

Task Force 02

## SUSTAINABLE CLIMATE ACTION AND INCLUSIVE JUST ENERGY TRANSITIONS

# G20 Strategic Observatory on Climate, Health, and Equity

**Luiz A.C. Galvão**, Senior Researcher, International Relations and Global Health Center/Fiocruz (Brazil)

**Carla Vizzotti**, Directora del Hub de Innovacion en Politicas de Salud y Equidad de la UNSAM (Universidad Nacional de San Martin) (Argentina)

**Dinesh Arora**, Principal Health Specialist, Asian Development Bank (Philippines)

**Mario Moreira**, President, Fiocruz (Brazil)

**Mauricio L. Barreto**, Senior Researcher, Center for Data and Knowledge Integration for Health/Fiocruz (Brazil)

**Danielly Magalhães**, Researcher, International Relations and Global Health Center/Fiocruz (Brazil)

**Pablo Ivan Pereira Ramos**, Researcher, Center for Data and Knowledge Integration for Health/Fiocruz (Brazil)



## TF02

## Abstract

The policy brief titled “G20 Strategic Observatory on Climate, Health, and Equity” emphasizes the urgent need for G20 efforts to address the intersecting issues of climate change, health, and equity. It begins by diagnosing the problem and highlighting how climate change exacerbates health inequities, particularly affecting vulnerable populations and low-income countries. The brief underscores the economic, social, and health impacts of climate change, including extreme weather events and loss of productivity. The document proposes establishing a Global Climate and Health Equity Observatory to monitor, analyze, and advocate for policy actions addressing climate-related health issues and equity. It outlines the observatory’s objectives, structure, and governance, emphasizing the importance of comprehensive monitoring, policy analysis, data-driven advocacy, knowledge sharing, and promoting transparency and accountability. The brief presents scenarios outlining potential outcomes of the observatory’s efforts, including proactive policy and action, improved equity and access, and innovation and collaboration. It also discusses strategies to overcome challenges such as limited resources and low public engagement, emphasizing the importance of actionable data, partnerships, equitable solutions, innovation, and effective communication. Overall, the policy brief stresses the critical role of the G20 in advancing the climate, health, and equity agenda and underscores the importance of addressing these interconnected challenges for a healthier and more equitable future globally.

**Keywords:** Climate change, Health, Equity, G20, Vulnerable populations, Global health inequities, Inequality, Climate and Health Initiative (CHI), Strategic Observatory, Governance.

## Diagnosis of the issue

Climate change represents a crisis with severe health impacts and consequential economic effects. Its global impact is anticipated to be disproportionately felt, with the world's poorest likely to suffer the most. This is particularly unjust as their emissions have contributed the least to the problem. On average, people in high-income countries emit over 30 times more than those in low-income countries (Ritchie 2023). As with other health crises, such as the COVID-19 pandemic, the burden and recovery of health are determined by existing social and racial discrimination, leading to well-documented increases in global health inequities (Mheidly et al. 2022).

Climate change has serious economic implications and impacts public health. The recent floods in Rio Grande do Sul caused widespread damage, estimated at \$29 billion. In the US, extreme weather events are projected to cost trillions of dollars, with over \$165 billion in damage in 2023 alone.

Climate change affects our wallets and is expected to disproportionately impact the world's poorest people. Just like with health crises like COVID-19, existing social and racial discrimination will determine the burden and recovery of health, leading to documented global health disparities (Ritchie 2023). Existing social and racial discrimination exacerbate global health disparities during health crises like the COVID-19 pandemic (Mheidly et al. 2022).

The pandemic exposed political, economic, and governance cracks, including public health, international cooperation, monetary flexibility, and government effectiveness. These issues stem from underlying problems such as inequitable healthcare systems,

demographic risks, economic strength against shocks, and global coordination (The Lancet 2024).

The recent health crisis continues to impact approximately 435 million workers, with concerns about the job market persisting (ILO) (International 2023). Among G20 nations, only China, Russia, and Mexico saw real salary growth in 2023, while the rest experienced decreases. Brazil, Italy, and Indonesia saw the largest drops. Additionally, only China and Russia saw notable productivity growth, with the added challenge of climate change complicating the situation.

Extreme weather events intensified by climate change, such as heat exposure, are diminishing labor capacity, particularly impacting countries with low and medium Human Development Index (HDI), resulting in substantial income losses equivalent to 6.1% and 3.8% of their gross domestic product in 2022 (Romanello et al. 2023). A significant portion of these losses, 40% in agriculture and 31% in construction, and exacerbates the plight of agricultural workers in low and medium HDI countries, often among the most impoverished globally.

The Intergovernmental Panel on Climate Change (IPCC) reported that the number of deaths caused by floods, droughts, and storms is much higher in regions with high vulnerability than those with low vulnerability. This demonstrates regionals' different starting points for developing climate-resilient infrastructure. The Lancet Countdown reported that heat-related mortality resulted in a loss of \$164 billion between 2018 and 2022. During this period, there was a 131% increase in the number of deaths in low HDI countries, compared to a 61% increase in very high HDI countries, when compared to the period from 2000 to 2004. Over the past decade, regions and countries ranked as very highly vulnerable, such as Mozambique, Somalia, Nigeria, Afghanistan, and Haiti, have

reported an average mortality rate 15 times higher than regions and countries ranked as very low vulnerable, such as the UK, Australia, Canada, and Sweden. The IPCC also recognizes that climate change is increasing the incidence of infectious diseases, vector-borne diseases, mental health, and undernutrition.

Over 3.3 billion people live in highly vulnerable countries, while 1.8 billion live in low-vulnerability countries. The most vulnerable countries, mainly low and lower-middle-income countries, bear the human costs of disasters due to extreme weather events and hazards. The population in these vulnerable countries is projected to significantly increase by 2050 and 2100. Vulnerability is influenced by various interconnected issues such as poverty, migration, inequality, access to essential services, education, institutions, and governance capacities, often made more complex by historical factors like col (Birkmann et al. 2022).

The proposals in this document were built upon past initiatives, such as the efforts of the G20 India (Khemka and Reddy 2023), and the Inter Academy Partnership (IAP) that conveyed essential messages to policymakers regarding climate change's impact on health, equity, and the environment. These messages highlight the challenges of climate change for development, growth, equity, and societies. They emphasize the need for rapid, effective climate action to mitigate long-term health risks and underscore the role of the scientific community in identifying climate effects on health and generating solutions.

The interlinked agenda of climate and health encompasses twin emergencies and the possibility of unlocking their accompanying co-benefits. As the climate bank, the Asian Development Bank (ADB) has been working to bring this agenda to center stage over the past few years. This includes high-level engagement and commitments during global

congregations, such as the G20 and COP28, towards mainstreaming this sectoral intersection, establishing high-level principles and its flagship Climate & Health Initiative (CHI) (Karlner et al. 2023). CHI was developed during the G20 2023 India Presidency. The climate and health agenda received support in the New Delhi Leader's Declaration from developing and emerging G20 member nations, including Argentina, Australia, Brazil, France, Germany, Indonesia, Italy, Japan, Republic of Korea, Mexico, Saudi Arabia, South Africa, United Kingdom, United States of America, and the European Union. CHI, a leading priority of ADB's Climate Change Action Plan 2030, was formally launched at the first dedicated Health Day at COP28 in the United Arab Emirates, where it garnered high-level country and health ministerial acknowledgment along with WHO backing (COP28 2023). The fact that ADB has committed 15% of its annual health portfolio to support climate-focused projects in developing member countries also reflects climate and health as its priority.

Intersectoral action is vital to effectively combat climate change's complex challenges and its impact on human health (Buse et al. 2022). Collaboration among the energy, transportation, agriculture, and healthcare sectors can create more sustainable solutions. For example, clean energy sources such as solar and wind power can decrease greenhouse gas emissions and enhance air quality, improving health outcomes (Bikomeye, Rublee and Beyer 2021). The G20 Global Alliance against Hunger and Poverty (G20 2024) is an excellent opportunity to advance the construction of a package of policies that may promote health and equity and combat climate change. Actions to address loss and damage are an opportunity for intersectoral action, shared goals, and government policies to promote health equity, and address crucial climate change problems (Chandra et al. 2023).

Several comprehensive frameworks, such as planetary health, one health, climate justice, and eco-health, offer practical options and arguments to promote an ecological perspective in human health research and practice, emphasizing the role of complex systems and the need for interdisciplinary action (Cissé et al. 2022).

The Brazilian G20 presidency emphasized the importance of addressing global equity, signaling a call to action. The G20 must take action to safeguard lives swiftly, including the lives of the most vulnerable people, particularly those experiencing homelessness living in the streets of their own countries (Kidd et al. 2023), migrants and displaced groups (Abubakar et al. 2018), those who are systemically discriminated against and suffer everyday climate injustices, and the lives of the Indigenous nations that are the natural guardians of nature worldwide (Redvers et al. 2023).

## Interaction of Climate, Health, and Equity in G20 Countries

Area of Interaction	Description	Example (with Statistics)
<b>Climate Change and Health Disparities</b>	Climate change impacts worsen existing health inequities for vulnerable populations.	In India, heatwaves disproportionately affect low-income communities, with a 30% increase in heatstroke deaths in low-income neighborhoods
<b>Climate Action and Health Benefits</b>	Investments in climate solutions can improve public health.	China's investment in renewable energy has reduced air pollution by 20% resulting in a 15% decrease in respiratory illnesses in major cities
<b>Unequal Access to Resources</b>	Wealthier countries and individuals have more resources to adapt to climate change and access healthcare.	Island nations in the Pacific spend a significant portion of their GDP on seawall construction due to rising sea levels. In 2022, Kiribati spent 10% of its GDP on seawalls, limiting resources for healthcare and social programs
<b>Food Security and Climate Change</b>	Climate change disrupts food production, impacting vulnerable populations the most.	Droughts in Ethiopia have displaced millions and threatened food security. The UN estimates that 20 million people in Ethiopia face acute hunger due to climate-related factors.
<b>Mental Health Impacts</b>	Climate disasters and the stress of climate change harm mental health.	A 2022 study in Australia found a 35% increase in rates of depression and anxiety in areas affected by wildfires.



## Proposed recommendations

The issues of climate, health, and equity are already mentioned in the G20 documents and initiatives, which aim to provide a platform for the G20 presidencies to realize their goal of promoting climate and health while advancing global equity. G20 efforts are essential to advance the climate, health, and equity agenda. To maximize the G20's potential, we propose creating a G20 Global Climate and Health Equity Observatory or other challenge mechanism, that would strategically monitor and support critical issues between presidencies, improving coordination and accountability.

The objectives of the Observatory or another challenging and accountable mechanism would include:

**Comprehensive monitoring:** The Observatory will monitor key initiatives and stakeholders across its core functions, including bridging the G20, COPs, and the Global Health Architecture. This means tracking policy recommendations, knowledge exchange, resource mobilization, and engagement efforts.

**Policy and political analysis:** The Observatory will analyze the political dynamics of the G20, assessing factors that enable or hinder its effectiveness. This includes evaluating the influence of G20 member states, the role of COP negotiations, and the alignment with WHO priorities.

**Data-driven advocacy:** The CHI Observatory will create evidence-based insights to inform advocacy, including reports, briefs, and infographics. This will help to highlight achievements and gaps and advocate for more decisive action on climate and health.

**Knowledge sharing and capacity building:** The Observatory will provide a platform to critically review and share sound knowledge, skills, and exemplary cases of mitigation

and adaptation through hosting workshops, webinars, and training programs to promote climate-resilient health systems.

Promoting transparency and accountability: The CHI Observatory will ensure accountability by monitoring resource allocation, project implementation, and the initiative's impact on health outcomes in developing countries.

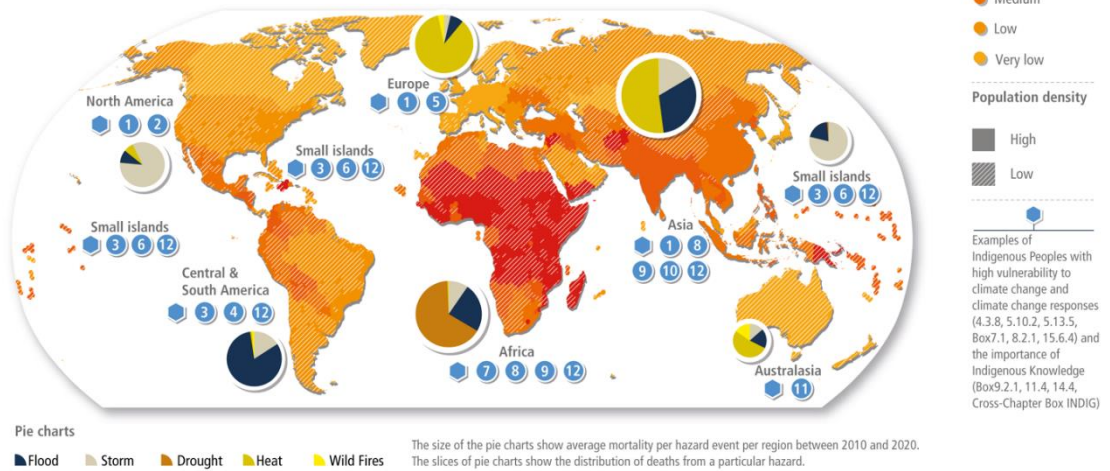
Structure and governance:

The G20 Global Climate and Health Equity Observatory will be an independent initiative funded by the G20 secretariat, member states, and other donors. Its governance structure will involve stakeholders from academia, civil society, and international organizations to consider diverse perspectives and expertise.

Existing analyses and frameworks related to populations in vulnerable situations are available and may serve as the initial starting point for the observatory, such as illustrated below:

### Observed human vulnerability to climate change is a key risk factor and differs globally

Vulnerability at the national level varies. Vulnerability also greatly differs within countries. Countries with moderate or low average vulnerability have sub-populations with high vulnerability and vice versa.



Examples of vulnerable local groups across different contexts include the following:

- 1 | Indigenous Peoples of the Arctic | health inequality, limited access to subsistence resources and culture | CCP 6.2.3, CCP 6.3.1
- 2 | Urban ethnic minorities | structural inequality, marginalisation, exclusion from planning processes | 14.5.9, 14.5.5, 6.3.6
- 3 | Smallholder coffee producers | limited market access & stability, single crop dependency, limited institutional support | 5.4.2
- 4 | Indigenous Peoples in the Amazon | land degradation, deforestation, poverty, lack of support | 8.2.1, Box 8.6
- 5 | Older people, especially those poor & socially isolated | health issues, disability, limited access to support | 8.2.1, 13.7.1, 6.2.3, 7.1.7
- 6 | Island communities | limited land, population growth and coastal ecosystem degradation | 15.3.2
- 7 | Children in rural low-income communities | food insecurity, sensitivity to undernutrition and disease | 5.12.3
- 8 | People uprooted by conflict in the Near East and Sahel | prolonged temporary status, limited mobility | Box 8.1, Box 8.4
- 9 | Women & non-binary | limited access to & control over resources, e.g. water, land, credit | Box 9.1, CCB-GENDER, 4.8.3, 5.4.2, 10.3.3
- 10 | Migrants | informal status, limited access to health services & shelter, exclusion from decision-making processes | 6.3.6, Box 10.2
- 11 | Aboriginal and Torres Strait Islander Peoples | poverty, food & housing insecurity, dislocation from community | 11.4.1
- 12 | People living in informal settlements | poverty, limited basic services & often located in areas with high exposure to climate hazards | 6.2.3, Box 9.1, 9.9, 10.4.6, 12.3.2, 12.3.5, 15.3.4

Source: Birkmann, J., et Al., 2022: Poverty, Livelihoods and Sustainable Development. Cambridge University Press, Cambridge, UK and New York, NY, USA, pp. 1171–1274, doi:10.1017/9781009325844.010. License CC-BY-NC-ND 4.0

## Scenario of outcomes

The initiative aims to bridge the gap between policy and action, with a focus on vulnerable populations and inequalities. The Observatory will promote groundbreaking activities that may lead to decisive action on climate, health, and equity.

Here are some scenarios that outline potential strategic outcomes:

### **Scenario 1: Proactive Policy & Action (High Impact)**

Outcome: The observatory becomes a reliable source for analysis, contributing to proactive G20 policy decisions.

Details:

- The observatory identifies vulnerable populations most at risk from climate-related health issues.
- Data is used to develop targeted interventions and build community resilience.
- Early warning systems for climate-driven health threats have been established.
- G20 policies promote sustainable practices that benefit both climate and health.

### **Scenario 2: Improved Equity & Access (Positive Impact)**

Outcome: The observatory helps bridge health equity gaps exacerbated by climate change.

Details:

- Research identifies how climate change affects marginalized communities unequally and disproportionately.

- The observatory advocates for equitable access to healthcare, significant social protection policies, and other resources relevant to mitigating the effects of climate change on health.
- Data informs G20 policies and programs to address social determinants of health.
- Capacity building empowers communities to advocate for their own health needs.

### **Scenario 3: Innovation & Collaboration (Breakthrough Potential)**

Outcome: The observatory fosters collaboration across sectors, leading to innovative solutions.

Details:

- Climate scientists, health professionals, social scientists, and policymakers collaborate on research.
- New technologies are developed for climate change adaptation and health mitigation.
- Public-private partnerships support research and implementation of solutions.
- The observatory becomes a global hub for knowledge exchange and best practices.

Challenging scenarios with limited resources and low public engagement are possible, but specific actions can prevent this and optimize success. Key strategies include:

- Focus on actionable data and clear communication.
- Build strong partnerships with G20 policymakers, researchers, and communities.
- Advocate for equitable solutions and address social determinants of health.
- Foster innovation and collaboration across sectors.
- Effectively communicate findings to raise public awareness and inspire action.

In summary, the success of the observatory or other challenge mechanism hinges on bridging the gap between knowledge and action. By providing decision-makers with precise data and advocating for change, the observatory can significantly contribute to a healthier future for all while addressing climate challenges equitably.

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