



2025 CLIMATE AND HEALTH POLICY PRIORITIES FOR PAKISTAN

This document summarises key priority areas of focus for Pakistan, supported by evidence from the 2025 Global Report of the Lancet Countdown.

MAKE HEALTH FACILITIES CLIMATE-RESILIENT AND STRENGTHEN DISEASE SURVEILLANCE

1 In the face of increasingly intense floods in Pakistan and their impacts on healthcare infrastructure and disease outbreaks, strengthening the climate resilience of health facilities and deploying mobile clinics in high-risk districts are key priorities. Integrating flood and infectious-disease surveillance, including cholera, malaria, and dengue, into national monitoring systems can protect vulnerable communities, maintain essential services, and improve preparedness for climate-related health emergencies.

Floods are among Pakistan's most health-damaging climate change-related hazards, disrupting health services, supply chains, and emergency response capacity. In 2022, WHO reported that around 1,460 health facilities ($\approx 10\%$ of the total) were damaged or destroyed, sharply reducing access to care. With extreme rainfall projected to intensify¹, facilities will remain on the front line unless made climate-resilient.

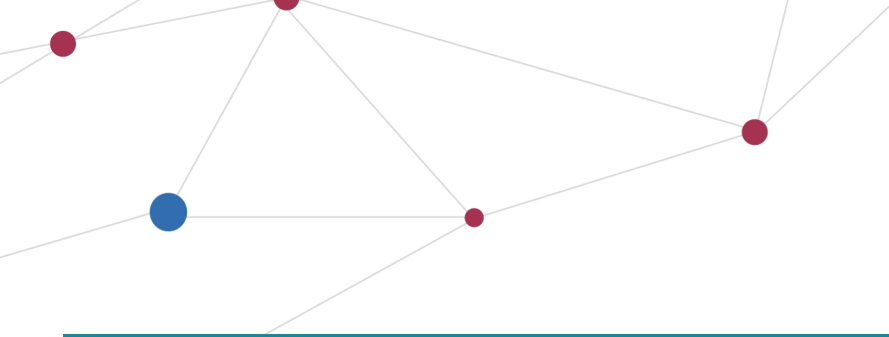
Flooding intensifies the spread of infectious diseases by contaminating water supplies, displacing populations, and creating stagnant breeding sites for vectors such as mosquitoes.² Following Pakistan's 2022 floods, dengue transmission surged, with 25,932 confirmed cases reported nationally.³ In 2015-2024, Pakistan has also experienced over 24% increase in dengue transmission risk, measured by the climate-defined basic reproduction number (R_0) for *Aedes aegypti* mosquitoes compared to 1951-1980 (**Indicator 1.3.1**). These trends underscore Pakistan's increasing vulnerability to climate-sensitive diseases and reinforce the importance of building integrated surveillance systems with rapid response capacity to detect and contain outbreaks effectively.

Pakistan has yet to adopt a Health in All Policies approach or fully integrate climate-sensitive disease surveillance into its health system. Strengthening coordination across health, environment, and disaster agencies, and investing in flood-resilient clinics with solar backup, cold chains, and integrated hydrological-disease surveillance through the Integrated Disease Surveillance and Response (IDSR) system can enhance early warning and continuity of care during floods, protecting communities and reducing preventable deaths.

DEVELOP AND IMPLEMENT A NATIONAL HEAT-HEALTH ACTION PLAN (HHAP)

2 In the face of increasingly intense heat exposure and recurrent heatwaves, protecting populations from this growing hazard requires developing and implementing a National Heat-Health Action Plan (HHAP). With graded heat alerts, SMS-based early warnings, community cooling centres, and heat-ready health facilities, and occupational safety standards, this plan can help protect health and the economy.

Extreme heat exposure has increased sharply across Pakistan. In 2024, people experienced over 1,400 hours of extreme heat stress during moderate activity, conditions that make outdoor activity unsafe and threaten lives and livelihoods (**Indicator 1.1.2**). The associated economic toll is severe: an estimated 33 billion working hours were lost in 2024, with agriculture and construction workers most affected (**Indicator 1.1.3**). Between 2012 and 2021, an estimated 25,302 deaths in Pakistan were attributable to heat exposure each year, 40%



higher than in 1990–1999 (**Indicator 1.1.5**). Projections from the World Bank indicate that heatwaves in Pakistan will become increasingly frequent and prolonged by mid-century, intensifying risks to health and livelihoods.⁴

Protecting lives and livelihoods requires the establishment of a national Heat–Health Action Plan (HHAP) with forecast-based SMS alerts, integration of heat surveillance into disease monitoring systems⁵, and cooling centres in high-risk districts. Health facilities also need upgrading to withstand extreme heat and maintain essential services year-round. Together, these measures can reduce preventable deaths, safeguard workers, and build resilience to escalating heat risks.

DEVELOP AND IMPLEMENT PROVINCIAL NUTRITION & CLIMATE ACTION PLANS

3

Addressing Pakistan’s persistently high levels of child undernutrition requires the development of provincial Nutrition and Climate Action Plans that integrate nutrition surveillance with climate forecasts, strengthen maternal–child nutrition programmes, and deploy climate-resilient nutrition clinics and supply chains.

Pakistan faces severe nutritional challenges, with 36% of children stunted nationally, rising to 40% in Sindh and 49% in Balochistan⁵. Recent research shows that higher temperatures and rainfall variability are significantly associated with reduced child growth indicators, including height-for-age (LAZ) and weight-for-length (WLZ) scores⁶. In 2022, 195,874 deaths were linked to insufficient consumption of nutritious plant-based foods (**Indicator 3.3.2**), while floods and prolonged droughts further disrupt harvests, limit food access, and reduce dietary diversity.

Provincial Nutrition and Climate Action Plans will be central to protecting children’s health under climate change. For these plans to be effective, they should link early warning systems with nutrition surveillance, strengthen local supply chains, and coordinate actions across health, agriculture, and social protection. Within this framework, scaling up programmes such as the Benazir Nashonuma cash transfer initiative with flood or drought triggers, pre-positioning Ready-to-Use Therapeutic Foods (RUTF), and expanding access to community-based nutrition services can ensure continuity of care during crises. Provinces can also integrate nutrition with water and sanitation programmes and promote exclusive breastfeeding and diversified diets to help reduce stunting, strengthen resilience to climate shocks, and build long-term human capital.

Accelerating Action

Urgent action is needed to address escalating health risks from heat, floods, infectious diseases, and undernutrition. Strengthening primary health centres, integrating flood and disease surveillance, implementing a national Heat–Health Action Plan, advancing provincial Nutrition and Climate Action Plans, and enhancing dengue preparedness will be vital to protect lives, reduce preventable deaths, and build a climate-resilient health system for Pakistan.

References

1. <https://doi.org/10.1016/j.atmosres.2019.02.009>
2. <https://doi.org/10.1017/dmp.2022.293>
3. <https://www.who.int/emergencies/disease-outbreak-news/item/2022-DON414>
4. https://climateknowledgeportal.worldbank.org/sites/default/files/2021-05/15078-WB_Pakistan%20Country%20Profile-WEB.pdf
5. <https://doi.org/10.1016/j.ajcnut.2025.01.003>
6. <https://doi.org/10.1016/j.ajcnut.2024.12.004>

Contributors

This document was written by Professor Zulfiqar A Bhutta, (Founding Director, Institute for Global Health & Development, The Aga Khan University, South-Central Asia & East Africa), and co-authored by Dr Shaukat Ali (Global Climate-Change Impact Studies Centre, Islamabad), Dr Jai K Das (Associate Director IGHD, AKU, Pakistan), Dr Abid Suleri (Executive Director, Strategic Development Policy Institute, Islamabad), Dr Ali Tauqeer Sheikh (Climate Change & Development Expert, Islamabad), Dr Mehreen Mujtaba (Health Services Academy, Islamabad), Dr Arif Goheer (Global Climate-Change Impact Studies Centre, Islamabad).

Review on behalf of the Lancet Countdown was provided by Mahnoor Saeed, MPP and Elise Digga, MPH.



For more of the latest data on health and climate change, you can find country data sheets by scanning the QR code.