



BUILDING CLIMATE RESILIENCE IN THE HEALTH SECTOR

A better understanding of health challenges—and innovative, tailored approaches to them—has led to significant advances in global health in recent decades. However, more frequent and extreme events and more variable weather may increasingly threaten human health and test already weak health systems. These changes may reduce access to safe water and improved sanitation; alter disease transmission, distribution and prevalence; and foster illness-related heat stress. Extreme weather may additionally disrupt service delivery. Consideration of gendered social, economic, political and cultural practices is critical, as they shape vulnerability to climate-related health impacts. Sustained gains in global health and climate-resilient communities and health systems require a range of policies and investments.



Improved use of climate and weather information Mainstreaming adaptation into governance, planning and budgeting

Dissemination of risk-reducing management practices

Mobilization of finances for adaptation

To help people become more resilient to extreme or shifting weather, USAID supports activities in four key areas, known as building blocks.

When effectively implemented these building blocks create a foundation for climate resilient development.

Health Sector: Building Block 1

Improving the availability, quality and use of weather and climate information

THE CHALLENGE

In many developing countries, weather and climate information is rarely used in health decision-making because access to relevant, timely and actionable information is limited, and knowledge of how to apply it is low. Decision-makers often lack resources and skills to understand and anticipate the health impacts of extreme weather events and projected changes in temperature and rainfall. This hampers their ability to manage risk and adapt in both the near and long-term. Additionally, uncertainties about the relationship between climate and disease prevalence, the influence of non-climate factors such as transportation infrastructure quality, and the lack of epidemiological and environmental data challenge the development and implementation of solutions for managing health risks.

USAID APPROACH

Reliable weather and climate forecasts are critical to the feasibility of health-related early warning systems and other tools. USAID helps partner countries improve weather and climate services so that decision-makers and health service providers are better equipped to manage current risks and build resilience to future conditions. USAID prioritizes building technical capacity of stakeholders to consider timescales and spatial dimensions so that they are able to identify appropriate climate information and integrate meaningful and actionable recommendations into resilience plans. USAID uses a range of communication methods to ensure climate and early warning information reaches all populations.

ILLUSTRATIVE INTERVENTIONS

TECHNICAL ASSISTANCE

- Training health professionals to analyze the relationships between extreme events and health impacts on women, men and vulnerable groups, e.g., by developing or adjusting appropriate models, and to understand climaterelevant thresholds for emerging diseases, such as meningococcal meningitis
- Strengthening collaborations between data providers and users such as universities, NGOs, women's networks and public and private sector actors

WEATHER AND CLIMATE DATA APPLICATIONS

- Helping develop tailored information products and decision support tools, e.g., risk and hazard maps, seasonal forecasts, vulnerability assessments and early warning systems
- Strengthening existing disease surveillance systems through improved use of weather and climate information to identify potential hotspots, e.g., geographic zones, vulnerable populations, etc., and to diagnose, monitor and respond to climate-related health outbreaks and vector-borne disease

Using Climate Data to Reduce Health Risks

Using data already available via the USAID Famine Early Warning Systems Network (FEWS NET), malaria early warning systems in Senegal and Kenya estimate humidity to inform potential mosquito survival. Combined with surveillance and seasonal forecasts, the analysis helps with early identification of potential disease outbreaks.

In Mozambique, USAID supported establishment of a new public health observatory, which will routinely incorporate climate information into its analysis and surveillance of disease trends across the country.

Conditions for Success

Countries that effectively use data to inform sector programming and have a basic data infrastructure will find easy entry points for health data. This infrastructure includes: basic data on population, health and infrastructure; weather stations and computers; and data management processes and policies. Countries that lack this capacity may have difficulty sustaining the use of this data beyond the life of a project.



Health Sector: Building Block 2

Mainstreaming adaptation measures into governance, planning and budgeting

THE CHALLENGE

Health policymakers at the national level and officials at the sub-national and local levels may not fully grasp the extent to which weather and climate can influence health outcomes. In addition, institutional fragmentation and inadequate coordination among sectoral government agencies and across various levels of government can hinder the flow and integration of relevant information, leading to policies and plans that are disjointed rather than comprehensive.

USAID APPROACH

Because climate risks can be cross-cutting, USAID works with partner governments to identify opportunities to integrate climate considerations into existing decision-making processes. In the health sector, USAID assists stakeholders to frame their strategies and plans around assumptions about human behavior, disease and disease vectors, helping to articulate and bring them into alignment with broader national development strategies.

ILLUSTRATIVE INTERVENTIONS

TECHNICAL ASSISTANCE

- Improving emergency response and contingency plans to cope with increased risks associated with natural disasters and extreme weather events, with attention to specific risks to women, men and vulnerable groups
- Leveraging governance platforms at various levels to foster more inclusive and participatory dialogue on adaptation goals and public health objectives, and to translate adaptation goals into prioritized interventions through existing planning mechanisms
- Supporting gender mainstreaming into climate and health policy and action plans
- Facilitating coordination among ministries of hydro-meteorology, health, agriculture and environment by convening strategic working groups to align adaptation goals and objectives across relevant strategies and plans, such as food security
- Strengthening health systems by translating hydro-meteorological information into health outlook forecasts and related actions
- Supporting improved planning around the location and construction of sanitation and health facilities, especially where risks of weather variability and change are high, e.g., coastal areas
- Assisting decision-makers in identifying areas of high climate-sensitivity and vulnerability in order to focus adaptive capacity improvement efforts

Identifying Hotspots to Inform Decision-Making

In Indonesia, USAID worked with local governments to identify hotspots where sanitation and public health are likely to be affected by extreme weather and climate shocks, including cost-benefit analysis to help prioritize adaptation responses.

USAID is also supporting research to identify the location of climate-related health risks (e.g., hotspots) across sub-Saharan Africa. Identifying these hotspots will help policy makers develop targeted intervention strategies.

Conditions for Success

In countries where multi-sectoral collaboration is encouraged during policy formulation and policy enforcement is high, improved planning can lead to public health gains and reduced risk for people and assets. Countries that lack enforcement and accountability in planning and regulation are likely to see less progress. Interventions to identify entry points and champions within relevant institutions are likely to catalyze support for climate adaptation in the health sector.

THE CHALLENGE

Risk-reducing management practices for responding to health challenges during and after heat waves, droughts and floods, for example, should be reflected in public health plans. However, lessons from successful approaches may not be effectively disseminated or systematically shared with stakeholders, resulting in a lost opportunity to replicate or scale up good practices. Additionally, limited horizontal and vertical coordination – for example, among agriculture, industry, water and health actors at various levels – may hinder the dissemination of lessons learned from evidence-based approaches and prevent broad-based adoption of good practices.

USAID APPROACH

To put evidence into action, USAID captures, shares and disseminates lessons learned through pilot programs and supports the replication and scaling of successful approaches by facilitating collaboration among local universities, regional/international research organizations, and NGOs. USAID also seeks to strengthen partner capacity for knowledge management and monitoring and evaluation. USAID includes gender considerations in health sector adaptation approaches to increase their effectiveness and ensure efforts reach the most vulnerable populations.

ILLUSTRATIVE INTERVENTIONS

TECHNICAL ASSISTANCE

- Promoting the use of early warning systems and information dissemination, e.g., related to the heat index and high ozone days
- Increasing access to prevention measures such as broad scale immunization and mosquito nets as well as gender-informed behavior change interventions in health services
- Supporting campaigns to educate women, men and vulnerable groups on the risks and responses to climate-related health issues
- Training health workers to treat people who have experienced trauma resulting from severe weather and displacement

Promoting Collaboration and Evidence-based Analysis

In Mozambique, USAID piloted a multi-pronged approach to support the integration of climate information into health sector planning. This included facilitating collaboration between the national institute of health and the meteorological agency; improving the evidence base of how climate and weather variability will influence malaria and diarrheal disease prevalence across the country; and building awareness among local government stakeholders of climate risks to public health.

In Tanzania, the Vector Control Scale-up Project, under the President's Malaria Initiative, developed a malaria epidemic early detection and surveillance system to track cases and identify outbreaks following periods of heavy rainfall. The system provides real-time reports, maps and graphs that inform response trends.

Conditions for Success

Community engagement with vulnerable groups and other stakeholders throughout the design, implementation, monitoring and evaluation of adaptation interventions ensures local context.

Building in flexibility allows for interventions to respond to varying climate scenarios. Effective channels for outreach and communication and sharing results generates valuable feedback loops.

Health Sector: Building Block 4

Mobilizing finance for adaptation measures from multiple sources

THE CHALLENGE

Funding for climate change adaptation competes, often unsuccessfully, with other urgent public health and development concerns. In many countries where USAID works, a long-term approach to public health, guided by risk management, is difficult due to insecure long-term funding, a lack of interdisciplinary collaboration and poorly integrated information management. A lack of creditworthiness, limited capacity to develop technically sound and investment-worthy project proposals, limited public financial management capacity, and low revenue bases often constrain local and national governments.

USAID APPROACH

USAID recognizes the importance of working with countries to mobilize domestic resources while also acknowledging that public financing alone cannot meet the adaptation challenge. By encouraging monitoring and evaluation that captures and correlates weather and health data, and enables adaptive management for future weather and climate scenarios, USAID helps stakeholders generate adequate evidence to support funding for climate-resilient health approaches and increases awareness about the need and value for tailored climate services. USAID builds capacity to mobilize resources for health resilience programming that reaches all populations and focuses on scaling up and replicating successful approaches through innovative partnerships and by leveraging multiple sources of finance.

ILLUSTRATIVE INTERVENTIONS

TECHNICAL ASSISTANCE

- Strengthening public financial management and revenue administration
- · Promoting integrated operations and maintenance budgets for capital investments such as infrastructure
- Conducting cost-benefit analyses of adaptation options
- Supporting gender mainstreaming and women's participation in climate and health finance mechanisms
- Funding allocations to ensure inclusive and equitable resources
- Demonstrating use of smart incentives and guarantees to reduce risk

Experiences in Afghanistan and Kenya

In Afghanistan, USAID is helping the Ministry of Public Health advocate for increases in the health budget and implement strategies for more resilient health care programs and systems.

In Kenya, through the Piloting Climate Change Adaptation to Protect Human Health, WHO and UNDP supported the Department of Environmental Health and Ministry of Public Health and Sanitation in developing financing proposals targeting the Green Climate Fund and the Global Environment Facility/Special Climate Change Fund.

Conditions for Success

Transparent and socially inclusive budgeting, financial planning, and local revenue generation and retention authority create an enabling environment for mobilizing and allocating financial resources from multiple sources. Climate finance may act as a catalyst to unlock additional sources of finance, specifically private capital, and tighten the links between financial institutions, hospitals and health clinics, and small and medium enterprises. Clear incentives will help engage the private sector in financing interventions.