



Sectoral Guide on Health & Well-being

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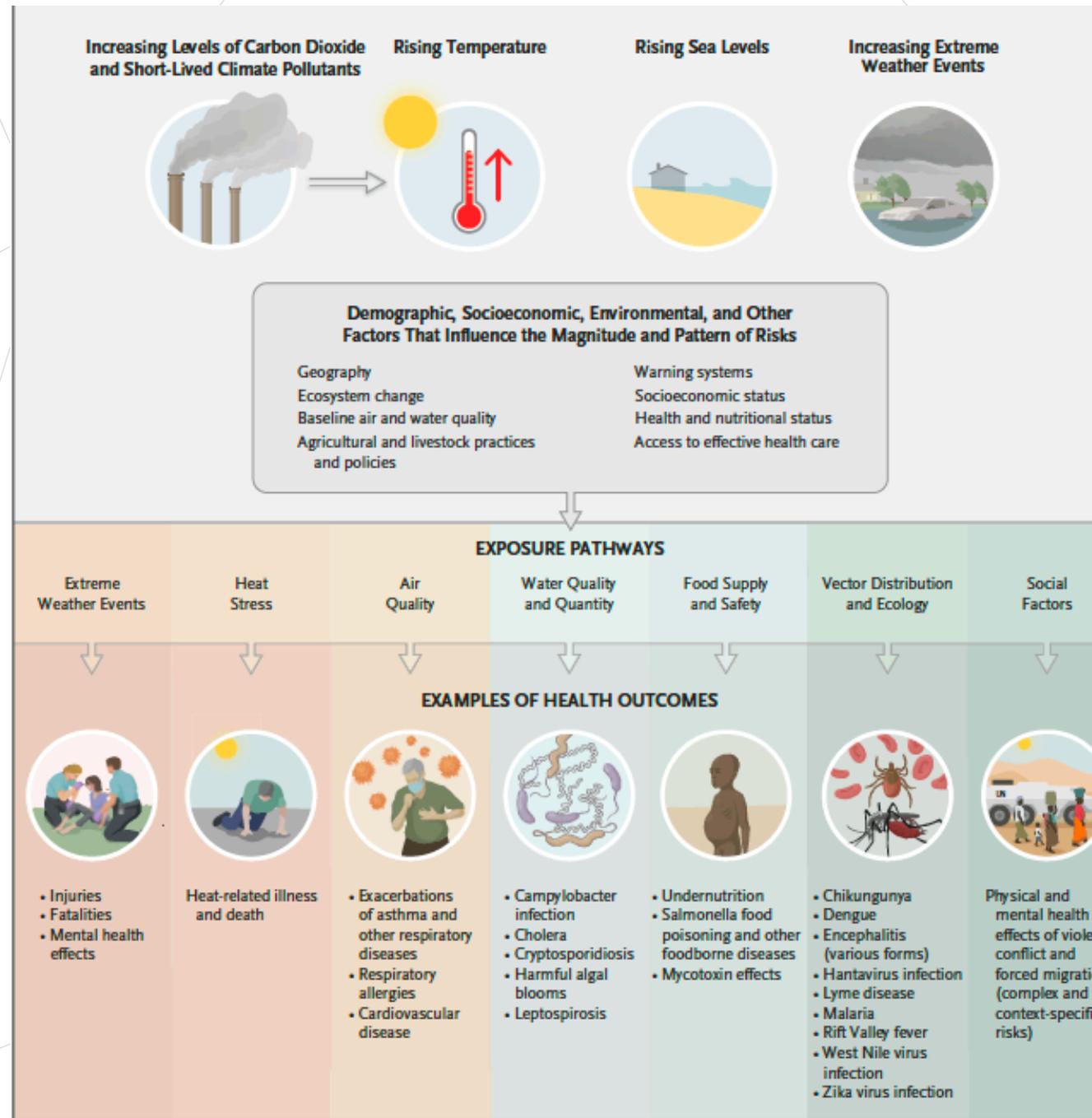
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1. Global Context

Major Health Risks Associated with Climate Change



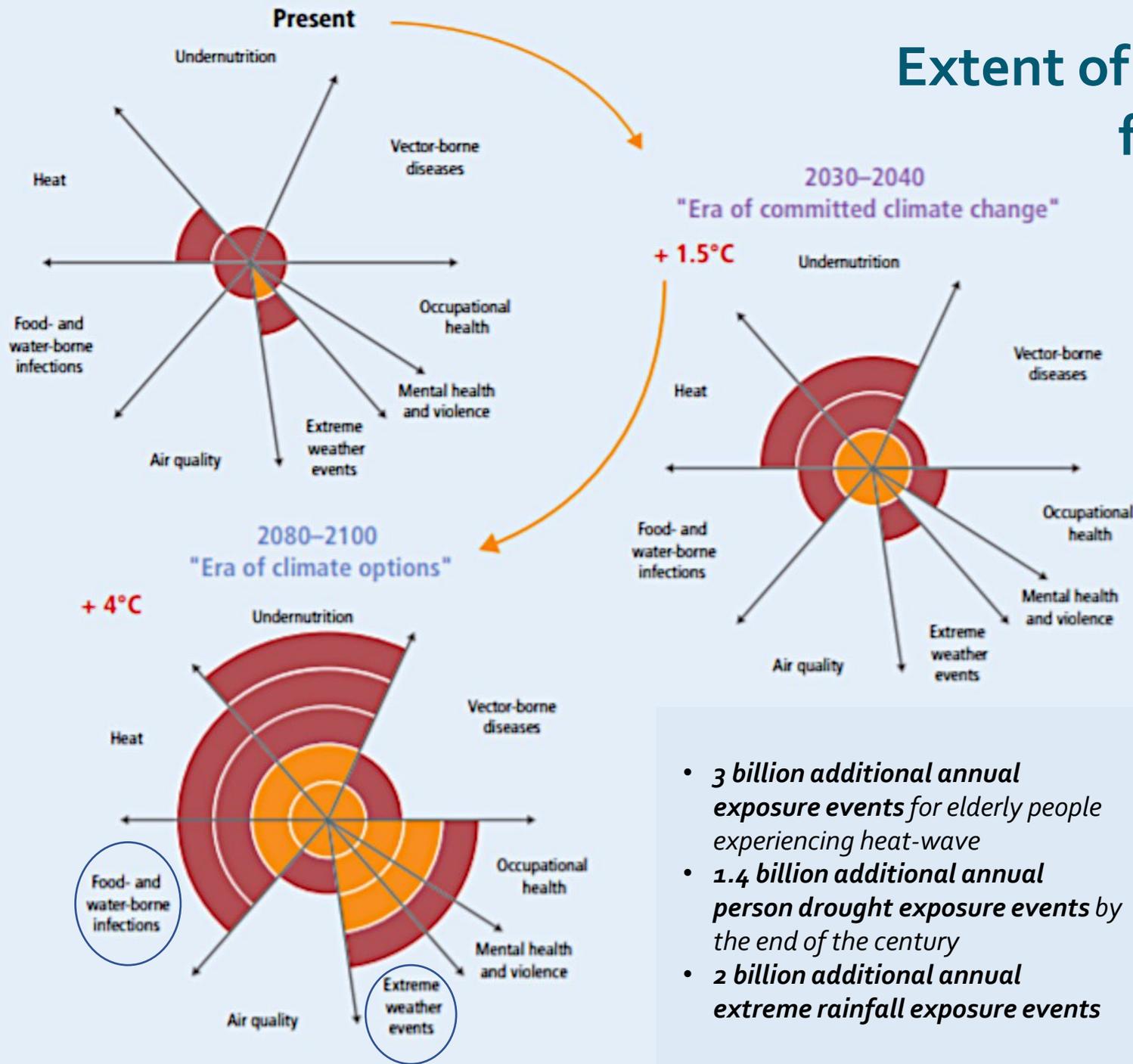
Source: Haines & Ebi 2019

Locations most Sensitive to Climate Change-related Health Risks

- Health risks are **unevenly distributed**
- **Sub-Saharan Africa** will be most affected by undernutrition
- **The tropics** will be affected most by **food and waterborne infection**
- **Extreme events** will affect most exposed and vulnerable

	DIRECT IMPACTS		ECOSYSTEM-MEDIATED			HUMAN INSTITUTION-MEDIATED
	HEAT AND COLD	FLOODS AND STORMS	VECTOR-BORNE DISEASE	FOOD AND WATERBORNE INFECTION	AIR QUALITY	UNDERNUTRITION
Geographies of greatest impact	Lower latitudes	Low-lying areas/ flood plains	Tropics—variable by disease	Tropics	SE Asia	Sub-Saharan Africa
	Cities	Coasts	Dengue: South American cities	Subtropics	Cities	East Asia and Pacific
	South Asia	Tropics	Leishmaniasis: desert	SE Asia	India	Latin America
	Sub-Saharan Africa	Asia	Encephalitis: Europe, Russia, Mongolia, China	Low-lying areas	China	Sahel
		Africa	Upland mountains with population pressure	Food insecure regions	Pakistan	Conflict zones
		Central/South America		Cholera—SE Asia	Sub-Saharan Africa household pollution	Upland mountains with population pressures
		Atolls				

Extent of health risks today and in the future, by level of adaptation



- In a +1.5°C warmer world, the greatest impacts will be in nutrition, heat, and food and water borne infections
- These will be followed by impacts to extreme events, mental health and occupational health
- In a +4.0°C warmer world, additional impacts on food and water borne diseases, extreme events will also be more common

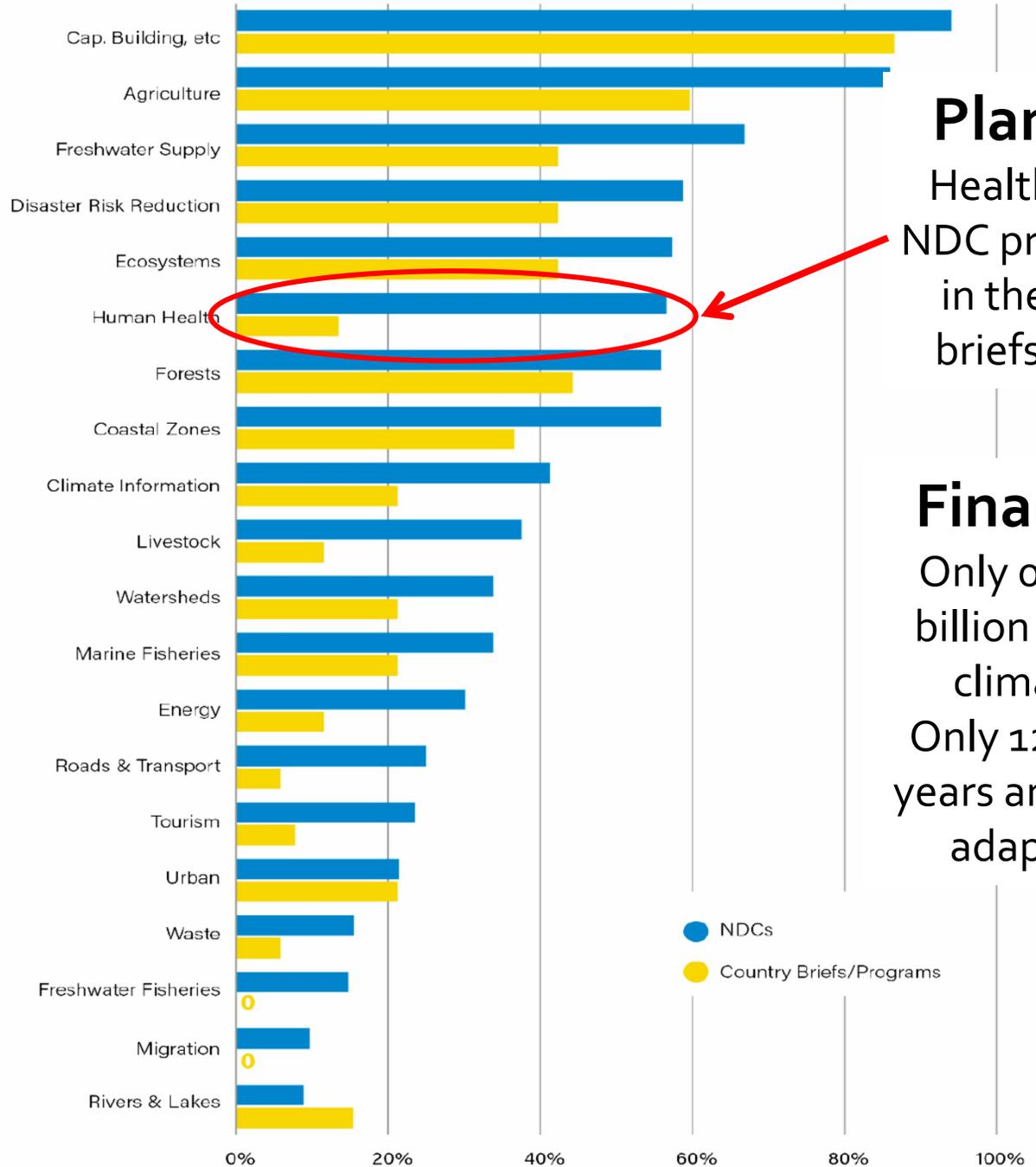
- **3 billion additional annual exposure events** for elderly people experiencing heat-wave
- **1.4 billion additional annual person drought exposure events** by the end of the century
- **2 billion additional annual extreme rainfall exposure events**

Where is the Sector Today?

- Health systems are not climate adaptive and not climate-resilient
 - Includes population health and health care facilities
- Few communities are protected from the health and wellbeing risks of climate change
- GHG emissions from health care facilities are about 4.4.-4.6% of worldwide emissions

Barriers to Adaptation and Mitigation in the Health and Wellbeing Sector

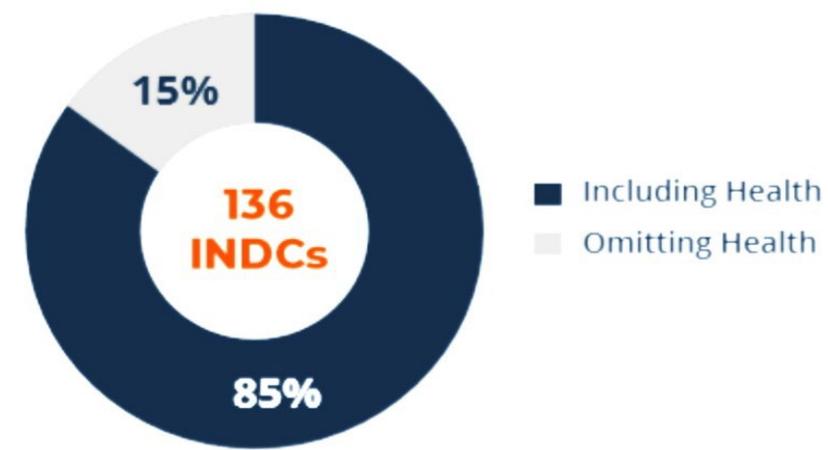
- Limited awareness of and information on the health risks of climate change and the benefits of adaptation, within and outside the health and wellbeing sector
- Insufficient technical knowledge and capacity
 - Insufficient surveillance and monitoring of climate-sensitive health outcomes
 - Limited expertise in data management and analysis
- Limited efforts to build partnership with local communities
- Insufficient collaborative mechanisms
- Financial and economic barriers include the availability of baseline resources available to the health sector



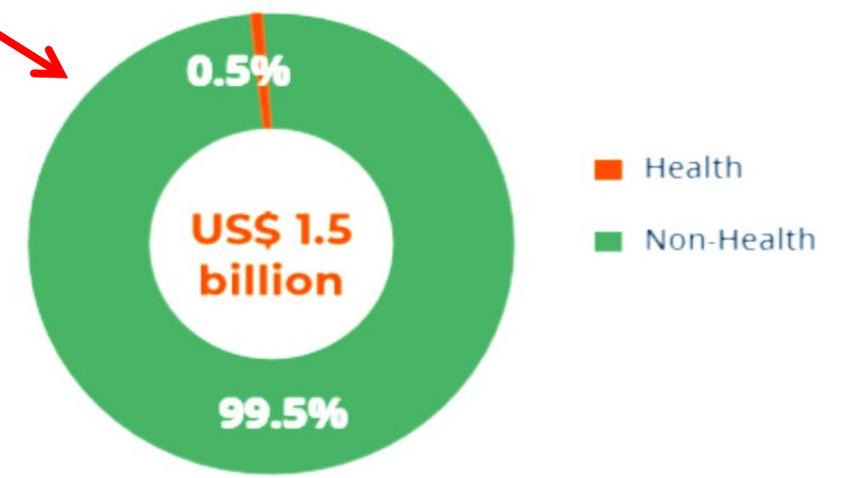
Planning Gap
 Health is high in the NDC priorities, but low in the GCF country briefs prioritization

Financing Gap
 Only 0.5% of US\$1.5 billion of multilateral climate projects. Only 12 projects in 10 years and only 3-8 % of adaptation funds

Inclusion of health in INDCs by Low and Middle-Income Countries



Disbursement of Multilateral Climate Finance



Source: WRI, based on data as of April 2018



2. Paradigm Shifting Pathways

Paradigm Shifting Pathways

PATHWAY 1
Promoting climate resilient health systems and services

Climate adaptive health systems and service

Health services preparedness and climate risk management for extreme events

DESIRED TRANSFORMATION
Health systems become climate resilient, low-carbon, and sustainable.

PATHWAY 2
Facilitating climate-informed advisory and risk management services and community action

Climate informed advisory and risk management services

Community action in climate and health

DEIRED TRANSFORMATION
Collection and integration of climate change and health data into climate-informed advisory and risk management services



Paradigm Shifting Pathways

- **Pathway 1** – promoting health systems and services that are climate adaptive and resilient to climate-related shocks and stress. Includes two sub-components:
 - Climate adaptive health systems and service
 - Health services preparedness and climate risk management for extreme events

Paradigm Shifting Pathways

- **Pathway 2** – facilitating climate-informed advisory and risk management services and community action. Includes two sub-components:
 - Climate informed advisory and risk management services
 - Community action in climate and health

Four drivers of paradigm-shift

Transformational planning & programming

- HNAPs integrated V&A Assessments and link with other sectoral NAPs
- Mainstream climate in health systems and services
- Pipeline development
- Enhance preparedness, risk management planning
- Scenario planning

Catalyzing climate Innovation

- People, institutions, resources capacities
- Plans, standards, policies, and procurement
- BCP and BCM
- Promote tele-health / tele-medicine

Mobilization of finance at scale

- Resilient health service providers
- Resilient infrastructure
- Supply chain management and private sector tele-health

Coalitions and knowledge to scale up success

- Knowledge platforms for sharing pilots, plans, models
- Best practices and lessons learned about health adaptation
- Sharing technologies and practices for managing risks

Promote climate-resilient health systems and services

Facilitate climate-informed advisory, risk management services and community action

- Climate into health advisory and risk management services
- Risk assessment, information for advisory and management
- Pipeline development
- Community adaptation

- Advisory, risk management
- Technology use
- Health surveillance
- Data-driven technologies and financing
- Community agriculture, food security projects
- Actions to prevent diseases
- Reduction of hazards
- Finance local programs

- Public and private health surveillance
- Health advisory
- Businesses in local community actions
- Community financial inclusion

- Sharing best practices and lessons learned
- Cross learning in health and Climate
- Community knowledge exchanges
- Participatory M&E, and learning

Paradigm-shifting pathways



3. Catalyzing Public and Private Sector Finance

Finance

- Delivering the paradigm shift for health and wellbeing will require mobilisation of finance at scale
- GCF has a role in delivering this, due to flexibility of financing instruments and ability to take more risks (test, demonstrate, unlock finance)
- Given nature of Health and wellbeing area (public goods, low revenue potential) grant finance will often be important, but are opportunities for loans, co-financing, blended and private finance
- Note that some aspects covered in related sector guide: Infrastructure (including Energy & Energy Efficiency) – for mitigation, Climate Information and EWS, WASH, Agriculture and food security

Financial Barriers

- Existing domestic budget deficits and availability
- Political economy – Ministries of Health in climate finance landscape
- Market failures (barriers to private investment)
 - Information
 - Positive externalities – social return higher than private return
 - Imperfect markets
- Lack of financial viability
- Access to finance at local and for most vulnerable

GCF Financial Portfolio

Instrument	Transformational Potential	Health examples
<p>Grants</p> <p><i>Readiness support</i></p> <p><i>Project preparation</i></p> <p><i>Technical assistance</i></p> <p><i>Results-based grants</i></p>	<p>GCF can support</p> <ul style="list-style-type: none"> -Planning and institutional capacity building, e.g. Health NAPs (and supporting health aspects in other sectors, e.g. other sector NAPs) -Monitoring and surveillance -Pipeline development, project identification, and project preparation -Project grant financing 	<p>GCF readiness grants for HNAPs and health related outcomes in Lao PDR.</p> <p>GCF grants for health alongside co-finance (Fiji Urban Water Supply and Wastewater Management Project).</p>
<p>Loans</p>	<p>GCF can provide</p> <ul style="list-style-type: none"> -Concessional lending to match long-term nature of public health-based investments -Finance to leverage co-financing -Concessional private sector loans 	<p>GCF Antigua and Barbuda's Resilience to Hurricanes in the Building Sector leverages grant funding to climate-proof critical public services and infrastructures including hospitals and clinics</p>

GCF Financial Portfolio

Instrument	Transformational Potential	Health examples
Guarantees and equity	<p>GCF can help to de-risk investment</p> <ul style="list-style-type: none"> -GCF can issue partial (first loss) risk guarantees -Can be an anchor investor in equity funds 	<p>Potential in private sector health and supply chains</p>
Bonds	<p>Targeted bonds can help overcome financing barriers to both public and private investment.</p> <p>GCF can provide partial credit guarantees to de-risk bond issuance, or support capacity building for the creation of health-resilience bond facilities</p>	<ul style="list-style-type: none"> • Resilience bonds • Vaccine bonds (GAVI) • Breathe Better Bonds (IFC)
Public-private partnerships	<p>Leverage private investment for public delivery</p> <p>GCF can play a role in technical assistance and institutional strengthening for climate-targeted or climate proofing PPP infrastructure</p> <p>GCF concessional finance can be used to engage private sector operators with acceptable risk-reward conditions</p>	<p>Relevant for health Infrastructure (e.g. hospitals) and potentially health services</p> <p>Examples in mitigation domain with health benefits (e.g. indoor cooking)</p>



4. Country Case Studies

Case study 1

Global Clean Cooking Program – Bangladesh (FP070)

GCF funding: USD 20 m

Total project funding: USD 20 m

Accredited Entity: The World Bank

*Cross-cutting
Bangladesh*



- **Climate drivers:** About 66 percent of Bangladesh' population live in rural areas, where women predominantly do the cooking using traditional, wood fueled stoves. Burning wood for cooking releases carbon dioxide, methane and black carbon. It also leads to deforestation and negative health impacts, causing an estimated 46,000 casualties every year in Bangladesh.
- **Project:** scaling up investments in improved cookstoves to increase demand and help extend the existing supply chain, together with technical assistance support to produce improved cook stoves, raise awareness, and carry out research and development of the stoves

Case study 2

Increasing resilience to the health risks of climate change in the Federated States of Micronesia (CN)

GCF funding: USD 9.475 m

Total project funding: USD 9.975 m

Accredited Entity: Secretariat of the Pacific Community

*Adaptation
Micronesia*

- **Climate drivers:** Climate change creating new risks to human health in FSM through increasing exposure to vector-, water- and food-borne diseases, and driving under nutrition due to crop failure
- **Project:** Will develop integrated climate and health information systems; and implement on-ground adaptation interventions in priority vulnerable communities to cope with vector-, water- and food-borne diseases



Case study 3

ASER Solar Rural Electrification Project (FP138)

GCF funding: USD 87.7 m

Total project funding: USD 143.3 m

Accredited Entity: Banque Ouest Africaine de
Développement (West African
Development Bank)

*Mitigation
Senegal*



- **Climate drivers:** Increasing temperature, extreme heavy rainfall events and reduced river flow, reduced rainfall and longer dry spell, and sea level rise leads to damages and challenges to power generation
- **Project:** electrification of 1,000 localities through distributed solar photovoltaic systems, with a capacity building component for the main stakeholders, thereby ensuring the promotion of an ideal sustainable environment provided through the solar mini-grids, as well as support for accessing funds to promote the generation of clean energy

Case study 4 (Non-GCF)

Africa: Solar for health



GCF funding: N/A
Total project funding: N/A
Accredited Entity: N/A

Zimbabwe, Zambia, Libya, Namibia, Sudan, and South Sudan

- **Context:** Energy poverty prevents access to healthcare for millions of vulnerable people around the world. Health clinics, maternity wards, surgery blocks, medical warehouses, and laboratories rely on electricity to refrigerate medicines, power the lights and operate life-saving medical devices. Intermittent or unreliable power source puts lives at risk.
- **Project:** support governments to install solar systems in health centres and clinics in rural areas to reach underserved communities, increasing climate resilience while contributing to climate mitigation, and generating economic savings on energy



5. GCF Investment Criteria

GCF'S SIX INVESTMENT CRITERIA

Impact

likely and measurable impacts – How many beneficiaries? How will mitigation actions result in low-emission sustainable development pathways and adaptation actions increase resilience?

Paradigm shift

How to ensure impacts continue and can be scaled up? Potential for knowledge exchange, learning, and replicability? Are new markets created?

Sustainable development

Align with international obligations, SDG priorities and GCF policies (e.g., gender, indigenous peoples)?

Recipient needs

How do the actions minimize exposures, and support development to respond to climate risks and impacts? Are monitoring and evaluation systems well established.

Country ownership

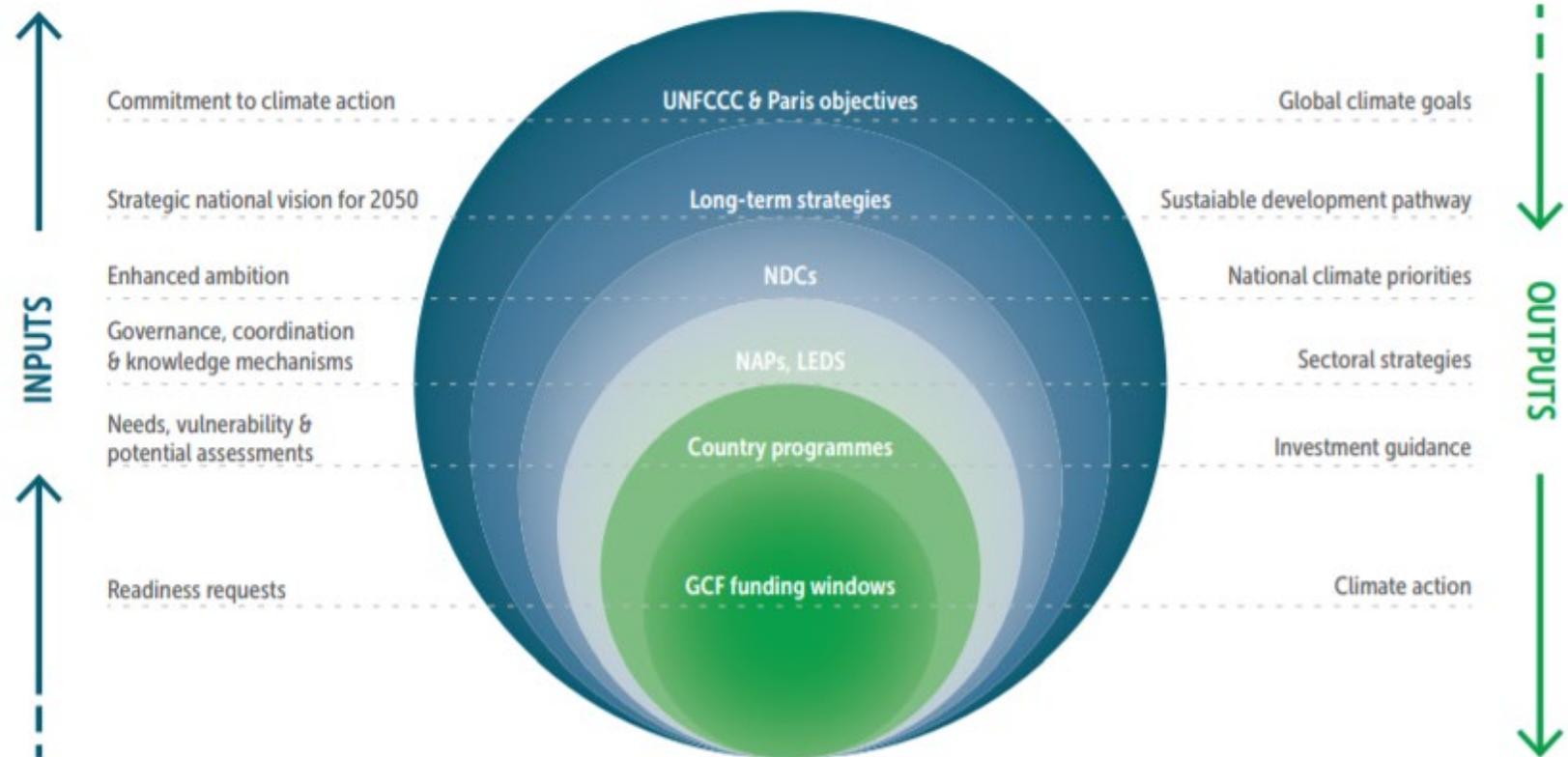
alignment with national policies (especially the NDCs and NAP). Supported by variety of stakeholders.

Efficiency and effectiveness

Sources of co-financing. What economic modelling assumptions have been made? Are the financial incentives aligned to the project/program? Are expected revenues sufficient to sustain investment?

CLOSING THE GAPS

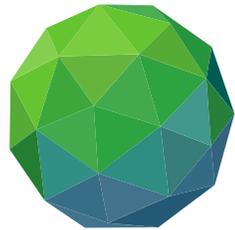
To provide support overcoming the challenges of the origination of funding proposals that are targeting “health” sector





THANK YOU!

Questions & Comments



GREEN
CLIMATE
FUND

**Raising
ambition.**
**Empowering
action.**