

Country Perspectives:

Eliminating Neglected Diseases in
Climate-Resilient Health Systems



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Letter to Partners

Elevating Country Leadership for Climate-Resilient NTD Elimination

Dear Partners,

As climate impacts accelerate—marked by increased flooding, rising temperatures, and disrupted ecosystems—communities already struggling with neglected tropical diseases (NTDs) face compounded health risks. We must heed the urgent calls of national leaders to support their efforts towards strengthening climate-resilient health systems that also advance elimination of NTDs. Our approach must center national and community leadership, which is fundamental for achieving sustainable outcomes.

The END Fund, together with the World Health Organization (WHO), Amref Health Africa, the African Leaders Malaria Alliance (ALMA), and other global and regional partners, has been collaborating with and supporting country leaders across Africa and the Western Pacific Islands to ensure their perspectives and strategies reach global decision-makers and funders. Through ongoing engagement and collaboration, these leaders have shared their strategies, challenges, and actionable insights, forming a critical foundation for designing climate-informed and resilient health responses. This collective experience has underscored the immediate need for targeted and collaborative action to overcome barriers to NTD elimination and ensure robust, climate-ready health systems.

Global decision-makers and funders must rally around the investment priorities set by country leaders to tackle the dual burdens of climate change and NTDs. Partners—including multilateral organizations, philanthropic foundations, and the private sector—each have a crucial role in advancing shared goals in two priority areas identified by these leaders:

Accelerate Investment in High-Impact Areas: Allocate resources to regions most vulnerable to the dual burden of climate change and NTDs, with a focus on diseases and areas nearest to elimination. Targeted investments in these regions can dramatically strengthen health systems and advance both disease elimination and climate resilience.

Strengthen Health System Climate-Resilience Through Multisectoral Partnerships: Expand investments in health system infrastructure and workforce training while fostering multisectoral partnerships that link health, environment, agriculture, and other sectors. These partnerships will ensure health systems are equipped to respond more effectively to climate shocks and reduce disease burdens sustainably.

At COP29, we urge global donors and partners to take bold action by aligning investments with the urgent priorities set by country leaders. Together, we can protect vulnerable communities, bolster national leadership, and create resilient health systems equipped to meet the challenges of a changing climate. Let's drive progress toward a healthier, more sustainable, and climate-resilient future for all.



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Executive Summary

Neglected tropical diseases (NTDs) affect over 1.6 billion people globally, with climate change threatening progress toward their elimination. Evidence increasingly highlights NTDs' climate sensitivity, underscoring the importance of investing in NTD elimination within low-emission, climate-resilient health systems. Such investments have a multiplier effect, advancing economic, educational, environmental, health, and prosperity outcomes.

While attention to climate impacts on health and neglected disease has rapidly increased since COP28, country leaders have been taking action on climate adaptation, mitigation, and resilient health systems over the last decade or so. The END Fund, working alongside partners, have been collaborating with and consulting country leaders to understand the challenges communities are facing, strategies making progress, barriers to overcome, and opportunities for funders to support their efforts.

This brief highlights case studies of countries facing the challenges of the dual burdens of the impacts of climate change and NTDs and the actions they are taking to build climate-resilient health systems. Consultations with contributors to this brief and desk research were conducted to inform each of the case studies featuring countries across Africa and the Western Pacific Islands. Throughout consultations leaders outlined actionable recommendations for donors to build on ongoing partner efforts to support country-led, climate-resilient health systems by elevating the leadership of those in countries and communities at the frontlines of the climate response. It emphasizes two critical areas for donor advocacy:

Accelerate Investment in High-Impact Areas: Allocate resources to regions most vulnerable to the dual burden of climate change and NTDs, with a focus on diseases and areas nearest to elimination.

Strengthen Health System Climate-Resilience Through Multisectoral Partnerships: Expand investments in health system infrastructure and workforce training while fostering multisectoral partnerships that link health, environment, agriculture, and other sectors.

Investments in these areas also contribute to a wide range of Sustainable Development Goals (SDGs), including SDG 1 (No Poverty), SDG 2 (Zero Hunger), SDG 3 (Good Health and Well-being), SDG 4 (Quality Education), SDG 6 (Clean Water and Sanitation), SDG 8 (Decent Work and Economic Growth), SDG 13 (Climate Action), and SDG17 (Partnerships). Integrating NTD elimination into climate-resilient systems addresses root causes of poverty and disease, enhances food security, reduces school absenteeism, and fosters inclusive development.

This approach also aligns with climate action goals by building adaptive capacity and reducing health risks exacerbated by climate change. Multisectoral collaboration across health, agriculture, and education strengthens these systems, driving sustainable progress not only toward global SDGs but also regional frameworks such as the African Union's Agenda 2063, the Paris Agreement, and the Common African Position on Climate Change. Global frameworks like the Addis Ababa Action Agenda and the Global Action Plan for Healthy Lives also provide a pathway to securing financing and effective implementation, laying the foundation for long-term development that benefits both people and the planet.

Introduction

"Across the globe, impoverished communities are bearing the burden of the climate crisis. Many of these same communities are also at high risk of contracting malaria and neglected tropical diseases."

- Dr. Daniel Ngamije Madandi, Global Malaria Programme Director, World Health Organization

Addressing Inequity Across Dual Burdens

The dual burden of climate change and health inequities disproportionately threatens low-income communities, worsening pre-existing development and health challenges. Indirect effects of climate change—such as flooding, droughts, and other extreme weather events—exacerbate the direct effects of diseases like malaria, dengue, and schistosomiasis. The African Union Climate Change and Resilient Development Plan recognizes the gravity of this challenge:

Human health will be negatively affected by climate change and its impacts, which can modify the transmission of diseases The death rate from climate change is 60 to 80% higher in Africa than it is in the next most vulnerable region (Southeast Asia) due to pre-existing vulnerabilities and the weakened ability of Africa to adapt to the impacts of climate change. These results imply that there will be up to 70,000 additional deaths in Africa by 2030 because of climate change.

Additionally, the World Health Organization's report "*Climate change, malaria and neglected tropical diseases: a scoping review*", underlines the challenge, noting, "climate change will perturb human health in profound and long-lasting ways ... there is already empirical evidence of climate change having amplified more than one-half of all known human infectious diseases." Recent research has since compounded these findings, highlighting the impact of climate change on dengue fever and schistosomiasis in Brazil and trends in dengue shaped by surface temperatures in the tropical Indian Ocean.

Leaders contributing to this brief share the perspective that overcoming these challenges requires building holistic, climate-resilient health systems that address multiple interconnected crises. National strategies must not only be designed to tackle the increase in vector-borne diseases due to climate shifts, but also related issues like agriculture, pollution prevention, and universal health coverage (UHC).

Partnering to Advance Country Leadership

Building on the momentum of COP28, partners across sectors within the broad-based climate and health ecosystem are working to gain clarity and create alignment, mobilizing action and ensuring that responses are integrated and resources are optimized in the global response. The END Fund has convened a growing coalition of partners working at the intersection of education, agriculture, climate

justice, economic development, research and development, philanthropy, policy, and health systems to ask similar questions and identify opportunities to best support the communities we serve. To complement the WHO's comprehensive scoping review, these multisectoral partners published a [policy perspectives paper](#) highlighting key recommendations and hosted a [partners forum](#) elevating country leaders advancing this work.

Future efforts must prioritize partnering with country and community leadership and ministries across sectors to ensure that every dollar invested in health is linked to broader climate resilience goals and supports communities on the frontlines, and equally that climate-oriented financing is more accessible to leaders in the health sector.

"We must be deliberate when bringing together different sectors. Various ministries and partners from mining, environment, and agriculture to health are required to facilitate pragmatic multi-sectoral action."

- Dr. Mercy Mwangangi, Senior Health Systems Strengthening Director of Amref Health Africa

Case Studies: Country Progress Towards Climate-Resilient Health Systems

“The most important place to develop resilience is within national health systems. This should include continued investments in capacity building of the health workforce, evidence generation, building climate-resilient infrastructure, developing early warning systems, fostering multi-sectoral partnerships, all with women and young people at the center.”

- Dr. Githinji Gitahi, Group CEO of Amref Health Africa

As the impacts of climate change increasingly intersect with global health challenges, building resilient health systems has become more urgent than ever. Countries are facing a complex web of interrelated threats, including rising temperatures, shifting disease patterns, and extreme weather events that disproportionately affect, and often displace, low-income communities. This collection of case studies sheds light on pioneering efforts to integrate climate adaptation with health system strengthening, drawing from a range of innovative approaches across diverse geographic and socio-political contexts.

The following case studies highlight partners who are actively driving efforts to integrate climate and health. Through consultations with these partners, we captured promising interrelated approaches, existing barriers and threats to progress, and solutions that could be considered in other countries. An emerging consensus among partners points to the need to adopt One Health approaches, integrate interlinking plans and policies across sectors, and position the elimination of neglected diseases within broader climate-resilient health systems development. These case studies are informed by insights, themes, and strategies unearthed through consultations with country leaders and in-depth desk research.

Drawing from experiences in Botswana, Ethiopia, Rwanda, Kenya, Senegal, Tanzania, and the Western Pacific Region, these case studies demonstrate the transformative potential of holistic frameworks that integrate human, animal, and environmental health systems to tackle climate-sensitive diseases like malaria, schistosomiasis, and dengue. While significant progress has been made, challenges persist, including the need for stronger infrastructure, sustained financing, multisectoral collaboration, and community-led solutions that center on equity.

By adapting these models across other contexts, the examples presented here emphasize not only the promise of integrated strategies but also the critical gaps that must be filled through global collaboration, targeted funding, and strategic advocacy. They provide practical insights that reinforce the urgency of advancing climate-resilient health systems worldwide.

Botswana: Integrating "One Health" for Disease Elimination and Climate Resilience

The Ministry of Agriculture has been a lead ministry in terms of animal health and vaccines and tools. They are now collaborating with the Ministry of Health to control vector-borne and other infectious diseases, sharing lessons from working with animal health to those working in human health."

- Joy Phumaphi, Executive Secretary, African Leaders Malaria Alliance (ALMA)

Context and Challenges

Botswana is projected to experience significant adverse health effects due to the impacts of climate change. Those effects are predicted to be driven by expected increases in the incidence of higher temperatures, floods, droughts and changing disease patterns. With a high incidence of climate-sensitive diseases, the [risk of vector-borne diseases such as malaria and dengue fever](#) is likely to increase by the 2070s and shift in regional and seasonal distribution. Increases in extreme weather events also threaten to disrupt healthcare infrastructure and food security.

Strategic Approach

Given these interconnected challenges, Botswana has implemented a "[One Health](#)" approach that integrates animal and human health to address vector-borne diseases exacerbated by climate change. The One Health approach ensures that environmental hazards such as vectors carrying infectious agents are managed to reduce risks to human health as interactions between animals, humans, and the environment occur. This approach involves collaboration between the Ministry of Agriculture and Ministry of Health, adapting successful and promising vector control strategies that target both human and animal health threats, such as tsetse fly control for sleeping sickness through aerial spraying of insecticides and use of bait technologies. Botswana is also adapting similar vector control approaches to target mosquitoes. These approaches are embedded in the National Malaria Control Programme, [Neglected Tropical Disease Masterplan](#), and [National Adaptation Plan](#), emphasizing interconnectedness across human, animal, and environmental health.

Results, Progress, and Future Needs

Botswana's approach highlights the important role of cross-sector collaboration in developing climate-resilient health systems. Integrating animal and human health into disease control becomes even more critical as climate change widens the geographic reach of vector-borne diseases. The "One Health" approach provides a scalable model for other countries aiming to tackle the dual burdens of climate change and health. However, challenges remain, including the need for updated healthcare infrastructure to withstand extreme weather and ensure adaptive response capabilities. Additionally, incorporating climate impacts across ministerial budgets and policies is crucial to success in operationalizing interconnected policies and long-term sustainability. Botswana can further strengthen its resilience by enhancing cross-sectoral collaboration and learning, expanding capacity-building efforts, and securing funding for adaptation measures.

Insights for Action

Botswana's experience demonstrates that cross-sectoral partnerships, when effectively integrated within a "One Health" framework, can strengthen climate-resilient health systems. This aligns with advocacy priorities for multisectoral collaboration and scaling similar models in other regions. Funders can enhance both NTD elimination and climate resilience by investing in these integrated strategies.

Ethiopia: Interlinking Policies to Operationalize a Holistic Climate-Health Strategy

"We can see this situation from two perspectives. There are some policies directly related to climate and health and others not directly related to climate but indirectly addressing their impacts in other ways."

- Dr Ashrafedin Youya, Emergency WASH, Climate Change & Health Expert, Ethiopia Ministry of Health

Context and Challenges

Ethiopia bears one of the [highest global burdens of NTDs](#), with 16 of 21 recognized diseases posing a significant public health challenge. Climate change has worsened this burden, leading to [significant health impacts](#), with increased heat waves, floods, droughts, and displacement altering disease patterns. Approximately 70% of Ethiopia's population lives in malaria-endemic areas, with outbreaks already a significant concern. Projected changes in temperature are expected to expand malaria's range into highland regions, while increased flooding will likely facilitate the spread of vector-borne diseases, such as schistosomiasis.

Strategic Approach

Recognizing these vulnerabilities, Ethiopia's [Health National Adaptation Plan](#), part of the Ministry of Health's broader [Climate Resilient Green Economy](#) strategy, integrates climate adaptation into health sector planning. The Ministry of Health has taken the lead with the [Guidance for Building Climate Resilient Health System](#) that provides clear guidelines for adaptation efforts, aligning with the [Health Sector Transformation Plan](#). Guidelines include tasks to be taken to ensure climate resilience, such as outbreak management plans in the case of extreme weather events, education for risk of new diseases, and linking disease surveillance and climate impact early warning systems.

The holistic approach incorporating multisectoral collaboration links key strategies, including the [Neglected Tropical Disease Master Plan](#) and the [WASH and Environmental Strategy](#), creating a unified response to both climate and health challenges. Leaders have emphasized ongoing efforts to increase awareness among stakeholders, from policymakers to healthcare professionals, and Ethiopia has invested in capacity building, such as training and at all levels to ensure effective implementation. By building adaptive capacity, ensuring responsiveness and the ability to cope with climate impacts, across sectors, addressing infrastructure gaps, and promoting sustainable health outcomes, this integrated strategy aims to enhance resilience and long-term health security.

Results, Progress, and Future Needs

Ethiopia's integrated approach has improved cross-sectoral coordination and adaptive capacity within the health sector, enabling more targeted responses to climate and health challenges. However, leaders point to continuing challenges in fully operationalizing and integrating these strategies across sectors, with healthcare and WASH infrastructure still requiring much-needed upgrades. Continued investment is essential to enhancing healthcare infrastructure, implementing the aforementioned linked climate and health policies, and expanding capacity-building initiatives for frontline health workers and communities, all of which are needed to further enhance resilience.

Insights for Action

Ethiopia's strategy demonstrates the importance of aligning health and adaptation efforts to build resilience. This aligns with advocacy priorities for supporting multisectoral planning and infrastructure development. Funders can amplify impact by investing in similar integrated strategies in other high-risk regions, strengthening both health systems and climate adaptation.

Rwanda: Multi-sectoral Approaches to Health Systems Adaptiveness

“When I was the Minister of Health of Rwanda, I saw first-hand the benefits of an innovative partnership between specialized UN agencies such as the World Meteorological Organization and the World Bank Group with the Rwandan Ministry of Environment and its national implementing agencies.”

- Dr. Daniel Ngamije Madandi, Director, Global Malaria Programme at the World Health Organization

Context and Challenges

Rwanda is highly vulnerable to impacts of climate change, as well as [8 of the 21 recognized NTDs](#). Despite progress in disease control, these gains are threatened by expected climate change trends. Diseases such as malaria and schistosomiasis, which are sensitive to shifts in temperature variation, are likely to spread into new areas as climate change alters transmission dynamics. With a warmer and wetter climate, malaria transmission may expand farther into the highlands, potentially [increasing incidence by up to 150% by 2050](#). Limitations in monitoring and responding to evolving disease patterns are compounded by infrastructure gaps and the need for stronger data systems.

Strategic Approach

To address these risks, leaders from Rwanda highlighted the importance of interlinked strategies, including the [NTD Strategic Plan](#) and [Nationally Determined Contribution](#) (NDC), which integrate interventions and metrics related to strengthening preventive measures and adaptation capacity into national policies. Metrics include “strengthen preventive measures and create capacity to adapt to disease outbreaks.” These interventions and related metrics are additionally included in Rwanda’s [Green Growth and Climate Resilience Strategy](#), ensuring a cohesive approach to climate and health.

Additionally, the [Rwanda Green Fund](#) has invested in “Strengthening Rwanda’s Weather and Climate Services to Support Development,” enhancing monitoring tools and technical capacity for data-driven decision-making. Efforts like the nationwide Air Quality Index—developed with the Rwanda Environment Management Authority, Ministry of Education, and Rwanda Meteorology Agency—showcase how integrated data systems are advancing climate adaptation and disease surveillance. This coordination is crucial for addressing climate impacts and monitoring climate-sensitive diseases, including NTDs.

Results, Progress, and Future Needs

The inclusion of climate resilience metrics, such as those related to preventing and adapting to disease outbreak and health related infrastructure strengthen Rwanda’s ability to predict and respond to climate-related health impacts. Promisingly, in 2022 WHO validated the elimination of sleeping sickness in Rwanda. Sustaining this progress, however, requires greater emphasis on locally led decision-making, increased investment in mitigation and adaptation, and scaling up knowledge among communities and partners. Rwanda’s data-driven, multisectoral approach—integrating climate action with health policies and collaboration with partners like the World Meteorological Organization—offers a model for other nations. Key elements include enhanced weather prediction, multisectoral coordination mechanisms, and investment in community-based adaptation measures.

Insights for Action

Rwanda’s approach demonstrates the effectiveness of integrating data systems with multisectoral collaboration to enhance health system resilience. This aligns with advocacy priorities for promoting multisectoral partnerships and data-driven decision-making. Funders should support similar strategies in other regions to advance global NTD elimination and climate adaptation.

Kenya: Health in All Policies for Climate and Health Resilience

"It is key to communicate to communities in ways that they can understand and enable them to make the right decisions for their own health. Policy and research development at the global level, must be broken down into understandable messaging and materials for the communities most affected."

- Nancy Chebichii, Research Officer at Kenya Medical Research Institute - CLEAN-Air Africa Research Unit

Context and Challenges

Rising temperatures and shifting rainfall patterns caused by climate change have made Kenya highly vulnerable to adverse health impacts. These include [the expected increase in incidence and seasonality](#) of heat stress, air pollution, asthma, vector-borne diseases (e.g. malaria, dengue, schistosomiasis, and tick-borne diseases), as well as water-borne, food-borne, and diarrheal diseases. Recent flooding, which damaged sanitation infrastructure, has already contributed to [outbreaks of NTDs like intestinal worms](#), illustrating how climate impacts are exacerbating disease transmission across the country.

Strategic Approach

Leaders highlighted how Kenya's approach to integrating climate and health reflects the critical importance of empowering communities by supporting local research and solutions while also building national capacity through trainings to implement intersectoral policies. Kenya's [National Adaptation Plan](#), guided by a Health in All Policies Approach (HiAP) articulated in the [Kenya Health Policy](#), aims to integrate climate change considerations across sectors and strengthen adaptive capacity. The [National Master Plan for the Elimination of NTDs](#) also utilizes a One Health coordinating office to support program operationalization that accounts for shifting climates. Additionally, Kenya has conducted [extensive training](#) to equip healthcare workers, policymakers, public environmental and health specialists, and scientists with skills in assessing climate risks, using WHO adaptation tools, and developing health adaptation plans.

The Pan-African Climate Justice Alliance (PACJA) has also been instrumental in promoting locally led, multisectoral collaboration to strengthen national leadership on climate and health. In Kenya and other countries where PACJA operates, it facilitates multisector platforms that bring together government entities, civil society, and local communities, like the [African Activists for Climate Justice \(AACJ\)](#) to improve Africa's influence in negotiations at regional and international negotiations, ensuring women, youth and local communities have a voice in shaping climate policy frameworks.

Results, Progress, and Future Needs

Kenya has built strong momentum in implementing its plans and strategies for disease elimination, particularly through integrated health and climate initiatives. However, scaling these efforts requires greater resources and deeper collaboration across sectors to sustain and expand progress. The potential for more severe climate impacts underscores the urgency of expanding efforts to create a fully climate-resilient health system.

Insights for Action

Kenya's strategy demonstrates the importance of integrating health across sectors to build resilience, aligning advocacy priorities for multisectoral collaboration and local empowerment. Funders can enhance resilience and support NTD elimination by investing in similar integrated approaches in other regions, fostering both health system adaptability and climate resilience.

Philippines and Western Pacific Region: Integrating Adaptation and Multi-Disease Plans

"Universal health coverage cannot be achieved without functioning health systems."

- Dr Kazim Sanikullah, NTD Lead at the World Health Organization Regional Office for the Western Pacific

Context and Challenges

Western Pacific Island nations contribute very little to global emissions and yet they face some of the most persistent and severe impacts of climate change including severe weather events, rising sea levels, and temperature increases. These impacts affect food security, health systems, and WASH infrastructure, while [increasing the risk of spread of vector-borne diseases](#) such as dengue fever. Projections suggest an increase in infectious diseases within both [low and high emissions scenarios](#), with potentially 150 million people in the Philippines at risk of malaria by 2070, and vectoral capacity of dengue fever reaching high endemic transmission levels.

Strategic Approach

The Philippines is advancing a paradigm-shifting [Multi-Disease Elimination Plan](#) that integrates efforts to control vector-borne diseases like dengue and schistosomiasis with climate adaptation strategies. It brings together technical, managerial, and financial integration across sectors and departments, including environment, education, and animal health, aligning national health initiatives with regional climate resilience frameworks, promoting coordinated action across sectors and levels of government. In Fiji, the concern for climate change is reflected in the [National Adaptation Plan](#) and national and [regional Pacific islands climate and health action plans](#), which demonstrate multi-sectoral collaboration to shape climate-resilient health systems development.

At the regional level, climate change is at the top of the agenda. Both the [Western Pacific Regional Framework for Action on Health and Environment on a Changing Planet](#) and the [Vision for WHO work with Member States and partners in the Western Pacific](#) outline thematic priorities and practical strategies for adaptation and mitigation. These frameworks, and others, highlight the need for a systems approach to UHC as the foundation and build upon the [Pacific Islands Action Plan on Climate Change and Health](#) that set the goal for all health systems in the region to be resilient to climate variability and change by 2030.

Results, Progress, and Future Needs

The integration of these strategies has strengthened sectoral coordination, allowing for more comprehensive climate adaptation measures across the region. However, significant challenges remain, particularly in securing donor support for smaller, underserved countries like Tuvalu and Nauru, where resource-constrained health systems hinder effective climate resilience efforts. Leaders emphasize that nationally led interventions are indispensable, with global support best directed toward priorities identified through local research and engagement with national partners to identify problems and strategic actions.

Insights for Action

Integrating disease elimination with climate adaptation in the Philippines and Western Pacific Islands underscores the need for multisectoral collaboration and equitable resource allocation. This aligns with advocacy priorities for supporting region-specific adaptations and scaling similar efforts in other vulnerable regions. Funders should focus on expanding these models to enhance resilience and health outcomes.

Tanzania: Coordinating Interlinking Plan Implementation for Sustainable Progress

"The UN and WHO guidelines can be helpful, but they need to be adapted for low resource countries. Engaging local leaders in the formation of these frameworks and bringing them into decision making is necessary."

- Dr. James Chrispin, Founder of Clinicians in Planetary Health of Global Health Hub Tanzania

Context and Challenges

Risks to human health caused by the impacts of climate change include increased malnutrition due to food insecurity, disease outbreaks, heat stress, and more. [Projections under a high emissions scenario](#), estimate that over 800,000 people annually will be affected by flooding between 2070 and 2100 in Tanzania. Increased flooding has extensive indirect health effects, disrupting food production, WASH infrastructure, and ecosystems that influence disease transmission, with neglected diseases expected to rise due to seasonal and temperature shifts.

Strategic Approach

Promisingly, Tanzania is making progress in developing climate-resilient health systems, largely through the implementation of its [Health National Adaptation Plan 2018-2023](#). The HNAP aims to mainstream climate adaptation into health policies by focusing on vector-borne diseases, water-related diseases, and the health impacts of natural disasters like floods and droughts. It aims to enhance disease surveillance systems, promote early warning systems for outbreaks, and integrate health priorities into national climate adaptation efforts, and emphasizes the need for resilient health facility, water, sanitation, and supply chain infrastructure to withstand extreme weather events to ensure healthcare continuity during disasters.

Additionally, Tanzania's [Master Plan](#) and [Sustainability Plan](#) for NTDs support long-term efforts through a participatory process with national and subnational stakeholders led by the Ministry of Health, emphasizing a HiAP approach and inclusion within UHC frameworks. Moreover, partnerships such as [Clinicians in Planetary Health of Global Health Hub Tanzania](#) have been developed to promote awareness and engagement at the community level about the health impacts of climate change.

Results, Progress, and Future Needs

Although Tanzania has made significant progress towards NTD elimination, with [treatments reaching over 40 million people](#) annually, that progress is under threat by the impacts of climate change. To maintain progress toward eliminating lymphatic filariasis and trachoma by 2030, barriers to progress must be addressed. Leaders raised the concern that while international frameworks, like those developed by the WHO and the United Nations, have been helpful to leaders in Tanzania in offering guidelines, they need further adaptation to fit the specific vulnerabilities of low-resource countries. One of the other key barriers Tanzania faces in advancing these efforts is the heavy reliance on external funding, which can be unpredictable. Leaders highlighted the need for sustainable internal financing mechanisms to support healthcare and WASH infrastructure and climate-informed workforce development tailored climactic and cultural variabilities across regions.

Insights for Action

National leadership and locally driven solutions remain crucial to sustaining progress. Funders should support internal financing mechanisms and adaptive strategies aligned with Tanzania's needs. Strengthening partnerships and fostering community engagement can enhance resilience, making Tanzania's approach a model for low-resource settings globally.

Senegal: Climate-Health Adaptation Through Multi-Sector Collaboration

“Successful countries prioritize evidence-based decision-making. Senegal is advancing in this area by building climate-health databases and developing indices for tracking and predicting disease transmission patterns.”

- Dr. Ibrahima Diouf, Climate & Health Consultant to the Senegal National Adaptation Plan Support Project

Context and Challenges

Senegal faces the burden of [multiple endemic NTDs](#), including lymphatic filariasis, schistosomiasis, and leishmaniasis. Climate change is [altering heat and precipitation patterns in Senegal](#), causing lengthier droughts, water scarcity, increased temperatures and floods with uncertain variability across regions. For example, as early as 2009, floods in Senegal displaced over 200,000 people, disrupting their livelihoods and access to care. Warming trends in Senegal are projected to increase disease risks, especially for malaria, lymphatic filariasis, and schistosomiasis.

Strategic Approach

To address these challenges, Senegal has made significant progress in integrating climate action into its health systems, driven by both national initiatives and international collaborations. The National Adaptation Plan for Climate Change in the Health Sector (HNAP) provides a framework aligned with Senegal’s commitments and strategic orientations of the [National Health and Social Action Development Plan](#). The HNAP framework supports implementation of climate-resilience policies, programs, and projects addressing the pillars of the health system, including governance, financing, service delivery, human resources, essential medical technologies, and the health information system.

In collaboration with the Ministry of Health and Save the Children International, Senegal has launched initiatives to utilize comprehensive risk assessments related to climate-induced hazards and help inform policies that protect the most affected populations by prioritizing adaptive health strategies. [The One-Health Surveillance Project led by the Institut Pasteur de Dakar](#) strengthens the surveillance of vector-borne diseases, such as malaria and dengue, through improved monitoring systems to track and control the spread of diseases exacerbated by rising temperatures and altered precipitation patterns. Moreover, Senegal benefits from initiatives such as the [Global Partnership for Sustainable Development Data](#) (GPSSD), which supports efforts to improve data collection and usage.

Results, Progress, and Future Needs

Senegal’s proactive stance in developing climate-resilient health systems reflects a broader commitment to addressing the intersection between health and climate change, positioning the country as a regional leader in climate-health adaptation. However, leaders pointed to the need for Senegal to improve data collection, build capacity to respond to climate induced health threats, and increased funding for climate adaptation within the health sector.

Insights for Action

To ensure progress towards a climate resilient health system in Senegal, funders can help by focusing on strengthening surveillance systems and local adaptation strategies. Investments in early warning systems will enable Senegal to better predict and mitigate the health impacts of climate change. Moreover, funders should focus on promoting community-based adaptation strategies, such as the bioclimatic architecture and reforestation initiatives in [Widou Thiéngoly Island](#), where localized interventions have proven effective in mitigating health risks related to extreme heat and environmental changes.

Key Lessons: Overcoming Barriers to Sustainable Health and Climate Resilience

Despite progress, local leaders still face significant challenges in bridging gaps within global multilateral systems and national climate-health policies and programs. The following lessons, derived from engagement with country leaders, should guide donors and policymakers in shaping strategies for building climate-resilient health systems:

Existing Inequities Across Systems

Contributors emphasized that many health systems in low-income countries are not sufficiently robust to support integrated climate and health initiatives due to existing inequities. Healthcare and WASH infrastructure, and medical supply chains, in resource limited regions are not equipped to withstand the shocks of climate impacts. Local stakeholders are too often left out of dialogue shaping global priorities. They should be engaged in the design, decision-making, and implementation of policies to ensure inequitable barriers are addressed.

“We are yet to see communities being involved to the degree they should be. The discourse on climate change has remained elitist. Much of the dialogue remains at the global level and only reaches the national level.” - Mithika Mwenda, Executive Director, PACJA

Gaps in Local Expertise to Operationalize Policies and Tools

Many countries face challenges operationalizing global and national policies into local action due to knowledge gaps. Contributors consistently stressed the need to equip local leaders with the tools and resources to implement and operationalize climate adaptation plans tailored to local contexts. Deloitte US and Project HOPE [published a report](#) earlier this year emphasizing the urgency of equipping the workforce for climate resilience with guidelines for stakeholders.

Data Gaps and Lack of Local Evidence

The absence of localized data on climate impacts, particularly for diseases like NTDs and malaria, hinders targeted interventions, especially in vulnerable regions like sub-Saharan Africa. Contributors consistently highlighted that current research often overlooks low-income, rural communities, limiting effective solutions, decision-making, and tools to translate local knowledge and research into action.

Financing and Resource Allocation

Contributors pointed to resource constraints, unpredictable financing and complex access mechanisms as key barriers to eliminating neglected diseases and building climate resilience. Efficient and equitable funding, with a focus on a *One Health* approach in underserved areas, is essential. To operationalize this approach, countries allocate resources for climate and health across ministerial budgets. Contributors emphasize the need for diversified financing from governments, private sector, philanthropy, and overseas development assistance.

Fragmentation and Barriers to Integration

Contributors raised fragmentation and siloed responses as a significant barrier to integrating climate-resilience and NTD elimination strategies. Ministries and sectors are not effectively coordinating, exchanging information, or informed. Country leaders should use National Adaptation Plans to link cross-sectoral policies and programs that facilitate collaboration and data sharing among different sectors, and coordinate implementation of the [One Health Joint Plan of Action](#).