedented level of attention, addressing the gaps and calling for integrated national climate/health strategies.
- **The BRICS** presidencies have been similarly nuancing their position on this subject, with the most recent Johannesburg II Declaration (2023) calling for multilateral cooperation for “mitigating and adapting to the impact of climate change, education, health, as well as pandemic prevention, preparedness and response.”

Leadership from the Global South

- Brazil, on the frontline of climate challenges, has set up a comprehensive national health and climate change plan, emphasising disease control and flood risk mitigation. With a commitment to prioritise climate change in health during its G20 Presidency, Brazil is positioned to contribute valuable interventions globally.
- South Africa, actively addressing climate change's health impacts through measures like the National Climate Change and Health Adaptation Plan, demonstrates international collaboration, exemplified by a recent agreement with the UK, showcasing its pivotal role in the global response to climate-health challenges.

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- The UAE, grappling with rising temperatures and air pollution, has shown commitment to climate-resilient health systems. Initiatives such as the national climate risk assessment, the UAE National Framework for Action on Climate Change and Health, and hosting the Global Institute for Disease Elimination position the UAE, as hosts of COP28, to play a significant role in addressing the health impacts of climate change on a global scale.
 - India, as a prominent global player, has demonstrated impactful leadership in areas such as climate advocacy over the years. India showcases considerable commitment to public health with the establishment of the National Institute for One Health and pioneering technological innovation it championed during its G20 Presidency, including the Global Initiative for Digital Health. These initiatives underscore India's dynamic and forward-thinking approach, positioning it to spearhead South-led scientific consortiums that can bridge interdisciplinary gaps and generate impactful insights to guide multilateral policy actions.

Potential Outcomes of Multilateral Action

Given the status of the climate and health nexus in these existing global forums, there is an opportunity for the Global South to achieve leadership and policy gains through making climate-health nexus a greater focus of the conversation at the multilateral level, especially with respect to:

- **Mobilising adaptation finance:** Enhancing climate negotiations by reinforcing the link between health risks and National Adaptation Plans to boost adaptation finance. Mobilising greater support from the international health community, especially for developing countries, to elevate health priorities and secure increased funding from diverse sources.
- **Expanding scope for multilateral health action:** Elevating global health research by promoting climate-health mainstreaming, focusing on upstream causes of health disparities in the Global South, and encouraging targeted investments from the private sector, development finance institutions, and philanthropies.
- **Democratising the actions and governance of multilateral organisations:** Integrate health effects into the 'just transition' framework, driving climate-health mainstreaming to reform institutional priorities, enhance the WHO's capacity in the Global South, and emphasise vital ecosystem protection and support.

Introduction:

The Time to Act is Now

Climate change is the biggest global health threat of the 21st century. The World Health Organization's latest statistics suggest that it could be the cause of 250,000 additional deaths per year from 2030 onwards, rising to over nine million deaths annually by the end of the century. Related issues, such as air pollution, already cause seven million or more deaths a year, most of them in low- or middle-income countries.

Health is and will be affected by the changing climate both directly and indirectly.

- Directly, the impact of climate change is being felt on human health and well-being through extreme weather effects (droughts and unusually heavy storms) as well as from greater exposure to heat stress, especially in heavily populated areas of the Global South.
- Deaths from heat stress are rising rapidly, with an increase of 50% in India over the last two decades, according to *The Lancet*. In Europe, scientists publishing in *Nature* predicted more than 68,000 premature deaths each summer by 2030, rising to almost 100,000 by 2040 – disproportionately among vulnerable sections of the population. Heat stress also causes direct economic losses thanks to lost work-hours, with *The Lancet* study saying that India suffered an economic loss of about 5.4% of its GDP as a consequence.
- Deaths from storms are also increasing in many parts of the world, and are occurring in areas previously considered safe: before this year's tropical cyclone that killed over a hundred people, Maui had not had a hurricane for a century.
- The indirect effects of climate change on health can be even more far-reaching. They can operate through both the degradation of ecosystems and through broader societal effects. Vector-borne diseases spread to new and unprepared parts of the world as their climate becomes more hospitable to both the pathogen and the vector. A 2019 academic study found that disease-carrying mosquitoes may reach a billion more people in 2050 than they do today.
- Airways diseases are of course impacted by air pollution, but rising sea levels also change the humidity level in populated areas, and increase the incidence of respiratory diseases. Wet-bulb temperatures could exceed the physiological limit of 35 degrees Celsius across large parts of South and West Asia by 2050.
- Water-borne infections, including those of the digestive tract, as well as zoonotic diseases may re-emerge in certain areas. Increases in flooding and unexpected rainfall have been found to precede about half the recorded outbreaks of water-borne diseases between 1910 and 2010.
- The food and water insecurity caused by climate change will not just exacerbate existing undernutrition problems, but also render populations more vulnerable to the spread of disease.
- Finally, societal effects of climate change might have catastrophic effects. At least 200 million people may be compelled to migrate due to climate change by 2050, according to the UN International Organization for Migration. The forced displacement of large numbers of people



and consequent population-level mental health challenges have been specifically noted in the G20 India issue note.

- These intersections of climate change and health outcomes have been extensively noted in the scientific literature. The 2022 IPCC Report highlighted the interdependence of climate, ecosystems, biodiversity and human societies.

Some national governments, as discussed below, have explicitly set out to frame programmes that address the linkages between these two policy domains. Thus this note does not seek to repeat the considerable evidence for these intersections in detail. It will instead focus on the potential for such policies at a multilateral level, and identify possible paths forward.

Given that the direct links between human health and climate change are now broadly understood, why has multilateral policy been slow to respond? The standard arguments apply: a lack of political will; a shortage of state capacity; too few resources. But these are true of all multilateral efforts, especially the climate change mitigation and adaptation spaces.

There have been problems specific to the climate/health nexus that have had the effect of additionally inhibiting policy action over and above the standard reasons. This paper argues that this is an appropriate time to address these problems at the multilateral level.

Addressing Inequity, Enabling Action

One major inhibiting factor has been that the health risks of climate change are (and will continue to be) distributed inequitably. Certain populations and regions are disproportionately vulnerable. The World Bank predicts that, by 2030, climate-driven health impacts will be responsible for more people – 44 million – being pushed into extreme poverty than any other effect. More than half of these will be in sub-Saharan Africa and South Asia.

Any multilateral response to the climate/health problem must therefore centre the problems, efforts, and leadership of the Global South. However, until now, arranging for proper participation or representation from the development world along each of these axes has been difficult.

Problems

- The nature of the climate/health nexus can only be described properly once the data and analysis of the specific problems in vulnerable geographies exists.
- In the absence of an inclusive and comprehensive evidence base, it is futile to prescribe evidence-based policy.
- Until recently, the current climate/health analysis was biased towards the data-rich countries of the Global North. Addressing this gap has now become a priority.
- Although incomplete, efforts such as those made by the InterAcademy Partnership (a global network of science, engineering & medical academies that provide independent expert advice on scientific, technological & health issues) can serve as a basis for a more comprehensive and inclusive taxonomy of problems to be addressed.
- Data on the interactions of climate change and health should be widely available, strategically gathered and presented, and integrated across geographies.



Efforts

- While many countries explicitly include health outcomes in the Nationally Determined Contributions (NDCs) they submit as part of the Paris Agreement on Climate Change, proposed interventions have often been misaligned, both with broader climate policy and with regional ambition and similar policies elsewhere.
- Extending this ambition was constrained in most cases by the fact that public health policy goals, evidence collection, and outcome analysis in developing countries were all internally focused.
- The pandemic was for many countries in the emerging world a major spur towards further integrating their public health establishments with regional and global institutions and increasing their use and sharing of data. This went hand-in-hand with a fresh appreciation of the importance of self-reliance in the countries of the Global South when responding to a worldwide threat.
- Countries in the developing world have moved swiftly on digital access and e-governance. Further innovations in science, in the fields of biotechnology, vaccine development, digital health and data and technology in general can now be disseminated swiftly through the health and climate establishments of developing nations.
- Such technologies enable better measurement of the health impacts of climate change and developing mechanisms to address them. There should be an effort to leverage tools such as to help tackle critical challenges at the intersection of climate change and health.
- Pandemic-era collaborative momentum should be taken forward in the post pandemic period. Mainstreaming the climate/health conversation in domestic and multilateral policy making would be important to add to that momentum.

Leadership

- The G20 is going through an unprecedented turn towards the developing world. Indonesia, India, Brazil and South Africa will successively hold the grouping's presidency. This year's Conference of Parties under the UNFCCC will be held in the United Arab Emirates, and thus feature enhanced Global South participation.
- The opportunity thus for a South-led agenda on climate/health that allows for the mutual integration of climate and health priorities into hitherto distinct multilateral conversations should not be missed.

Existing Multilateral Action: A Basis for Action

The interaction between climate change and health outcomes, while under-conceptualised at the multilateral level, has nevertheless been the subject of some discussion. In order to fruitfully recommend Global South-led action at the multilateral level, it is necessary to understand what existing activities could be built on or enhanced.

World Health Assembly

The World Health Assembly has long discussed the climate/health interaction, but in recent years has laid out an argument for an integrated approach to environmental shifts and health policy.

- The World Health Assembly has been aware of the links between environmental changes and health outcomes since at least the 1990s. Its 48th session raised concerns about environmental changes and their connection to new infectious diseases.
- However, it was during the 51st Assembly in 1998 that the comprehensive discussion of health and climate change commenced with Resolution WHA51.29, focusing on “Protection of Human Health from Climate Change and Stratospheric Ozone Depletion.”
- The 61st Assembly in 2008 marked a significant milestone with Resolution WHA61.19, which remains a key framework for global discussions on climate change’s impact on human health. The resolution outlined a set of priorities aimed at strengthening global health systems to effectively address the gradual and sudden shocks caused by the direct or indirect effects of climate change, including ‘Developing Health Measures for Climate Change Adaptation’ and ‘Strengthening Health Measures’.
- The 72nd session resulted in an agreement on a Global Strategy on Health, Environment, and Climate Change, offering a roadmap to address these issues until 2030.



World Health Assembly: Charting the course for global climate-health resilience.

- The Global Strategy, for the first time, quantified the mortality costs of “known avoidable environmental risks”, which it estimated accounted for a quarter of deaths and disease burden worldwide, or 13 million deaths a year. Of those, seven million preventable deaths were due to air pollution.
- The Global Strategy also argued that existing health policy was flawed. Approaches focusing on the treatment of individual diseases “rather than reducing the adverse impact of determinants of health” would be insufficient.
- It also argued that health outcomes were being determined “by policies in key sectors other than health” and thus an integrated approach that addressed “the upstream determinants of health” was essential.
- The Strategy noted, finally, that while the IPCC synthesises and tracks research and action on climate change and health, similar institutional mechanisms for the broader interaction between climate change are missing.

Multilateral engagement on health at the ministerial level, and through the WHA and related frameworks, has clearly coalesced around the understanding that health outcomes are increasingly co-determined by environment-related policies, whether they affect biodiversity, urbanisation, or carbon mitigation/adaptation.

The Conference of Parties

Historically, climate-related health issues were not a central topic at COP discussions until recently. However, there has been a steady increase in interest and traction for the subject, culminating at COP26 in the development of the Alliance for Transformative Action on Climate Change and Health (ATACH), led by the WHO. COP28 likely to give the issue an unprecedented level of prominence. However, health impacts of climate change have not traditionally been a negotiating issue by national Parties at the COP.

- The human right to health was acknowledged in the 2015 Paris Agreement and expanded upon in the COP27 cover decision of 2022, which recognised the right to a clean, healthy, and sustainable environment and “the right to the highest attainable standard of physical and mental health”.
- At COP26, the World Health Organization hosted its WHO Pavilion, marking the first-ever dedicated space for health and climate programming during the event. COP27 saw human health — and, especially, mental health — receive increased coverage.
- The COP26 Health Programme was initiated and ATACH emerged to support COP26 health commitments. As part of the COP26 Health Programme, more than 70 nations have already committed to climate-resilient, low-carbon, and environmentally sustainable health systems, at the minister of health level.
- ATACH has also listed out a set of recommendations for the secretariat (WHO) and member states, which includes points like ‘Update the estimate for the current global burden of disease mortality attributable to climate change’; ‘Develop national climate change and health strategies’; ‘Identify priorities for action and where investment and support is needed to maximise health protection and benefits’.
- The climate-health nexus is expected to gain further political traction at COP28, with the first-ever health day and climate-health ministerial being organised.

The past three COPs have energised the climate/health discussion, and cooperation with the WHO as the ATACH secretariat has increased. Gaps exist, however, in the creation and integration of national climate/health strategies, and the collection and use of data to track the problem. The traditional multilateral climate establishment has been less committed to an understanding of the co-determination of climate and health outcomes than the multilateral health establishment.

The Group of 20

Across various Presidencies, the approach to climate change and health has shifted and adapted in response to the escalating effects of climate change and the emergence of global health crises. Since the pandemic, the One Health approach has become an important part of the G20's recommendations.

- The 2015 Turkey Communique recognised climate change as a critical challenge and set the stage for discussions on its cross-sectoral impact. In 2016, the China Presidency emphasised how health threats, like infectious diseases, can affect multiple sectors and hinder sustainable development.
- The 2017 German Presidency established the G20 Health Working Group, highlighting the interconnectedness of health, environmental protection, and poverty reduction.
- Italy's 2021 Presidency prioritised pandemic prevention and a One Health approach in addressing climate change. The Health Ministers' declaration said G20 action would come through "leveraging and relying upon the technical leadership and coordinating role of the WHO, FAO, OIE and UNEP".
- In 2023, the Indian Presidency, for the first time, explicitly prioritised the climate and health agenda in its Health Track discussions. The Health Ministers' Meeting Outcome Document and Chair's Summary acknowledged that "climate change will persistently precipitate health crises, giving rise to infectious diseases and recurring natural disasters which pose a serious threat to healthcare systems and vital health services.
- The Leader's Declaration resolved to "enhance the resilience of health systems and support development of climate resilient and low-carbon health systems in collaboration with MDBs and support the work of [ATACH]". The Brazil Presidency has indicated that it will prioritise Climate Change and Health in its Health Working Group action plan, continuing the efforts of the India Presidency.
- Alongside the G20, the Asian Development Bank announced that they would set up a climate and health hub, which would facilitate knowledge sharing, promote partnerships and innovations, and support countries beyond the G20, especially developing countries, to address the challenges stemming from the impact of climate change on health.

The G20 plays a crucial role in directing the activities of multilateral agencies, in which members of the grouping play critical roles. Action at the multilateral level will have to build upon the G20's adoption of One Health principles. The G20 is an essential stage for directing development finance to support policy action in this sphere, for creating any new institutional framework or structures, and for sustained coordination between stakeholders in the climate and health fields at the multilateral level.

BRICS

The BRICS grouping has been freshly enlarged in 2022, and will now include countries such as the United Arab Emirates, which is to host COP28. BRICS has had problems with internal coordination in the past, but is an important forum from the point of view of collating and amplifying Global South perspectives on regulatory and global public goods issues. Climate/health has generally not figured as a key health priority in BRICS declarations, but larger inferences to it can be made in terms of pandemic preparedness and stopping the transmission of infectious diseases.

- The Johannesburg II Declaration of the recently held 15th BRICS summit in 2023 called on multilateral cooperation for “mitigating and adapting to the impact of climate change, education, health, as well as pandemic prevention, preparedness and response”.
- The BRICS Foreign Ministers’ statement on the sidelines of the recently concluded 78th session of the UNGA acknowledged the “increasing relevance of the interface between sustainable development and global health issues”.
- The Beijing Declaration of the 14th BRICS Summit, 2022, saw more of a focus on pandemic response, and it stressed on being better prepared for future public health emergencies, and urged BRICS countries to take proactive and effective measures to prevent and reduce the risk of cross-border transmission of infectious diseases and contribute to improving global health”. The BRICS Vaccine R&D Centre was set up, which serves as a platform for mutual collaboration to accelerate the development of vaccines of public health importance.

BRICS is an under-utilised location for action on the climate/health interaction. BRICS leaders in the past have been particularly willing to create and support South-led centres for shared research and policy harmonisation. This creates an additional opportunity at the multilateral level for mainstreaming the climate/health discourse.

Effective Action from the Global South

An integrated global outlook on health policies that centres the health effects of climate change must be built upon the understanding that climate change will have varying impacts on different countries and populations, most of which will be felt in the Global South.

The next G20 troika will consist of India, Brazil, and South Africa. The UAE is the host of COP28, a new BRICS member, and enormously influential in these conversations and in its geography. We examine their domestic policies and priorities in the climate/health space and what this implies for their broader leadership at the multilateral level going forward.

Brazil

Brazil is on the frontlines of the battle against climate change and is particularly subject to climate extremes. Due to its tropical location, Brazil suffers from a high incidence of climate sensitive infectious diseases. Rising temperatures are of increasing concern, especially for vulnerable groups such as children and the elderly. Under high emissions scenarios, heat-related deaths for the elderly are expected to increase to approximately 72 deaths per 100,000 by the 2080s, from 1 death per 100,000 annually currently. In response to these challenges, in 2016, Brazil launched its national health and climate change plan, an initiative that remains ongoing. This comprehensive strategy involves the endorsement of a national health adaptation plan, actively addressing climate change's impact on public health.

Key initiatives focus on disease vector control and mitigating flood-related risks. Brazil has also conducted national assessments of climate change effects on health and implemented a specific health-focused National Adaptation Plan (NAP), designating the Ministry of Health's Secretariat for Health Surveillance as the coordinating authority for health-related NAP efforts. Brazil, like India, has a vast portfolio of interventions in the health and adaptation spheres that can, once they are the subject of targeted research, inform public policy globally. Brazil's Minister of Health Nísia Trindade affirmed the country's plans to make climate change as one of the four priority areas in health during their G20 Presidency, ensuring continuity of engagement on this nexus at the global level.



Brazil prioritizes community well-being amid climate-health challenges.

South Africa

Climate change is a pressing concern for South Africa due to its anticipated health impacts, including increasing heat stress, changes in the range and distribution of vector-borne diseases, air pollution, and water-borne diseases. River flooding, a common occurrence, brings indirect health risks such as infectious disease outbreaks and vector distribution, with projections indicating that by the 2030s, an additional 8,500 people annually may face river flood-related risks due to climate and socioeconomic changes.

South Africa's high inequality rates, represented by a Gini coefficient exceeding 0.6, make a significant portion of its population exceptionally vulnerable to the multifaceted impacts of climate change, including those affecting health. To address these climate change concerns, South Africa has been taking proactive measures. The National Climate Change and Health Adaptation Plan (2014–2019) laid out a foundational framework for the health sector to adapt to climate change. South Africa's health sector demonstrated excellence during the pandemic, particularly regarding surveillance and research – this can be brought to bear on examining the effects of climate change on regional health outcomes. South Africa has recently also forged an agreement with the UK, solidifying their commitment to collaborate in the health sector. This partnership aims to jointly combat pandemics, develop medicines, and fortify health systems against the adverse effects of climate change, which further exemplifies the importance being accorded to the climate health nexus in international discussions.



Heightened health threats loom in South Africa amidst climate-linked floods



Empowering vulnerable communities for a healthier future.



UAE

The UAE faces significant concerns related to climate change due to its predominantly hot and arid climate, with potential impacts including extreme heat incidences, rise in sea levels, water stress, among others. Even small variations in weather patterns could impact the country's economic, environmental, and social status. Climate change is expected to elevate mean annual temperatures and intensify heat waves, leading to a higher incidence of heat-related medical conditions among the population. Additionally, factors driving climate change, such as inefficient and polluting energy sources and transportation, contribute to air pollution in the UAE. According to the WHO, UAE cities reported annual mean particulate matter (PM) levels above recommended values in 2017. Natural dust is a significant contributor to high PM levels, resulting in over 1400 deaths from ambient air pollution in the UAE in 2016.

The UAE has demonstrated commitment to the creation of climate-resilient health systems and minimising the impact of climate change on public health action. In 2019, the UAE undertook a national climate risk assessment for the health sector. In the same year, it launched the UAE National Framework for Action on Climate Change and Health 2019-2021 in partnership with WHO. This set UAE's strategic plans to address public health challenges posed by climate change. The Global Institute for Disease Elimination, hosted in Abu Dhabi, serves as a centre for research and analysis of the climate-health nexus. UAE President HE Sheikh Mohamed bin Zayed Al Nahyan's personal philanthropy has also focused on a portfolio of global health programs, including efforts to ensure climate change does not hamper disease elimination efforts. As hosts of COP28, the country will also host the first Health Day and climate-health ministerial.



UAE's climate commitments: Prioritising climate-resilience and public health

India

India has been making significant strides as a key player in the global arena, particularly in its role as a large emerging economy and a distinguished member of multilateral architecture. This position has allowed India to amplify development-focused narratives and address the concerns of the Global South effectively.

In the area of Knowledge Dissemination, India's establishment of the National Institute for One Health in Nagpur, under the Office of the Principal Scientific Advisor is a notable achievement. While its current focus on zoonotic diseases is timely and relevant, India is poised to broaden its scope of research. Working in tandem with initiatives like the Asian Development Bank's Climate and Health Hub, India's Institute for One Health will be a critical lever in the larger global network, enhancing the understanding of the interplay between health and the environment.

Regarding Science and Technology, India's leadership in technological innovation, e-governance, and digital platforms is commendable. Its strong, competitive, and development-focused scientific community has been instrumental in creating effective digital health solutions, thereby enhancing public health outcomes. India's G20 Presidency and the outcomes it championed, including the Global Initiative for Digital Health, highlights its capacity to lead in establishing the technological and institutional frameworks necessary for comprehensive data collection, sharing, and evidence-based interventions. India's extensive scientific expertise, particularly in health sciences, positions it well to spearhead South-led scientific consortiums that can bridge interdisciplinary gaps and generate impactful insights to guide multilateral policy actions.



India's leadership will help drive the climate/health discourse forward globally

India's journey reflects its dynamic and forward-thinking approach, highlighting its potential to drive further positive change on the global stage.

The Potential Outcomes of Multilateral Action

What could be the productive near-term targets for South-led multilateral action in the climate/health space? How will mainstreaming climate/health help Global South nations in particular?

As described above, the interactions between climate action and health outcomes have become part of the conversation in a limited way. For the Global South, the costs of inaction may be even greater than the benefits of action listed above. The opportunity cost of the absence or abstention of large developing economies in particular from the climate/health discussion is considerable. These are precisely the countries that are, at this very moment, putting into place health systems that will cover a large proportion of the world's population that is most susceptible to climate change. The evidence base for their policies in this field is far too restricted, limited by silos and dominated by the concerns of the developed world.

This national effort will need to be reinforced and amplified by supportive global institutions that properly reflect the South's priorities. A narrow focus on, say, pandemic prevention, must give way to a broader view that incorporates specific developing-country issues such as health stress, water stress, and respiratory diseases. The question is who can work to coalesce disparate efforts in a manner that provides clear and demonstrable value by 2030.

The One Health approach has received particular attention from the India Presidency of the G20 and several of its partners. India's commitment to multilateralism underlines its ability to provide sustained leadership. Such sustained leadership would create an opportunity for mainstreaming climate/health across India's international partnerships, both global and regional, as well as advancing coordination domestically between various agencies, ministries and levels of government that are relevant to this effort.

We focus here on the leadership and policy gains to be achieved for the Global South through making climate/health nexus a greater focus of the conversation at the multilateral level.



Unlocking Global South resilience: Prioritising climate health nexus within the G20

Mobilising adaptation finance

In recent years, the focus of climate negotiations has shifted from a sole focus on emissions mitigation to questions of adaptation to existing climate change. Recent COPs have also introduced the question of compensation for the “loss and damage” suffered by smaller and poorer nations as a consequence of climate change. National Adaptation Plans, where they have been produced, often fail to link their actual assessments of health risks and the adaptation requirements. This means that interest in adaptation finance, including from the private sector, has been low. Health is in any case under-prioritised within climate adaptation finance; by some estimates, only 0.3% (\$14 million) of multilateral climate change adaptation funding was directed specifically at the healthcare sector from 2018-2020. The international health community being more supportive of the formulation of such plans, especially for developing nations, will help make the case for increasing adaptation finance from multilateral, bilateral, and private sources.

Creating new spaces for scientific and technological collaboration

Legacy platforms for the interaction of scientists and tech experts in this field are largely dominated by the Global North and are focused around issues defined in the 20th century. Research on low-income countries is, in particular, minimal: a study in *The Lancet Planetary Health* found that 80% of nearly 16,000 studies on climate and health were about high-income countries and China (alongside some other upper-middle income countries). More forward-looking mechanisms for South-led partnerships in climate/health are necessary. The CLIMADE consortium, based out of CERI in South Africa and FOC in Brazil, brings together public health professionals and scientists, but has a narrower focus on climate-amplified epidemics and genomic sequencing of pathogens. Similar platforms, with a broader focus on public health and climate, can be energised.

Clarifying the “Loss and Damage” conversation

Demands for Loss and Damage (L&D) financing, meanwhile, are hard to pin down. One major question is whether absorptive capacity for such financing exists in many recipient states. Linking L&D concretely to the rising costs of health as a consequence of climate change allows for this question to be overcome, as the expansion of health capacity in a developing country to meet the additional costs imposed on it by climate change is a more easily comprehensible and quantifiable target. Health organisations operating in the Global South should be able to provide evidence about health-related L&D that is relevant to the Warsaw Mechanism on Loss and Damage, the UNFCCC’s Santiago Network, and whatever additional mechanism for L&D financing emerges from COP29.

A new arena for mobilisation around climate action

A case for the urgency of climate action can be more effectively made, both internationally and within domestic politics, if public policy is seen as clearly linking it to negative health consequences suffered by individuals and communities. Action on air pollution in some developing countries has sought to make this link, but there are positive benefits to expanding that discourse to other frames correlated with or part of climate change. One area of potential action that could clearly link climate-driven shifts in disease patterns to the actual health outcomes and experience of communities is wastewater surveillance. This is cost-effective and scalable, and will create new possibilities for local political mobilisation around climate and health. Global South nations, on the frontline of bearing both the direct and indirect costs of climate change, will benefit from this enhanced messaging.

Reframing the cost-benefit analysis around mitigation

Health costs, both to the public exchequer and out-of-pocket payments by households, represent major calls on the financial resources in the Global South and can hold back the emergence of individuals or entire communities from poverty. The WHO has estimated that the cost of direct damage to health from climate change may be between \$2 and 4 billion annually by 2030. But an explicit, localised and quantifiable cost attached to the health implications of climate change would further indicate the economic benefits of quicker climate action.

Expanding the scope of multilateral health action

Global health research has received increased investment in the post-pandemic era, but cooperation is excessively limited. It continues to focus essentially on diagnosis, genetics, and treatments, often of single diseases. Climate/health mainstreaming will assist in raising the profile of upstream causes of health outcomes — especially those that disproportionately affect Global South countries — as a target for such investment from the private sector, development finance institutions, and philanthropies.

Creating an integrated evidence base

Making an investment case for climate action, identifying the correct targets for policy and finance, and ensuring climate justice all require evidence-based policy. Using a One Health approach is essential, but metrics for such an approach are currently limited, and do not integrate evidence from other domains such as water/sanitation or biodiversity. Creating an integrated evidence base that incorporates such variables as the movement of people, wastewater surveillance, and exposure to pathogens can also be enabled through the more effective use of technological solutions. Privacy-compatible open platforms are being pioneered by several Global South nations, especially India's Digital Public Infrastructure system.

Creating an economic rationale for action

Within developing countries, the economic costs of delaying a climate/health agenda — whether overall, in terms of lost growth and workforce debility, or to the national exchequer, through higher public health spending — will create additional stakeholders for climate action. Finance ministries globally seek a clear and evidence-based understanding of the costs of inaction. The World Bank, together with IISD, launched in 2023 a framework for the economic valuation of the health impacts of climate change. Supporting country- and city-specific applications of this valuation framework will allow policymakers to make more informed decisions.

Increasing the interaction of public health establishments in developing countries

Mainstreaming climate/health into the multilateral conversation would allow for the links partially forged between these establishments in the pandemic era to be extended. Learning across borders is crucial. Templates for successful interaction include the Joint Learning Network for Universal Health Coverage and the UHC2023 platform, both of which highlight the usefulness of peer learning and a multi-stakeholder approach. A portfolio of successful interventions that have taken into account the specific requirements and constraints of the Global South and are led by large developing nations, including the next G20 troika, is an essential first step.

Increasing regional and sub-national capacity for climate/health action

State capacity in the Global South is usually a binding constraint. Subnational governments have a major role to play in the identification and management of complex risks, but typically are unable to do so. The presence of a multilateral framework for such complex climate/health risks will allow such capacity-constrained entities to access expertise from across both the climate and the health domains.

Broadening the notion of climate justice

Efforts are ongoing to ensure a 'just transition' in the climate space that identifies those disproportionately impacted by the transition. Including the health effects of climate change and climate action in this framework will enable greater emphasis on the protection and support of vital ecosystems and other channels of importance to the Global South.

Broaden implementation of the One Health Joint Plan of Action

Current commitments focus on such matters as antimicrobial resistance. Global South leadership can and should expand the One Health agenda to the environmental dimensions described in the Plan of Action.

Democratising the actions and governance of multilateral organisations

For many Global South countries, this is an end in and of itself. Reform of the priorities and policies of several institutions can be achieved by mainstreaming climate/health. For the WHO, for example, it will help the Global South to advocate for reforms that enhance its capacity to respond to climate-related health challenges by bolstering data collection and research capabilities and coordination mechanisms to ensure timely and effective responses to emerging health threats linked to climate change.

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References

1. https://apps.who.int/gb/ebwha/pdf_files/WHA61-REC1/A61_Rec1-part2-en.pdf
2. <https://iris.who.int/bitstream/handle/10665/258896/WHA51-1998-REC-1-eng.pdf;jsessionid=3D957E9AEDEA8BFDD756B04A5C96BC02?sequence=1>
3. https://apps.who.int/gb/ebwha/pdf_files/WHA72/A72_15-en.pdf
4. https://climateandhealthalliance.org/wp-content/uploads/2023/05/April-2023_A-WHA-Resolution-on-Climate-Change-and-Health.docx.pdf
5. <https://www.cop28.com/en/news/2023/09/health-center-of-climate-discussion>
6. <https://brics2023.gov.za/wp-content/uploads/2023/08/Jhb-II-Declaration-24-August-2023-1.pdf>
7. https://www.fmprc.gov.cn/eng/wjdt_665385/2649_665393/202206/t20220623_10709037.html
8. <https://pib.gov.in/PressReleasePage.aspx?PRID=1808277>
9. https://www.g20.org/content/dam/gtwenty/gtwenty_new/document/G20-New-Delhi-Leaders-Declaration.pdf
10. <http://www.g20.utoronto.ca/2015/151116-communicue.html>
11. https://www.b20germany.org/fileadmin/user_upload/G20_Action_Plan_on_the_2030_Agenda_for_Sustainable_Development.pdf
12. <https://static.pib.gov.in/WriteReadData/specificdocs/documents/2023/jan/doc2023130155801.pdf>
13. <http://www.g20.utoronto.ca/2017/2017-g20-climate-and-energy.html#:~:text=Our%20action%20will%20be%20guided,global%20average%20temperature%20to%20well>
14. https://www.g20.org/content/dam/gtwenty/gtwenty_new/document/G20_HMM_Outcome_Document_and_Chair_Summary.pdf
15. <https://www.mef.gov.it/en/inevidenza/The-G20-established-a-joint-Finance-Health-Task-Force-to-strengthen-pandemic-prevention-preparedness-and-response/>
16. <http://www.g20.utoronto.ca/2021/210906-health.html#:~:text=We%2C%20the%20G20%20Health%20Ministers,global%20health%20risks%20and%20emergencies>
17. <https://onlinelibrary.wiley.com/doi/full/10.1002/puh2.62>
18. https://climateknowledgeportal.worldbank.org/sites/default/files/2021-07/15915-WB_Brazil%20Country%20Profile-WEB.pdf
19. <https://www.who.int/publications/i/item/9789240023604>

20. <https://noharm.medium.com/g20-prioritizes-climate-and-health-action-41bf2458ea60>
21. <https://www.thenationalnews.com/world/uk-news/2022/11/23/uk-and-south-africa-to-collaborate-in-tackling-pandemics-and-climate-change/>
22. https://climateknowledgeportal.worldbank.org/sites/default/files/country-profiles/15932-WB_South%20Africa%20Country%20Profile-WEB.pdf
23. <https://www.scienceopen.com/hosted-document?doi=10.18772/26180197.2022.v4n3a12>
24. <https://iris.who.int/bitstream/handle/10665/330008/WHO-CED-PHE-EPE-19.3.2-eng.pdf?sequence=1>
25. <https://mohap.gov.ae/en/media-center/news/29/10/2021/uae-reiterates-commitment-to-developing-climate-resilient-health-sector>
26. <https://www.wallstreet-online.de/nachricht/17345157-cop28-uae-president-designate-commits-to-put-health-at-the-center-of-climate-discussions>
27. <https://u.ae/en/about-the-uae/strategies-initiatives-and-awards/strategies-plans-and-visions/environment-and-energy/national-climate-change-plan-of-the-uae#:~:text=The%20primary%20objectives%20of%20the,diversification%20agenda%20through%20innovative%20solutions>
28. https://www.mea.gov.in/bilateral-documents.htm?dtl/36812/IndiaUAE_Joint_Statement_on_Climate_Change
29. <https://mailchi.mp/presidency.gov.za/from-the-desk-of-the-president-monday-11-october-2021>
30. <https://fortune.com/2023/10/19/climate-change-health-crisis-nvestments-threats-health-environment-kerry-hudson/>
31. [India heatwave: High temperatures killing more Indians now, Lancet study finds - BBC News](#)
32. [Heat-related mortality in Europe during the summer of 2022 | Nature Medicine](#)
33. [Public Health Scientists Chart the Destructive Power of Hurricanes | Columbia University Mailman School of Public Health](#)
34. [Global expansion and redistribution of Aedes-borne virus transmission risk with climate change | PLOS Neglected Tropical Diseases](#)
35. [Health and Climate Change \(worldbank.org\)](#)
36. [Systematic mapping of global research on climate and health: a machine learning review - The Lancet Planetary Health](#)
37. [Extreme water-related weather events and waterborne disease | Epidemiology & Infection | Cambridge Core](#)
38. <https://iris.who.int/bitstream/handle/10665/367385/9789240057906-eng.pdf?sequence=1>

