

# Thematic Update on Climate & Health

50<sup>th</sup> Board Meeting For Information GF/B50/09 14-16 November 2023, Geneva, Switzerland

# **Executive Summary**

- Climate change represents a profound threat to the achievement of the Global Fund's mission and to the vulnerable countries, communities and people at the center of our strategy.
- Some of the most significant and early impacts of climate change are on human health, with death and morbidity caused by increasing infectious diseases, food insecurity and disasters, compounded by economic disruption and migration which will most affect those that have contributed the least to carbon emissions.
- Climate change poses the greatest threat to our mission to end malaria and to build resilient and sustainable systems for health but will also significantly complicate the fight against HIV and TB and efforts to support the financing of SDG3 targets. 71% of Global Fund resources support the 50 most climate-vulnerable countries. 87% of global malaria burden and Global Fund allocations for malaria are in these climate-vulnerable countries.
- Addressing climate change is not an expansion of the Global Fund's mission, but instead is a response to an unprecedented shift in the context of human life on earth that will affect most aspects of the Global Fund's work. As such, it is better understood as critical context and a lens though which to consider all our work.
- This is the first time the Strategy Committee (SC) and Board will have a thematic discussion on Climate & Health. The document presents (i) a brief overview of the climate emergency, (ii) analysis on the human health impact of climate change and on the Global Fund's mission, (iii) the actions the Global Fund is undertaking to address impacts of climate change across our grants, sourcing operations, the Secretariat and global thought leadership, and (iv) next steps.
- The Secretariat welcomes feedback from the SC and Board on this analysis, our actions to date, and additional steps we can take to reduce the human health impact of climate change and further mitigate carbon emissions.

### ${\boldsymbol{\Im}}$ the global fund

# **Summary of feedback from October Strategy Committee**



### Strategic & focused action

- Acknowledgement that as an essential and largest funder of grants for health, Global Fund has a major role to play in the climate & health space
- Agree that climate actions should build on Global Fund's comparative advantages & remain focused on core mission with clear linkages to HTM and health systems outcomes
- Appreciation for outlined next steps that are ambitious, strategic, resultsoriented, and aligned with partners' plans to ensure coordination
- Global health and climate partners need to work to better understand, quantify, measure, and scale up pragmatic interventions that address both health and climate needs, in many cases, this is scaling-up existing efforts.
- Acknowledgement of challenges in addressing key areas without additional resources.



# Partnership, advocacy, & resource mobilization

- Endorse ongoing collaboration with health and climate partners to help accelerate and address environmental determinants of health through one voice and coordinated actions (e.g., sharing good practices and examples)
- Call to strengthen global advocacy and communications in partnership with WHO and other key partners around cobenefits of climate & health interventions, amplifying the notion that health action is climate action and vice versa
- Acknowledge need for resource mobilization to support climate-resilient health systems and address the increasing climate-induced costs for malaria programs



### **Country-level**

- Support country-level partners' capacity and advocacy on climate & health in a way that elevates communities and country voices
- Continue to ensuring flexibility and rapid support to climate-related emergencies
- Encourage embedding systematic approaches to support climate-resilient health systems and coordinate investments across partners

### > Embedding climate considerations

- Support continued consideration of embedding climate issues in Global Fund systems and process for GC8 (e.g., allocation letters, guidance notes, etc.)
- Request for periodic updates to the Strategy Committee and Board

# **Summary of content**

# **1** Global overview of the climate emergency

- Human Health Impact of Climate change and on the Global Fund's mission
- 3 Our actions





## Global heating is fueling dangerous climate extremes worldwide and the window of opportunity for averting the worst climate emergency is rapidly closing

- Global warming of 1.5°C is likely to be reached in the near term
- Every increment of global warming will intensify multiple climate hazards
- World rapidly running out of remaining carbon budgets
- Need to reach net zero CO<sub>2</sub> emissions as soon as possible to avert the worst scenario climate catastrophe & build climate resilience, in particular for most vulnerable populations and communities



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Sources: IPCC 6th Annual Report; Carbon Tracker Initiative

Note: Carbon budget is the cumulative amount of carbon dioxide (CO<sub>2</sub>) emissions permitted over a period of time to keep within a certain temperature threshold.

# **Global Overview of the Climate Emergency**

Greenhouse gas concentrations continue to reach record levels, accelerating global heating across land and ocean, melting glaciers and rising sea levels, impacting vulnerable populations



# **Communities that are the least responsible for climate change are some of the most climate vulnerable**

Regions with **lowest net GHG emissions are most exposed** to effects of climate change and have **least capacity** to adapt and counter impacts.



Source: PIK • Values exclude emissions from LUCF sector.

🔆 WORLD RESOURCES INSTITUTE

Sub-Saharan Africa and South Asia have lowest per capita greenhouse gas emissions but have many of the most climate-vulnerable countries.



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Per capita emissions by region, 1960-2021

## Climate disasters disproportionately affect developing countries with high disease burden, weak health systems and fragile and conflict contexts

- Developing countries are hardest hit by the impacts of climate change due to their higher vulnerability and lower ability to cope
- In 2022, Africa and Asia accounted for over 90% of people affected by climate disasters worldwide
- Droughts affected 88.9 million people in Africa in 2022, including DRC, Ethiopia, Nigeria, Sudan, Niger, and Burkina
- Floods in Pakistan in 2022 affected 33 million people, causing 1,739 deaths and economic damage of US\$ 15 billion
- Monsoon floods led to 2,035 deaths and US\$ 4.2 billion in economic damage in India and affected over 7 million people in Bangladesh



# Climate-fueled disasters triggered displacement of 8.7 million people in 88 countries and territories in 2022, representing a 45% increase since 2021

- Climate disasters are triggering a rapid increase in internal displacement across developing countries and fragile and conflict contexts
- Record levels of flood displacement were observed in Pakistan and Nigeria in 2022
- Longest and most severe drought on record resulted in displacement of 2 million people across Somalia, Ethiopia, Kenya
- Consecutive climate disasters are forcing people to flee repeatedly, undermining their recovery and disrupting access to essential health services, including for HIV, TB & malaria



8.7 million Iternally displaced people as a result of

as of 31 December 2022

in 88 countries and territories

**0** 45%

Increase in the number of people internally displaced by disasters since 2021

## The climate emergency is driving global hunger, triggering catastrophic humanitarian needs and increasing food insecurity which impacts health

- Global warming is influencing weather patterns, impacting the ability to produce food and by extension the price of food
- Food productivity growth is down 21% because of global heating
- As of 2021, 2.3 billion people faced food insecurity, and nearly 10% of the global population was undernourished
- Since 2020, drought has been affecting the **Greater Horn of Africa**, the longest such sequence in 40 years, resulting in an estimated **37 million people facing acute food insecurity across the region**



2016

Year

2014

2018

# **Climate Change effects on Global Economy**

# Under a high greenhouse gas emissions climate scenario, global real GDP per capita may reduce by over 7%

### **Unequal costs of climate change**

Poorer countries face greater risks from climate change and are less able to adapt to them.

(adaptive capacity and exposure indexes, points out of 1)



Source: IMF staff calculations based on 2015-18 data from the European Commission, the United Nations University Institute for Environment and Human Security, the University of Notre Dame, and the April 2020 World Economic Outlook. Note: Dotted lines show estimated linear relationships for advanced economies, and for emerging market and low-income countries combined, respectively.

- Climate vulnerability raised the average cost of debt in climatevulnerable developing countries, with additional interest payments expected to increase between US \$146 and \$168 billion over the next decade
- Even in high income countries, economic effects of climate change are severe. In the US alone, \$2 trillion revenue loss can be expected annually by 2100
- Transition to a low-carbon economy requires investments of US \$4-6 trillion a year, with huge impacts on fiscal space for both implementer and donor countries
- IMF estimates that annual climate change adaptation needs will exceed 1% of GDP in about 50 lower-income countries for the next 10 years, while for small island states the costs could reach up to 20% of GDP
- Less than 5% of total global adaptation spending and less than 0.5% of multilateral climate adaption finance targets health

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# The climate emergency is triggering a seismic shift - we need to address impact on human health and our mission

"The rate of temperature rise in the last half century is the highest in 2,000 years. Concentrations of carbon dioxide are at their highest in at least 2 million years. The climate time-bomb is ticking."- António Guterres, UN Secretary-General

- Earth will likely reach 2°C of global warming by the 2040s without significant climate actions
- Even at current global warming of 1.1°C, unprecedented, widespread and rapid changes are already occurring globally
- Over **3.3 billion people are highly vulnerable** with the largest impacts observed in communities in Africa, Asia, Latin America, LDCs, Small Islands and low-income households
- Climate-induced migration could affect 86 million people in Africa, 89 million in Asia and 17 million in Latin America by 2050
- Climate impacts, and related losses and damages, will escalate with every increment of global warming, increasing human mortality & morbidity, disease vulnerability, food-water-energy insecurity, displacement, conflict, poverty and inequality

# Increasing global population exposed to extreme events at different levels of global warming

Multi-year mean change in exposure according to



**Note**: Projecting Exposure to Extreme Climate Impact Events Across Six Event Categories and Three Spatial Scales (Lange 2020)

# **Summary of content**

Global overview of the climate emergency

Human Health Impact of Climate change and on the Global Fund's mission

3 Our approach





## Climate change is threatening to reverse years of progress<sup>2</sup> in public health and disproportionately affecting the most vulnerable

- WHO estimates that between 2030-2050\* climate change will cause an additional 250,000 deaths per year
- Most of these deaths will be from malnutrition, malaria, diarrhea and heat stress
- More than half of additional deaths are projected for Africa, including those resulting from:
  - Malaria (33,000, mainly in Africa)
  - Childhood undernutrition (85,000, mainly in Africa & Asia)
  - Heat-related deaths (94,000)
  - Diarrheal disease (33,000, mainly in Africa & Asia)
- Health impacts of climate change are the largest climate driver of extreme poverty affecting an additional 132 million people, mostly in Sub-Saharan Africa and South Asia

\*compared to 1961–1990 S THE GLOBAL FUND



Projected annual additional deaths attributable to climate change, in 2030 and 2050 compared to 1961–1990

Heat in elderly people

# **Climate change and malaria, HIV and TB**

Risk of infectious disease will increase due to climate change either directly (e.g., vector-borne) or indirectly (through disruption of services)

Increases in other vectorborne diseases will also impact Global Fund's mission Of the three diseases, malaria is the most affected by climate change, as malaria transmission is intricately connected with temperature and precipitation patterns. Climate change, migration and political instability also impact malaria transmission dynamics and service delivery. HIV is impacted by climate change, as climate migration may impact service continuity and changing temperatures may change distribution of infectious diseases of concern



Climate change affects vulnerability to TB, through air pollution increasing the risk of contracting the infection and climate migration affecting continuity of care.

# Climate change imperils our mission to end malaria

By directly affecting parasite development and vector population dynamics, climate change will challenge, complicate and set back efforts to end malaria

Climate change can influence the rate of parasite development inside mosquito and vector population dynamics through:



Accelerates *Anopheles* mosquito lifecycle (from egg to mature adults) and shorten the time required for *Plasmodium* parasite development in the vector to become infectious lead to **higher chances for transmission** 

Alters the number, quality and location of breeding sites, as an increase in the number and range of mosquito breeding sites leads to increasing mosquito population, which yields **higher chances for transmission** 





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Optimum humidity range of 60-80% and increase in mosquito survival, flight activity and host-seeking behavior lead to **higher chances for transmission** 

# *Climatic factors play a major role in malaria transmission dynamics*

- Receptivity Climate change creates a better ecosystem for transmission of *Plasmodium spp*, which can result in more competent vectors and disrupt health systems and delivery of malaria interventions.
- Vulnerability Extreme weather events can trigger large population movements, which can result in malaria importation and lack of access to case management and prevention interventions.
- Infectivity Climate change may increase the development rate of *Plasmodium* parasites by shortening the time it takes for mosquitoes to become infectious, potentially increasing rates of transmission and infective bites.

# **Example of changes in malariogenic potential**

### Malaria and the Ethiopian Highlands

- Ethiopian highlands (including Addis Ababa at >2,000 m and Mt. Ras Dashen at > 4000 m above sea level) previously considered to be 'too-cold' and a less favorable environment for the vector and parasite for disease transmission
- With temperature rising, the malariogenic potential of the highlands could change reaching temperature threshold for malaria transmission
- Programs historically have excluded interventions in high altitude areas (assuming highlands are safe)

Rigorous surveillance and comprehensive review of malaria epidemiological and climate data and program preparedness



## 2

# Climate change imperils our mission to end malaria

Shifting geographic locations and length of transmission seasons not only exposes immunologically naïve populations to malaria but increases the malaria risk for the most vulnerable, particularly children in Sub-Saharan Africa

- By 2030s, models indicate that potentially an additional 50-62 million people will be at increased risk for endemic malaria transmission, and 37-48 million people at risk for seasonal transmission, in Central, Eastern, and Southern Africa
- Eastern Africa projected to see dramatic increases in people at risk for malaria transmission
- Areas with **limited suitability for malaria transmission** may **become seasonally suitable** under conditions of a changing climate, particularly in Southern Africa



# **Climate change will impact other vector-borne disease**

Support to systems strengthening - particularly surveillance and epidemic & pandemic preparedness is critical as countries will have to react to the spread of other vector-borne diseases

Almost **all vector-borne diseases have a climate dimension** by:

- Creating more suitable environments for vectors through warmer temperatures – resulting in increased areas where vectors, like mosquitos, can survive and reproduce
- Increased rain can increase standing water ideal breeding areas for many vectors; droughts may also increase areas of standing water (created from previously flowing water)
- Increasing disease transmission seasons due to improving climatic/environmental conditions for transmission
- Changing temperatures can affect the behavior of vectors – e.g., by changing biting behavior of mosquitos

A 2019 study found that by 2050 the number of people at risk by diseasecarrying mosquitoes will increase by 500 million

Aedes aegypti mosquito spreads dengue fever, zika virus, chikungunya, and yellow fever

Projected changes in the risk of dengue occurrence



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# Climate change impacts our mission to end TB

Impact of climate change increases TB risk factors, affecting the pattern and distribution of TB burden and affects TB diagnosis and treatment services



Regions (Asia, Africa) with high TB burden are some of the most climate vulnerable regions



**Climate disasters disrupt TB diagnosis and treatment** services, leading to increased TB transmission from undiagnosed TB, amplification of drug-resistant TB and poor treatment outcomes



**Changes in climatic variables** (temperature, precipitation, humidity and wind speed) may have varying effects on transmission and morbidity, including through Vitamin D metabolism, UV radiation and malnutrition

### **Climate-driven:**

- Emergency situations can lead to overcrowding which is associated with increases in TB transmission
- Shocks to food systems can lead to malnutrition and undernutrition
- Air pollution can increase the spread and severity of TB
- **Migration** and **displacement** creates disruption in diagnosis and treatment services

# **Climate change impacts our mission to end HIV/AIDS**

Climate change threatens to undermine the global progress made in curbing the HIV epidemic through its effects on the availability and quality of HIV care and health outcomes for people living with HIV

Impacts of climate change **are unequally distributed and exacerbate existing inequities**. For example, by increasing conditions leading to HIV transmission, including those related to gender-based violence.

Climate disasters disrupt service delivery through their impacts on health systems' ability to provide services to vulnerable populations, especially those who require long-term treatment and follow-up

Climate-induced displacement leads to interruptions in service continuity, thereby increasing risk of HIV transmission and drug resistance



Climate-triggered **food insecurity and poverty** can **threaten continuity of treatment** for PLHIV and increase unsafe sex, which may **increase the risk of HIV infection** 

Increasing infectious diseases which are often more threatening for PLHIV even when virally suppressed, including invasive fungal infections

# Climate change impacts on our mission to strengthen health and community systems

Systems for health will be at the front line of addressing the human health impacts of climate change, responding to increased infectious diseases, heat deaths, and other climate-related disasters



The capacity and ability of health care systems to manage and protect populations will be impacted by climate change

Ways in which climate change may impact health and community systems



Injury, mortality, and reduced well-being of healthcare workforce due to climate disasters, extreme heat and climate-sensitive diseases

Accessibility and continuity of services interrupted by climate disasters

**Disruption of global and regional supply chains for essential health products**, e.g., flood destroying manufacturing facilities, leading to global or regional medicine shortages



Increased pressure on public health budgets and increasing out-of-pocket expenditure for poor households

# Climate change impacts the Global Fund mission to reduce health inequities

Climate change exacerbates existing inequalities and vulnerabilities of populations affected by HTM and reduces gender equality

- Climate change is increasing existing social and economic vulnerability, including amongst key, vulnerable and underserved populations affected by HTM, with most significant impacts occurring in Africa, Asia and parts of Latin America and the Caribbean
- Climate inequities (disproportionate effects on lower income and marginalized communities) aggravate the same structural inequalities in political power, policy, practice and funding that drive health inequities
- Climate effects on health is the biggest climate risk to poverty
- Rising global temperature and increasing climate disasters are amplifying gender inequalities and are acting to further undermine women's economic and social rights, especially in countries with high climate vulnerability

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Examples of local vulnerable persons:

- Women & non-binary people
- Migrants with informal status and limited access to health services and shelter
- 8 People uprooted by conflict
- People living in informal settlements located in high climate risk areas
- 1 Indigenous peoples
- 5) Older people, especially poor and socially isolated people

## 2

# **Climate change will drive further disease emergence**

About 40 new infectious diseases have been discovered in the last fifty years, and climate change will increase the risk of emerging and re-emerging infectious diseases

- New epidemics and pandemics can arise when infectious agents are passed from animals to humans; these "zoonoses" can acquire the ability to transmit from person to person and cause global pandemics including COVID-19, avian influenza & HIV
- Climate change increases the risk of disease emergence by increasing interactions at the human-animal interface, requiring a One Health approach
- Disease emergence is further facilitated by increased human population density, rapid global transportation, and risk is modeled to be highest in forested tropical regions affected by land-use changes and characterized by greater wildlife biodiversity and higher human population density

### Global Examples of Emerging and Re-Emerging Infectious Diseases





# **Summary of content**



Global overview of the climate emergency

- Climate change and the
   Global Fund mission
- **3** Our Actions

A Next steps



## Global Fund is committed to addressing the impacts of climate change on HTM and supporting low-carbon, climate-resilient health systems

### 2023-2028 Strategy



Account for the impact of climate change on malaria transmission as well as the impact of malaria interventions on the environment by facilitating the inclusion of relevant climate metrics in malaria data repositories to refine stratification, planning, quantification and timing of malaria intervention.

Addressing the threat of drug and insecticide resistance, and **encouraging climate**, **environmentally-sensitive and One Health approaches**.

**Champion environmentally sustainable sourcing and supply** – as part of our efforts to **encourage climate, environmentally-sensitive, and ethical approaches** – by acting as a catalyst to promote responsible, ethical and sustainable procurement and resilient supply chains.

To build diversity, resilience and **reduce the environmental impact of commodity supply chains**, countries will be supported to **leverage the private sector** to strengthen domestic procurement and enhance the capacity for local manufacturing and supply of core commodities. Statement (Dec 2021) outlines the steps to promote climate resilience and greening efforts across:



**Country-level** 



Health Product Sourcing and Procurement



**Global Fund Secretariat** 

### 

Statement on Climate Change and Environmental Sustainability

### 3 December 2021

The Global Trand is decidy concerned about the impact that investmential damage and climits charge are leaving on human health and the disperpositional effects on the most valenciale and disadvantaged communities. As a loading multitational lander of grants for the disadvantage and COVID-11 programme and a shareflythen human and the environment, advances are done to the shareflythen human and environment, advances the environmental and climate impact of our procurement environment, advances the environmental and climate impact of our procurement environmental, shareful and and appendix the basel. This statisment calculates the share was and environmentally sensible systems for health. This statisment calculates the share was and produces the statisment of the climate environmental processes the statisment of the climate environmental processes of the climate environmental processes of the environmental processes of the climate environmental processes of environmental environmental and climate environmental processes of the environmental processes of the climate environmental processes of environmental env

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Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Soft Assessment Report of the Vergovernmental Paser or Climate Change.

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Page 1 of 5

# Global Fund supports countries that are most vulnerable to the impacts of climate change

(3)

Global Fund-supported country



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Note: Based on <u>University of Notre Dame Global Adaptation Initiative (ND-GAIN) Climate Resilience Index</u>, which summarizes a country's vulnerability to climate change and other global challenges in combination with its readiness to improve resilience.

# The Global Fund supports countries with both high HTM burdens and high climate vulnerability

The 50 most climate vulnerable countries\* have:

- 87% of malaria burden within Global Fund eligible countries
- 226M cases of malaria per year
- 87% of Global Fund malaria allocation totaling \$3.61b

- 48% of HIV burden within Global Fund eligible countries
- 15.6m PLHIV
- 68% of Global Fund HIV allocations totaling \$4.43b
- 35% of TB burden within Global Fund eligible countries
- 3.4M cases of TB per year
- 55% of Global Fund TB allocations totaling \$1.33b

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# **Global Fund engagement in global climate-health agenda** to advance common principles and coordinated actions for addressing climate change impacts on health

### ILLUSTRATIVE

2022	



Launched at COP26. Platform to support countries to realize their commitments for climate resilient and low carbon, sustainable health systems. Engaged since June

2022.

Inaugural meeting to discuss solutions and substantial financing for climate-adaptive health strategies (~200 leaders representing 140 organizations, 40 countries (government, private sector, NGOs, global institutions and higher education)).

> FORECASTING HEALTHY FUTURES GLOBAL SUMMIT 2023 MARCH 14-16, 2023 - ABU DHABI



Hosted by President Macron, a key focus of the Paris Summit was discussing options for mobilizing innovative financing for countries vulnerable to climate change.

G20 calls for

resilient low-

carbon health

**One-Health** 

framework

climate-

2023 INDIA

ONE EARTH · ONE FAMILY · ONE FUTURE SYSTEMS and

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2023

Health Minister Roundtable on climate and health to discuss Common Position on climate and health, Civil Society Roundtable on Malaria as a case study, Rockefeller event on climate/health financing, civil society mobilization on a climate/health campaign.



General Assembly High-level Week 2023

Co-hosted (with COP28, Green Climate Fund, and Rockefeller Foundation) highlevel roundtable promoting common principles and priorities for climate-health financing. Participated in key climate & health focused events hosted by Clinton Global Initiative, Concordia, Forecasting Healthy Futures, End Malaria Council, Sanofi Foundation, & Foreign Policy.



COP28 will host Inaugural Health Day and host the first climate-health ministerial meeting to build consensus on priority actions for health system's response to climate change.



### **COP28 Health**

Fora for global health and climate community to promote health and equity are placed as central to climate negotiations, and showcase evidence, initiatives and solutions to maximize the health benefits of tackling climate change across regions, sectors and communities.



# **Global climate-health movement**

73 countries have committed to develop climate resilient and low carbon, sustainable health systems as part of the Alliance for Transformative Action on Climate and Health (ATACH)

- As part of these commitments, countries commit to:
  - Conduct climate change and health vulnerability and adaptation (V&A) assessments
  - Develop a Health National Adaption Plan (HNAP) informed by V&A
  - Utilize HNAP and V&As to facilitate health access to climate change funding
  - High ambition/high emitters: set a target date to achieve health system net zero emissions (ideally by 2050)
  - All countries:
    - Deliver a baseline assessment of GHG emissions of the health system (including supply chains)
    - Develop an action plan or roadmap by a set date to develop a sustainable low carbon health system

### • 51 out of the 73 countries have Global Fund grants

Source: WHO ATACH



## Global Fund provides tools and flexibility for countries to invest in programs and systems equipped to respond, adapt, and mitigate climate change

(3)

- Grant flexibilities and the Emergency Fund are Global Fund's first line of support for countries when faced with climate-related disasters such as cyclones, floods, and drought
- Funding Request and country dialogue processes enable countries to design and prioritize investments that strengthen & build climate-resilient and sustainable health systems to be better able to reduce and manage multiple climate risks
- Catalytic Investments like the Digital Health Impact Accelerator Matching Fund integrate climate resilience as key priorities to further support countries sustain health gains in the context of a changing climate
- As the burden of vector-borne diseases can be particularly sensitive to seasonal weather patterns, climate considerations have been central to Global Fund investments in malaria programs for years. However, climate change complicates our mission by dangerously shifting burden and trends across geographies in increasingly less predictable ways

# **<u>Disaster Response</u>: Global Fund provides rapid and flexible (3) emergency response support to climate-related disasters**

**'Disaster Response'** in the Global Fund context is defined as an **activity supported by the Emergency Fund or grant** immediately following a **climate-related disaster** that contributes to coordinated humanitarian response in disasteraffected areas to **sustain health gains** aligned with Global Fund Strategy priorities.

### **Recent examples of Emergency Fund uses\***



## Cyclones

~\$1m USD to Mozambique, May 2023

# Flooding

\$30m USD to Pakistan, Sept/ Oct 2022

# Ê D

# Drought

~\$2m USD to Somalia, Nov 2022

# 46% of Emergency Fund allocation to-date involved supporting rapid country responses to climate-related disasters\*

\*Of \$117m USD allocated over GC5 and GC6. At time of disasters, reprogramming of existing grant funds is undertaken as a first option. If reprogramming cannot cover prioritized needs, additional funding through the Emergency Fund may be provided.

## This year Cyclone Freddy had a devastating impact on Mozambique, Madagascar, and Malawi





Photo: Peter Sands and Minister Mitchell (FCDO) are briefed on anti malarial larvicide operations in Mozambique after Cyclone Freddy.

233 health facilities damaged or destroyed

(3)

# Cyclone Freddy was the world's longest lasting tropical cyclone ever recorded, making clear countries like Mozambique are on the frontline of the global climate emergency

	Context		Cyclone Freddy increased malaria transmission risk for 184k displaced people						
🕺 2.4m PLHIV		S\$ 2.37bn	<ul> <li>Increase in stagnant water bodies that become mosquito breeding sites</li> </ul>						
116k TB cases	si G	igned with	Washed away insecticide in recently sprayed houses						
🌟 10.3m malaria	cases to	o-date	<ul> <li>Loss of belongings including insecticide treated nets (ITN)</li> <li>123 health facilities damaged or destroyed, potentially limiting access to malaria provention &amp; treatment</li> </ul>						
Response	e to Cyclone Fre	eddy							
Emergency Fund US \$952,391	Emerge control · Indoor (~26k h · Larvicio Bed ne (~600k) Emerge	ency vector flood response residual spraying nouses) de application t redistribution ency shelters	<image/>						

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Source: Global Fund

### 3 ~ 2022: Pakistan experienced record spike in malaria $\infty$ cases due to deadly climate-driven flooding & landslides



### Severe heat wave followed by monsoon rains and melting glaciers caused flooding and landslides



1,739 deaths



+

2k health facilities damaged or destroyed



US \$30m

# Grant funds

US \$18m



Mobile units and health camps



Provision of clean water, emergency food packs, and generators

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- Malaria control efforts
- Community-based tests and treatment
- Distribution of insecticide-treated nets
- Indoor residual spraying
- Education campaigns



Figure: Provision of malaria testing and consultation at a health camp set up in front of the mobile health unit

In response to the 539,534 cases reported July – Sept

Largely due to presence of stagnant water increasing mosquito breeding sites

# **2022: Somalia experienced most severe drought in 40 years following four consecutive failed rainy seasons**



### **Global Fund Disaster Response**



**Sthe GLOBAL FUND** IDP (internally displaced person): HCW (healthcare worker) <u>Sources</u>: Global Fund, <u>OCHA Aug 2022, IFRC Dec 2022</u> Drought led to deterioration of food security and<br/>severe risk of famine, as pastoralist Somalis<br/>depend on livestock for livelihood.Image: severe risk of famine, as pastoralist Somalis<br/>depend on livestock for livelihood.Image: severe risk of famine, as pastoralist Somalis<br/>depend on livestock for livelihood.Image: severe risk of famine, as pastoralist Somalis<br/>depend on livestock for livelihood.Image: severe risk of famine, as pastoralist Somalis<br/>depend on livestock for livelihood.Image: severe risk of famine, as pastoralist Somalis<br/>depend on livestock for livelihood.Image: severe risk of famine, as pastoralist Somalis<br/>displacedImage: severe risk of famine, as pastoralist Somalis<br/>displacedImage: severe risk of famine, as pastoralist Somalis<br/>displacedImage: severe risk of famine, as pastoralist Somalis<br/>displaced



*Figure*: Elderly woman carries a jerrycan of water from a borehole in Ladan, an informal settlement hosting nearly 3,000 displaced persons in Dollow. Most people living there have been displaced by drought (May 2022). *Photo*: <u>Claudia Rosel/IOM</u>

# <u>Adaptation</u>: Global Fund strengthens core building blocks of health systems that are critical for climate resilience

'Adaptation\*' in the Global Fund context is a module, intervention or activity that builds climate resilient health systems and programs, which are capable of anticipating, responding to, coping with, recovering from and adapting to climate-related shocks and stress, so as to bring about sustained improvements in population health aligned with Global Fund Strategy priorities, in the context of climate change.

### Modular Framework can be used to build climate-resilient health systems and programs

Illustrative examples of climate relevant uses for RSSH components of Global Fund grants

Module	Intervention	Climate relevant use	Module	Intervention	Climate relevant use
Monitoring and	Surveillance for HIV, tuberculosis and malaria	Identifying climate-driven changes in	Health Sector	Health sector planning and governance for integrated people-	Incorporating climate risks and
Systems	Surveillance for priority epidemic- prone diseases and events	V disease dynamics	Planning and Governance for	centered services Integration/ coordination across	opportunities into strategies,
Community	Capacity building and leadership	Community system resilience	Integrated People-centered	disease programs and at the service delivery level	planning, and approaches
System Strengthening	Community engagement, linkages and coordination	<b>ΨΨΨ</b> building to multiple climate shocks	Services	Supporting private sector engagement	
Health Financing	Community-led advocacy and	Mobilizing climate	Human Resources for	Community health workers: In- service training	Climate disaster preparedness
	monitoring of domestic resource mobilization	finance for health	Health (HRH) and Quality of	Education and production of new health workers (excluding	and response trainings
Systems	Health financing strategies and planning		Care	community health workers)	

\*Adapted from WHO definitions of climate resilient health systems and environmentally sustainable health systems

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Sources: Global Fund Modular Framework; WHO 2020

## Mitigation: Global Fund is supporting transition towards low carbon health systems through clean energy, waste management, and supply chain efficiency

'Mitigation\*' in the Global Fund context is a module, intervention or activity that supports low carbon and environmentally sustainable health systems and programs to improve, maintain or restore health, while *minimizing negative impacts on the environment* and *leveraging opportunities* to restore and improve it, for the benefit of the health and well-being of current and future generations aligned with **Global Fund Strategy priorities**.

waste

### Example: Healthcare waste management

"Measures that avoid waste production, promote the reuse, repair and remanufacture of products (where safe and practical to do so) ... and enhance resource efficiency will inevitably support decarbonization." Modular Framework can be used to build climate-sensitive systems and programs **Technical Brief** Avoidance, Reduction and Module Intervention Component Safe Management of Health Care Waste cation Period 2023-2025 **Health Products** Avoidance, reduction and RSSH Management management of health care S GLOBAL Systems

### \*Adapted from WHO definitions of climate resilient health systems and environmentally sustainable health systems

### **Recent analysis of supply chain** performance conducted to:



### **Improve environmental** friendliness of waste management

- 50% of countries showed ٠ opportunity to improve practices
- Countries using C19RM to improve waste management systems



### **Reduce waste from product** expiries

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Insights to drive country investments where needed

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# <u>Mitigation</u>: Clean energy like solar for healthcare delivery building advances low carbon health systems

### Solar for Health (S4H) is a UNDP initiative, supported in part by Global Fund.

- >1,000 health centres and storage facilities in 15 African countries solarized since 2017
- Ensures constant and costeffective access to electricity for uninterrupted health services, while also mitigating the impact of climate change and building resilience

### Solarized health centres in Zimbabwe



Solar photovoltaic systems installed in 405 health facilities between 2016-2020.<sup>2</sup>

6.5m people assured sustained & resilient access to healthcare

# Countries including solar in GC7 Funding Requests:\*

- Burundi
- Gambia
- Haiti
- Liberia
- Madagascar
- Mali
- Niger
- Somalia
- Zambia



\*Window 1 & 2 Global Funding Request submissions

## **Health Product Procurement**

NextGen Market Shaping provides a vehicle to advance priorities articulated in Global Fund's Climate Change and Environmental Sustainability Statement





Approximately half of our health product procurement goes through the Pooled Procurement Mechanism (PPM) – granting us more flexibility to select suppliers who promote good practices. December 2016, Global Fund formally committed to collectively advance environmentally and socially responsible procurement through engagement with suppliers of health products.

Global Fund is part of the UN Informal Interagency Task Team on **Sustainable Procurement in the Health Sector** (SPHS), working with partners on a comprehensive approach to sustainable procurement. Chair since 2022.



In 2022, the Secretariat finalized its **Responsible Procurement Framework (RPF)** which sets out our expectations of suppliers regarding their climate and environmental impact, fair labor practices and social sustainability.



In 2023, **piloting of RPF** and collection of baseline supplier information to assess maturity and assess potential risks and gaps that need to be addressed.

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# **Responsible Procurement Framework (RPF)**

Enabling integration of climate and environmental factors into Global Fund procurement

### Purpose

- Apply RPF to address critical risks and contribute to the achievement of UN SDGs.
- Provide Global Fund with **clear structure and practical tools** to mitigate environmental, social and economic risks related to its procurement activities.
- Help buyers to implement sustainability metrics and select the right tools to reduce the procurement risks related to the social, economic and environmental dimensions of the bottomline framework.

### **Triple bottom-line framework**

- Environmental: Protect the environment from externalities linked to supply operations
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  - Social: Safeguard human & labor rights, as well as occupational health & safety
- - **Economic:** Stimulate the economic development of emerging economies by applying best business practices

### Example application

### Insecticide-Treated Nets (ITN) tender



# Global Fund leverages its market influence to reduce carbon footprint of shipping and packaging standards

### **Reducing air freight shipments**

Global Fund works with countries and suppliers to improve procurement practices towards reducing emergency orders and opting for sea freight deliveries



### **Reducing packaging**



Global Fund has taken action to reduce plastic associated with ITNs

# ~5,700 metric tons of plastic waste reduced

Since 2018 when Global Fund recommended removal of individual plastic bags for the distribution of ITN

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**Sources:** Global Fund PPM Data and ITN Supplier data

## Global Fund is proactively exploring efficiency opportunities to save money and reduce carbon footprint of health product value chains

### **Objectives:** Mapping the ITN Distribution Value Chain Identify ways to improve the value for money of the ٠ **ITNs are largest health product spend** Global Fund's investment in ITN procurement, delivery categories (US \$500m annual spend), and distribution [cost, lead-time, and quality] representing in 2022: Inform areas to be prioritized for NextGen Market ٠ Shaping approach to drive environmentally sustainable ~25% of PPM spend procurement and supply chains >50% of global supply Contribute to the Global Fund's Climate Change and ٠ **Global Fund is exploring granular insights on** Environmental Sustainability Statement and approach cost, time, and environmental impact at each to Climate and Health Nexus stage of commodity distribution



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<u>Note</u>: PPM (Pooled Procurement Mechanism); ITN (Insecticide treated net)

# Responsible procurement practices at country level aimed at reducing waste and saving lives

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Example of Zambia and ARV packaging



# Program innovations can drive positive health and environmental outcomes while saving money

Example: Multi-month ARV dispensing practices (3 or 6 month refills)

### Health

- Less visits to pick medication
- Reduced costs of travel to clinic setting
- Improved retention among patients established on ART
- Indirect cost savings i.e., medical personnel able to attend to other patients

### **Environmental**

- Minimizes use of materials and resources through product lifecycle
- Reduced paper consumption
- More environmentally-friendly packaging

### Economic

Savings in transportation costs (including freight, inland transportation, handling and clearance charges)

- Warehouse space saved
- Easy to handle shrink packaging

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# Secretariat actions

We continue to look for opportunities to avoid, reduce and mitigate impact of our Secretariat operations



The Global Health Campus is a certified Minengerie building.

- Building energy is 100% renewable & 100% hydraulic
- 100% recycled paper is used 245



### **Green commuting**

Public transport, biking, and walking preferred by many GF staff

Green initiatives common (e.g., bike-to-work month)





Secretariat has adopted а hybrid working (including teleworking) through its Future of Work initiative, which brings both climate and cost benefits.

In line with its 2021 Statement on Climate Change and Environmental Sustainability, the Secretariat has undertaken a carbon footprint of its 2022 Secretariat operations in line with Greenhouse Gas (GHG) Corporate Standard Protocols International Organization for Standardization (ISO) and 14064-1:2019

- Travel is the main driver of the Secretariat's footprint
- Purchased goods and services is the second largest contributor



- Seek and use alternatives to  $CO_2$  heavy travel, including through virtual collaboration alternative
- Combining missions, avoiding short long-haul travel outside of Europe
- Advance travel planning ٠

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Secretariat is exploring options regarding offsetting unavoidable emissions – e.g., travel

# **Summary of content**



Global overview of the climate emergency

- Climate change and the Global Fund mission
- 3 Our approach





### A climate action framework seeks to protect HTM and RSSH gains in the context of an escalating climate emergency



# **Next Steps**

The following next steps are proposed to continue our response to climate change and play a leading role in addressing the climate-health nexus within our mandate

Global leadership and priorities to address climate and health linkages	Support countries to address and respond to climate change and resulting health needs	Further embed climate change & environmental considerations into Global Fund Supply Operations and Secretariat functions
<ul> <li>Engaging Heads of State, MOH/MOF champions, civil society, youth and advocates networks to keep climate change high on the health agenda and raise the profile of the health impacts of climate change on climate change agenda</li> <li>Progress on terms, definitions and transparent measurement methodologies on health and climate change including on finance, adaptation, loss &amp; damage and mitigation</li> <li>Promote alignment and joint funding approaches across global climate and health financing partners including the World Bank, Green Climate Fund and others</li> </ul>	<ul> <li>Continue to actively utilize grant flexibilities and the Emergency Fund as the first line of support to better prepare for and respond to climate disasters</li> <li>Continue to embed climate considerations into malaria grants and efforts to build RSSH, as well as HIV and TB programs</li> <li>Seek opportunities to utilize grant and catalytic funding to support country investments in climate and health priorities including digital health, solarization of health facilities and supply chain improvements</li> <li>Build evidence-base, country and CCM engagement to develop priority climate &amp; health interventions to integrate into GC8 and other areas of Global Fund work</li> </ul>	<ul> <li>Use the Responsible Procurement Framework and carbon footprint value chain analyses to continue to integrate climate and environmental factors into Global Fund procurement activities</li> <li>Continue to pursue efficiencies that deliver climate and environmental benefits including prioritized sea freight deliveries and reduced packaging</li> <li>Continue to look for opportunities to avoid, reduce and mitigate impact of our Secretariat operations, including analysis and actions to reduce our carbon footprint</li> </ul>

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## A range of climate-sensitive health risks are driven by exposure pathways and vulnerability factors



- Climate change impacts health and health systems via a set of vulnerability pathways, both <u>directly</u> and <u>indirectly</u>, and is strongly mediated by environmental, social and public health determinants
- Disproportionate impact on most vulnerable and disadvantaged – women, children, ethnic minorities, poor communities, migrants or displaced persons, older populations, and those with underlying health conditions

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