

Research for resilient health systems in fragile and shock-prone settings

Strengthening climate-resilient health systems: opportunities and challenges – policy brief

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Background

Climate change poses a significant threat to the stability of health systems around the world by escalating heat-related illnesses, intensifying extreme weather events and shifting infectious disease patterns. These climate shocks are increasing pressure on already-overburdened health systems, which also face the challenge of reducing their own contribution to greenhouse gas emissions from energy consumption, transportation and waste generation.

However, awareness of the need for health systems to develop resilience to climate change has grown significantly. This was demonstrated by the significant presence of the health sector at COP28, with over 50 health ministers and more than 140 countries endorsing the Declaration on Climate and Health¹ to confront interconnected challenges. This urgency was further underscored by the recent approval of a landmark resolution on climate and health by World Health Organization (WHO) member states at the World Health Assembly², marking a significant step forward.

This policy brief summarises key lessons from a webinar hosted by Rebuild for Resilience on Strengthening climate-resilient health systems: Opportunities and challenges in May 2024. It brings together learning on 'climate mainstreaming' in the health sector from three projects undertaken by Oxford Policy Management (OPM) to understand what mainstreaming means in practice and identify lessons for policy and implementation change.



View of flood-affected area of Multan, Pakistan in August 2010 Thomas Koch / Shutterstock

¹ COP28 UAE Declaration on Climate and Health (n.d.) https://www.cop28.com/en/cop28-uae-declaration-on-climate-and-health

² Fletcher, E. R. (2024, May 31). New climate and health resolution wins strong support from WHO member states. Health Policy Watch. https://healthpolicy-watch.news/new-climate-and-health-resolution-garners-strong-support-from-who-member-states/



Mainstreaming climate resilience into health policies in South Asia

In the context of health, successful mainstreaming means ensuring that health policies, programmes and projects consider climate resilience at every level.

The Action on Climate Today (ACT) programme³ was a regional technical assistance initiative aimed at supporting government implementation of climate strategies in South Asian countries. It facilitated climate mainstreaming into health sector planning at both national and sub-national levels. ACT's multifaceted initiatives, such as the Vulnerability and Adaptation assessment in Kerala, the Heat Island study in Odisha, and climate rationale assessment at health facility level in Nepal, enabled governments to adopt effective strategies to combat the health impacts of climate change.

The programme developed a comprehensive framework (as shown in Figure 1) for mainstreaming climate resilience into the health systems. This framework combined three key dimensions:

- The programme identified key entry points that matched government demand and fit with its objectives. For example, in various Indian states, ACT used the State Action Plan on Climate Change (SAPCC) as an entry point. Though initially not operationalized, SAPCC was leveraged to engage government actors, placing health and climate resilience on their agenda and clarifying implementation responsibilities. The possible options were assessed based on their ability to mitigate health and climate risks and achieve the most significant positive impact. Initiatives were reassessed regularly to consider if they should be expanded, changed or halted to enhance the health sector's climate resilience.
- 2. The programme engaged with enabling environments or systems. This includes institutional capacity, awareness, climate policy frameworks, the evidence base and financial mechanisms. A prime example of this approach is the climate and health vulnerability assessment conducted in Kerala. This work established a strong foundation of evidence on climate-related health risks and informed specific actions for addressing climate-related health disorders. The programme also facilitated cross-sectoral support, strengthening the state's climate action plan, institutional capacity and access to climate finance.

Political economy drivers **Enabling** environment Climate policy Awareness and frameworks understanding Stakeholder Institutional capacity participation **Evidence and Finance Entry points** research **Project** Scheme Regulation **Budget Policy**

This ultimately led to a robust health strategy for managing climate impacts.

The programme was also informed by a set of political economy drivers, reflecting political will, power dynamics, social structures and economic conditions. Understanding the political landscape helped enable actors to navigate potential roadblocks and identify how and when change can happen. The programme also prioritized assessing stakeholder interests and political will within governments. ACT used strong evidence generated from projects in Kerala, Odisha and Nepal to build a compelling case for change. This engagement process fostered momentum for tackling climate challenges within the health sector.

Figure 1 Framework for mainstreaming adaptation to climate change within governance systems

³ Oxford Policy Management (n.d.) Action on Climate Today: climate-proofing growth and development in South Asia. https://www.opml.co.uk/projects/action-climate-today-proofing-growth-development-south-asia



Mainstreaming climate resilience across the health system pillars in Pakistan

In recognition of the growing threat of climate change to public health, Pakistan's Ministry of Health commissioned a scoping study to identify major gaps and weaknesses in mainstreaming climate resilience within health policies, planning and implementation. Using the WHO's Operational Framework for Building Climate Resilient Health Systems⁴, OPM developed a comprehensive action framework for enhancing resilience to climate shocks. The resulting framework emphasizes the need for continuous collaboration from all relevant stakeholders and serves as a roadmap for building a better climate-resilient health system.

The study's findings shed light on critical gaps in Pakistan's health sector preparedness for climate change. Figure 2 provides an overview of the findings against the WHO Operational Framework. The findings illustrate the breadth of activities that are needed to fully mainstream climate resilience into health policies and implementation. These actions should be carefully sequenced to achieve quick wins and engage where demand is greatest.

This scoping study engaged stakeholders on mainstreaming climate resilience across health systems. The review led to impactful changes within Pakistan's health sector. Recommendations from the scoping review led to the inclusion of climate and health considerations in the next version of National Health Policy, establishing coordination mechanisms between the Ministry of Health and the Ministry of Climate Change, initiating climate health vulnerability assessments in three provinces, and developing capacity-building packages for health managers on climate and health issues.



Children in a flood-hit area of Ubauro, Pakistan Asianet-Pakistan / Shutterstock

(Overleaf) Figure 2 Findings of study on gaps and weaknesses in mainstreaming climate resilience in health policies, planning, and implementation⁵

4 WHO (2023). Operational framework for building climate resilient and low carbon health systems. https://www.who.int/publications/i/item/9789240081888

⁵ ReBUILD for Resilience Consortium. (July 2023). Health Systems in Pakistan: Climate Resilient. Retrieved from https://www.rebuildconsortium.com/health-systems-pakistan-climate-resilient/

Climate resilient health systems: Framework of action

- Designate focal points
- Nominate a joint technical working Notify coordination committees

climate change monitored

Include climate change

criteriaforfuture

(e.g., the GEF, Adaptation

Fund, bilateral donors)

in programs funded - Health impacts of

through financial

mechanisms specific to

nealth-determining

health determining sectors such as WASH,

ood security etc.

sectors

Development funding in Climate Change Funding

droub

Streams

Sectors Influencing

Health-Specific Funding

Health

International scoping resilient health systems

Mechanisms

of funds for climate

policies

Cross-sector Collaboration

- Strengthen community advocacy & engagement
- Conduct health impact assessments on new mitigation & adaptation policies

Review international policies to recommend changes in national Develop MEAL mechanisms

Develop curricula & health professionals/ training courses for Human Resources various levels of students

Update institutional contingency plans climate resilience with respect to

communication

Communications

Organizational

Capacity

& Awareness information material & strategy

Adaptation Options Establish M&E

Vulnerability vulnerability

- Collect information on existing human resource, technical and health service delivery capacity

mechanism for health risks associated with Review adaptation climate change

and identify gaps mapping with respect Conduct/complete assessment and risk

Develop baseline

indicators

to health systems

Monitoring Surveillance &

Disease

risks - Periodic review of health system capacity with respect vulnerabilities and to vulnerabilities for monitoring

climate changing

besongegrates

A line grates

One base

Vince base

Vi

network profile - Finalize the

Early Warning

3. Health Informati

Build Blocks

surveillance tools

update disease

- Review and

- Develop indicators

communication climate threats community for respondingto with effective

Communication

Promote/support Connect to Policy efforts with

assess health system GHGresearchers linked

Promote research to

Research Agenda

Explore link between dust

emissions.

storms and air pollution

across academia, and public sector

SupportResearch

Establish network of

Government agencies/ collaborative research development partners

*Source: KIIs & Literature Review

Policies and protocols

emergency response plans for health Review and update Risk management sectorcontingency plan for extreme Review and update preparedness and to future climatic conditions

empowerment Community

national all-hazards health emergency and disaster programs, based on risk and capacity assessm considering short and Review and update risk management

WAO Health S. Washington

Delivery of interventions

5. Service

requent occurrence of various climatic events potentially affecting communicable/non-communicable diseases and other programs

to include climate-risks considering geographical shift and future

mortality & morbidity

Review and update public health planning for maternal health,

Coordinated Management

Review and update on regulatory policies

Regulation

Monitoring

with respect to

energy, transport, climate, monitoring mechanisms with other sectors for e.g.,

food and agriculture &

management tools for climate

Develop intersect

 Conduct health impact assessments for policy/ programmes in related sectors building health system

resilience towards

6. Clim

Adaptation of current infrastructure & technologies

assessment of health sector Explore best practices for upgrading old buildings.
- Conduct GHG emissions

uptake.

Promotion of new technologies

a focus climate sensitive Identification evaluation & at health facilities in medications/drugs. new technologies for local feasibility assessment of

Sustainability of health

catastrophic climatic events with Evaluate supply chain integrity

Health programming



Climate finance to power healthcare facilities in Africa and South Asia

Securing adequate funding remains a critical challenge for health system planning, especially in low- and middle-income countries. As part of Sustainable Energy for All (SEforALL's) commitment to tackling climate change and enhancing healthcare investment, OPM analysed climate finance potential for boosting low-carbon, resilient healthcare solutions in South Asia and Sub-Saharan Africa⁶. Many people in these regions are served by healthcare facilities which rely on unreliable grid connections and/or expensive diesel or petrol generators. The study estimated that transitioning to clean energy solutions like stand-alone solar PV systems can save thousands of dollars from fuel savings, significantly reduce greenhouse gas emissions, and increase the facility's resilience to power disruptions during storms or other hazards.

The study findings underscore the need for a diversified approach to mainstreaming climate finance to strengthen health systems. Existing climate finance mechanisms include grants provided by multilateral funds, market-based and concessional loans from financial institutions, sovereign green bonds issued by national governments and resources mobilized through carbon trading and carbon taxes. There is no single 'best' solution for integrating climate finance into health activities and collaboration between health and climate finance experts will be needed.

Climate finance has the potential to supplement health sector resources in the right circumstances. However, several challenges must be addressed to unlock the full potential of climate finance for health. These include high upfront costs, fragmented government structures, a potential mismatch between funding and health priorities and a lack of awareness about available international funding.

This report emphasizes the importance of raising awareness about the benefits of investing in low-carbon healthcare solutions, particularly solar PV systems. The study underscores the necessity for coordinated efforts among stakeholders from the energy, health and climate sectors through collaborative platforms. The focus should be on complementary and additional funds, so that health system funding is protected.



Man carries a child and bag from his flooded house in Hyderabad, Pakistan in September 2011 Asianet-Pakistan / Shutterstock

6 Oxford Policy Management (n.d.) Climate Finance for Powering Healthcare. https://www.opml.co.uk/projects/climate-finance-powering-p healthcare



Conclusions from experience of mainstreaming climate change considerations into health systems

The three case studies illustrate the complexity of mainstreaming. The experiences in South Asia and Africa show the importance of identifying the right entry points, navigating the political economy and shaping institutions. This is essential to securing political interest that is needed to strengthen leadership, coordination, planning and budgeting.

- There is scope to secure climate finance that is complementary to existing health finance, for example for clean energy for health facilities. This finance should focus on mutual benefits and the sustainability of investments, and it should complement, not replace fundamental investments in health systems.
- Investment in collaboration is important. This includes cross-sector leadership within government, through working groups, joint action plans, institutional strengthening and staff that are explicitly tasks with working across institutional boundaries.
- Invest in helping health and climate practitioners understand and integrate climate and health data. This includes climate models, integration of climate data with health surveillance systems and use of vulnerability and risk assessments to inform targeting of health investments.
- Prioritize implementation research that examines the practicalities of "climate-proofing" health systems. Research needs to be multidisciplinary, emphasising the social and political dimensions required for climate resilience. This requires health experts, social scientists, and affected communities to work together to address real-world challenges, informed by political economy analysis to identify realistic opportunities for change.

Key Resources

- Action on Climate Today (2017). 'Mainstreaming adaptation to climate change within governance systems in South Asia: An analytical framework and examples from practice'. Retrieved from: https://www.opml.co.uk/sites/default/files/migrated_bolt_files/mainstreaming- adaptation-to-climate-change-within-governance-systems-in-south-asia.pdf
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The content of this policy brief was prepared based on the inputs of webinar presenters and discussants:

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The webinar was chaired by Dr Sushil Baral, Director of HERD International, Nepal.

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Research for resilient health systems in fragile and shock-prone settings

ReBUILD for Resilience examines health systems in fragile settings experiencing violence, conflict, pandemics and other shocks. Our aim is to produce high-quality, practical, multidisciplinary and scalable health systems research which can be used to improve the health and lives of many millions of people.



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