World Bank Climate and Health Program

PUTTING HEALTH AT THE CENTER OF CLIMATE INVESTMENT AND ACTION

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As the climate crisis escalates, evidence is mounting about its growing harm to human health and well-being. Indeed, this relationship between climate change and human health is now one of the defining challenges of our era, and, at current trajectories of change, it will remain so for some time to come. No one anywhere around the globe is beyond its reach, though staggering numbers of people – especially women, children, the elderly and those living in poverty – are more vulnerable than others.

Our only option is to act immediately, tenaciously, and creatively to address this growing challenge. If we can maximize climate-health financing and scale up collective action to strengthen health systems' defenses against climate change, we can save and improve the lives of millions of people.

For these reasons, the World Bank has launched a new Climate and Health Program whose aim is to slow and blunt the force of climate change's dangerous collision with human health. The program pivots on three foundational components that will: **assess country climate-health vulnerabilities and impacts** to design country-tailored solutions; **scale up investments to build low-carbon resilient health systems;** and **build and deepen partnerships** at global, regional, and country levels to multiply and magnify these efforts.

The World Bank has committed to substantially expand investments in climate and health across its entire existing health portfolio (currently $34bn in health systems projects in over 100 countries) and into new initiatives designed to build high-quality, climate-resilient and low-carbon health systems. The Bank will use the full range of its financing instruments for both adaptation and mitigation activities.

AN ALARMING AND STEADILY EXPANDING THREAT TO HEALTH

Climate change is increasingly undermining every pillar of good health and compounding the health impacts of multiple crises.

Climate change is a major risk multiplier. It is contributing to the emergence and reemergence of new and previously controlled infectious diseases; greater global food insecurity; and economic crises exacerbated by conflict. Changing climate conditions are increasing the likelihood of heat-related illnesses, altering the patterns of infectious disease transmission, and heightening health risks that emerge from extreme weather events. They are also depriving more and more people of basic human needs such as water, sanitation, and nutrition.

The 2022 report of the *Lancet* Countdown, an international research collaboration that independently monitors the evolving impacts of climate change on health, highlighted the need to put health at the center of climate action.[i] The report and its updated 2023[ii] edition stress that a low-carbon, resilient future can avoid the health harms of climate change and deliver improved health outcomes.

Climate change threatens to push millions of people into extreme poverty, particularly in the poorest countries.

A recent World Bank analysis estimates that, over the current decade ending in 2030, an additional 132 million people could be living in extreme poverty due to climate change.[iii] More than half of these people live in sub-Saharan Africa and South Asia. The analysis, which considered the impacts of climate change on extreme poverty from five different channels (health, agriculture, labor, disasters, and food prices), concluded that the health impacts of climate change are the largest contributor to increases in the poverty headcount (44 million people).

The World Bank has also estimated that by 2050 at least 21 million more people could die due to health risks triggered by climate change – risks such as malnutrition, malaria, dengue, diarrhea, and heat stress. Most of these additional deaths will occur in low-income and lower-middle income countries in Sub-Saharan Africa and South Asia, and this estimate does not even include deaths from other climate change-exacerbated risks such as floods, droughts, wildfires, and other extreme events.

Climate affects health through *direct, ecosystem-mediated,* and *indirect* pathways.

Direct impacts can occur as a result of rising temperatures and heatwaves, in addition to poor air quality. High temperatures can lead to heat stroke and dehydration and exacerbate non-communicable diseases. Of course, people who spend much of their working days outside or who lack sufficient cooling in their homes are especially exposed to these risks. Flooding and severe storms intensified by climate shocks also subject people to traumatic injury.

As temperature and precipitation patterns change, they also trigger ***ecosystem-mediated*** impacts. These can include increased risk of vector-borne diseases (e.g., malaria and dengue), water-borne diseases (e.g., cholera), and food-borne illnesses due to shifts in agricultural practices and food safety. As climate change raises the likelihood of infectious disease outbreaks, global health security risks also rise, as the COVID-19 pandemic devastatingly demonstrated.

Indirect impacts on health due to climate change include deterioration of mental health from climate-related population displacements, or malnutrition resulting from disruptions in agriculture and food systems. The magnitude of these impacts has been steadily mounting over time. For example, prior to 1970, dengue fever caused severe outbreaks in only nine countries; today, it is endemic in more than 100, causing at least 100 million infections every year.[iv,v]

Climate change weakens and compromises health systems.

Climate shocks increase the need for health services and put greater strains on health systems' capacity to meet those needs. With the increase in the incidence, severity, and distribution of climate-driven health issues, health systems experience greater demand for essential services. Also, as climate change is making extreme weather events – such as hurricanes, floods, and wildfires – more frequent and intense, there is a greater likelihood of damage to health facilities, interference with supply chains that deliver critical medications and other health products, and disruptions to workforces that provide health services.

It is already clear that most health systems will need new technologies and models of service delivery to withstand the growing stresses climate imposes on them. Additionally, climate-induced large-scale migration may require more emergency and mobile services.

All members of a community will feel the effects of climate change, but the poorest and most vulnerable will bear the biggest brunt.

People living in poverty are disproportionally affected by climate change largely because they tend to be more exposed and vulnerable to it than others. Climate change also worsens gender inequality. It reduces women's ability to be financially independent and weakens their social and political rights, especially in economies heavily based on agriculture.[vi] Moreover, pregnant women, children and the elderly are among those whose health is most affected by climate change.

The health sector also contributes to the magnitude of the crisis, as it produces around five percent of greenhouse gas (GHG) emissions globally.

While GHG emissions are likely much lower in lower-income countries, data confirming this are limited, and emissions may also increase in some countries, where access to quality care is particularly low. Still, there is an opportunity even in low-income contexts, to support countries' efforts to avoid locking in to high-carbon pathways and to build more sustainable and resilient health systems.

For example, the electrification of health facilities through renewable energy sources not only reduces health systems' GHG emissions but also supports the continuity of essential health services should electricity lines be compromised when disasters strike. Furthermore, the promotion of high-quality, person-centered clinical care can save lives and minimize carbon output. Evidence from the United Kingdom, for example, has found that good asthma control results in one-third the carbon footprint of uncontrolled asthma and that an effective primary prevention program for diabetes could reduce emissions by a third[vii,viii].

THE PROGRAM: OUR TASK AHEAD

There is a strong and urgent need to take collective action and a tremendous opportunity to build on global momentum to rein in climate change's impacts on health.

Today's choices and actions will determine the extent to which current and future generations will suffer the health impacts of climate change. We must build the evidence that guides investments, mobilize sufficient funding, and support countries to make their health systems more sustainable and resilient.

With these ends in mind, the World Bank launched its Climate and Health Program on the Health Day of the Conference of Parties (or COP28) gathering in December 2023. Through the Program, the Bank has committed to:

- **Generating evidence about countries' needs and about the most cost-effective interventions to address the climate and health crisis.**
- **Investing in country-tailored and evidence-based solutions and scaling-up investments for low-carbon resilient health systems.**
- **Working in partnership with other organizations to advocate for and mobilize additional resources in support of global, regional and country-level efforts to scale up climate-health actions.**

A closer look at each of these priorities:

Generating evidence about the most cost-effective interventions to address the climate and health crisis.

Much more must be done to identify country-tailored investments in climate and health that provide countries maximum payoffs for the most reasonable costs. Such a "best buys" approach improves health outcomes for specific climate-sensitive diseases as it reduces their associated carbon footprint and climate-driven health outcomes.

The Bank's Climate and Health Program will also support a Climate and Health Investment Framework that qualifies, quantifies, and drives climate-health investments. For this part of the program, the Bank will, in collaboration with partners, be guided by a "3 by 3" framework that considers activities and related financing needs and the potential sources of financing.

Figure 1 below presents a summary, and conceptual view of the "3 by 3" framework. It focuses on three goals and actions to allow countries, financiers, and partners to identify country-tailored investment opportunities and maximize finance for climate and health.

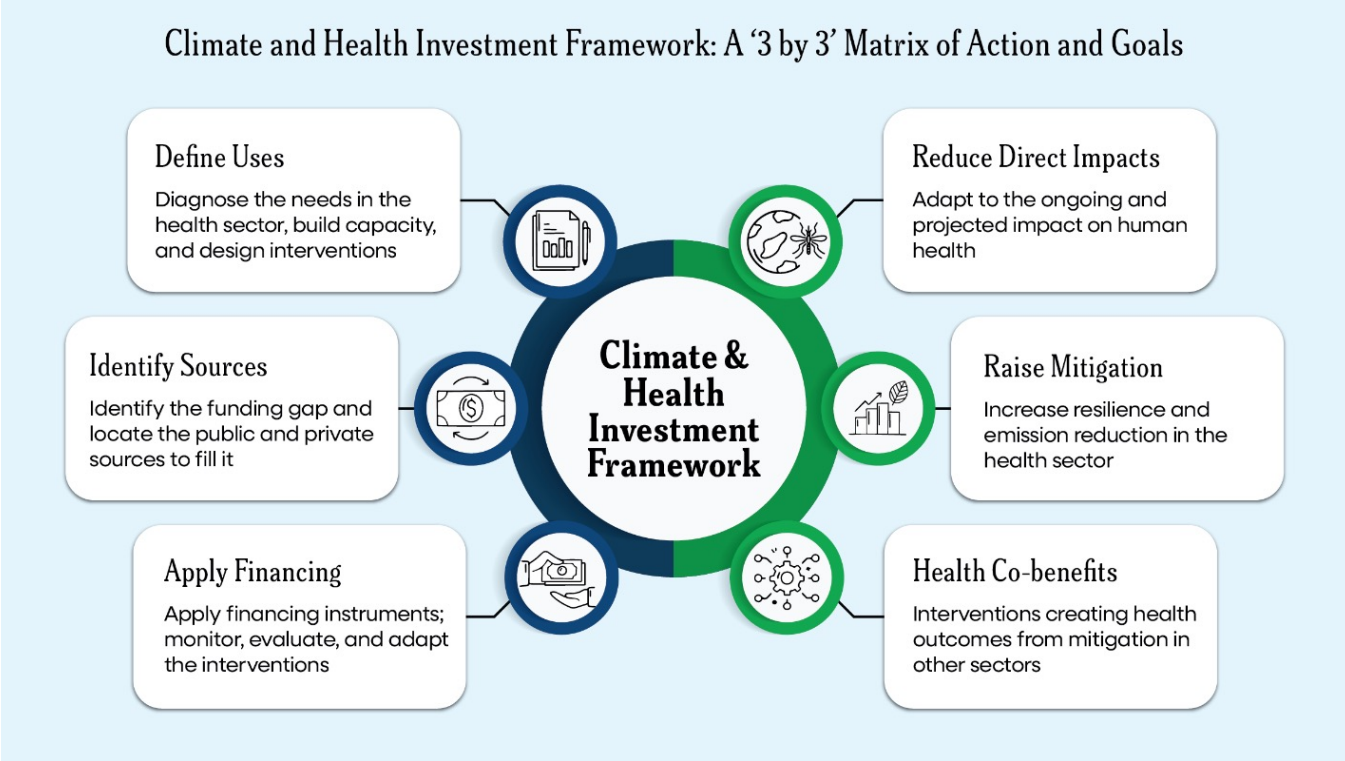

Figure 1: 3 by 3 Climate and Health Investment Framework

Investing in country-tailored and evidence-based solutions and scaling-up investments for low-carbon resilient health systems.

The Climate and Health Program will help countries implement evidence-based, locally tailored interventions that address the intersection of climate change and health system resilience and sustainability. It will:

- **conduct country diagnostics such as climate and health vulnerability and carbon footprint assessments;**
- **support national-level policy dialogues and implementation of proven new approaches in World Bank-financed projects aimed at building climate-resilient health systems;**
- **mobilize technical assistance and financing from various domestic and international sources to support promising reforms;**
- **and gather real-time data for monitoring of implementation progress, generating country evidence of impact, and facilitating cross-country learning.**

Such investments include building strong leadership and governance, improving the quality and reliability of service delivery, expanding the capacity of the health work force, integrating information systems, and promoting sustainable and uninterrupted supply chains for medical products.

The World Bank will use its current US$34 billion portfolio of health system investments to transition in the coming years to be fully responsive to climate needs.

Working in partnership with other organizations to advocate for and mobilize additional resources in support of global, regional and country-level efforts to scale up climate-health actions.

The Climate and Health Program will focus on strengthening and building upon its partnerships and convening power.

This can lead to better and more effective advocacy for policy reforms and a coordinated mobilization of additional needed financing to transform health systems affected by the climate crisis.

The Program will work in close collaboration with country leaders and champions, World Health Organization (WHO) and its Alliance for Transformative Action on Climate and Health (ATACH) network, the Global Fund, and Gavi, the Vaccine Alliance, as well as leading foundations, other development banks, and bilateral donors. These collaborations will focus on joint advocacy, development of global and country evidence, and the mobilization of financing to support the country level agenda.

The World Bank has also established and is co-convening the Development Bank Working Group for Climate-Health Finance, which is working to align development banks around a common agenda, namely: how to raise and prioritize development bank investments and drive climate and health commitments at the scale needed to sustainably finance essential climate and health actions.

The Working Group includes multilateral development banks and representative members of the Finance in Common network that incorporates key Public Development Banks.

The Working Group's objectives include:

- Elevating health as a climate investment priority;
- Demonstrating substantial financial commitment to support the health sector's adaptation and mitigation needs;
- Directing resources to the highest-impact interventions to improve health outcomes and reduce net greenhouse gas emissions;
- Building capacity in climate change and health at the sub-national, national, regional, and global levels, including building capacity in the private sector to help companies and investors to make the investments needed to mitigate climate change and adapt to its effects, wherever appropriate and relevant within respective mandates;
- Facilitating coordination and communication with other stakeholders, including Finance in Common, governments, other international organizations and Working Groups relevant to climate-health, academia, the private sector, and other partners.

The role of development banks in addressing climate change's impacts on health is crucial. They are uniquely positioned to mobilize significant financial resources, technical expertise, and policy influence, making them indispensable actors in driving climate action.

Given the critical importance of strong leadership in any crisis response and reform agenda, the Climate and Health Program will also support and leverage country leaders and champions to drive the climate-health agenda worldwide. It will enable leadership capacity building and the establishment of cross-country and regional platforms for leaders and champions to exchange critical knowledge and experiences.

The program is also exploring the creation of a platform for public-private dialogue on climate and health to foster collaboration and pivot private sector investments towards climate and health. The platform will seek to define the climate-health transactions most conducive to private sector investments and delivery, as well as the conceptualization of mechanisms for blended financing to leverage private capital for climate and health financing.

The World Bank will also work closely with the Global Financing Facility for Women, Children and Adolescents (GFF) in order to incorporate evidence about diagnostics and best buys in the country-led investment cases, particularly as they relate to the impact of climate change on women and children. Complementary financing from the Pandemic Fund will likewise help strengthen surveillance and outbreak control given that climate change is raising the likelihood of infectious disease outbreaks. The Program will also include strong collaboration with external partners such as UNICEF, WHO, and UNDP, among others.

Multi-sectoral action is essential for maximum impact, and close collaboration will take place across the World Bank including with teams working on Water, Energy, Social Protection, Agriculture and the International Finance Corporation, the World Bank's private sector arm.

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[i] Lancet Countdown Report November 5, 2022 Health At the Mercy of Fossil Fuels
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[iii] World Bank Group. Revised Estimates of the Impact of Climate Change on Extreme Poverty by 2030. Available at: https://openknowledge.worldbank.org/server/api/core/bitstreams/ad7eeab7-d3d8-567d-b804-59d620c3ab37/content
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