

ADAPTATION FUND

An Integrated Approach to Physical Adaptation and Community Resilience in Northwest McKinnon's Watershed – Antigua and Barbuda.
PHOTO CREDIT: ADAPTATION FUND

THEMATIC BRIEF | JUNE 2026

HEALTH

The Adaptation Fund has supported developing countries with their adaptation needs by funding over **USD 269 million** across **37 projects** where health gains have been identified as an expected outcome, representing **16%** of the Fund's total portfolio. While health is not the primary goal of these projects, the Fund contributes to better health outcomes by addressing underlying drivers of climate-related health risks, including unsafe water, food insecurity, inadequate shelter, and exposure to climate-sensitive diseases.

Through grants in water and sanitation systems, resilient infrastructure, and food and agriculture, these projects are expected to reach more than **16 million beneficiaries** and support over **415,000 households**.

Overview and Strategic Relevance

Climate change poses growing risks to human health, especially in communities already facing limited access to safe water, nutritious food, adequate shelter, and basic services. Health co-benefits are most visible where adaptation investments reduce the conditions that drive climate-sensitive illness and economic disruption.

By funding water and sanitation systems, resilient infrastructure, food security, ecosystems, and livelihoods, the Adaptation Fund helps lower exposure to risks such as unsafe water, malnutrition, heat stress, flooding, and vector- or water-borne disease.

These benefits extend beyond individual health outcomes, they can reduce pressure on households and public systems by helping avoid illness-related costs, disruptions to work and school, and losses in productivity. In this way, projects that are not primarily designed as health interventions can still



Pa Enua Action for Resilient Livelihoods (PEARL) – Cook Islands

PHOTO CREDIT: UNITED NATIONS DEVELOPMENT PROGRAMME

The Adaptation Fund Portfolio in Health

The Adaptation Fund supports health co-benefits through projects whose primary goals fall across five Global Goal on Adaptation (GGA) thematic areas: water and sanitation, infrastructure and human settlements, food and agriculture, ecosystems and biodiversity, and poverty eradication and livelihoods. Of the **37 projects** where health outcomes are expected as co-benefits, the largest concentrations are in **water and sanitation (35%)**, **infrastructure and human settlements (28%)**, and **food and agriculture (21%)**.

Figure 1.1: Share of Adaptation Fund portfolio with 'health' co-benefits, by primary GGA theme (**in % of total funding amount & USD million**).

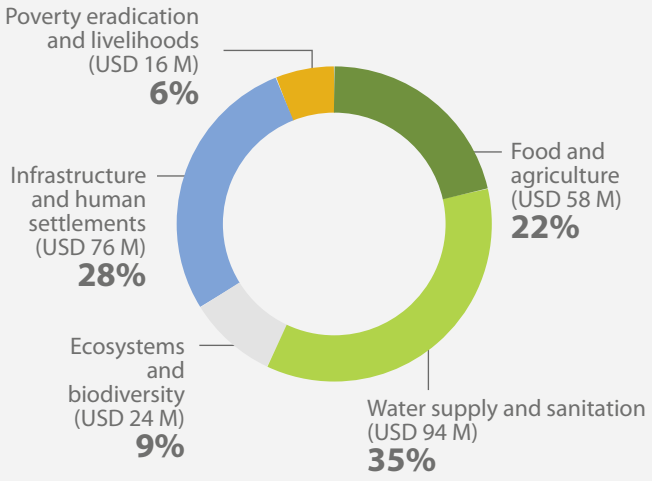
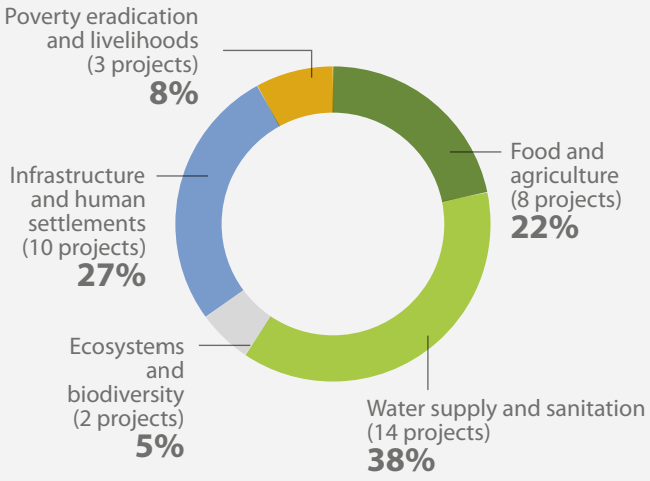


Figure 1.2: Share of Adaptation Fund portfolio with 'health' co-benefits, by primary GGA theme (**in % & number of projects**).



The portfolio has a strong presence in the most vulnerable countries: 19 of the 37 projects (51%) are in Least Developed Countries or Small Island Developing States. Geographically, Asia-Pacific has the highest concentration of these projects (46%), followed by Africa (24%) and Latin America and the Caribbean (22%).

Project delivery also reflects the Fund's commitment to direct access, with **32%** of projects led by **National Implementing Entities**.

Figure 2. Geographical distribution of projects with 'health' co-benefits, by type of implementing entity. Distribution of Adaptation Fund funding that have 'health' co-benefits, by region, broken down by the type of implementing entity responsible for project delivery.

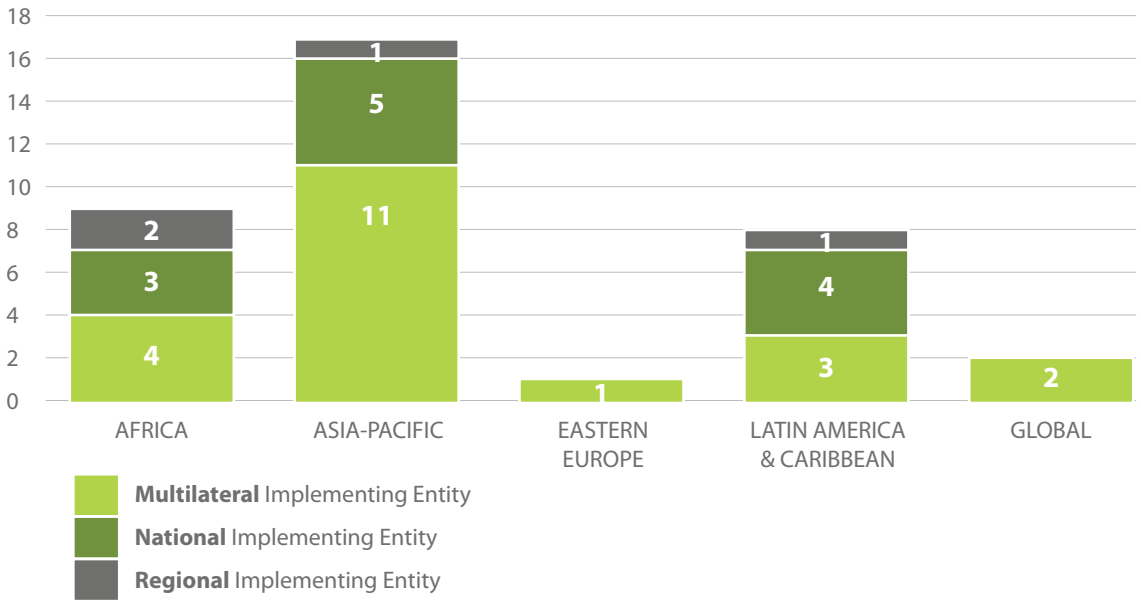


Figure 3.1: Share of Adaptation Fund portfolio with 'health' co-benefits, by implementing entity type (**in % of total portfolio & USD million**).

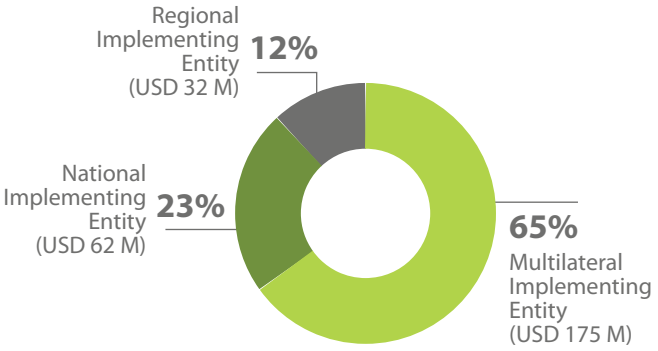
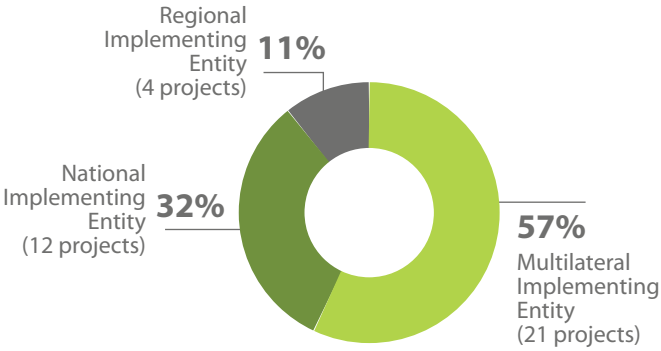


Figure 3.2: Share of Adaptation Fund portfolio with 'health' co-benefits, by implementing entity type (**in % & number of projects**).



Note: *Adaptation Fund 'health' co-benefits portfolio: USD 269 M across 37 projects*

CASE STUDY:

MALAYSIA



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Nature-Based Climate Adaptation Program for the Urban Areas of **Penang Island**

Country:	Malaysia
Implementing entity:	UN-Habitat (MIE)
Amount:	USD 10,000,000
Project duration:	2022-2027
Status:	Under Implementation

Penang Island's urban areas are increasingly exposed to two compounding climate hazards: rising heat and flooding, both of which pose direct public-health risks. Average temperatures in Bayan Lepas increased by 1.5°C between 1951 and 2018, while rapid urbanization has intensified the urban heat island effect, with surface temperatures in urban areas reaching up to 8°C higher than surrounding natural areas. In parallel, increasing rainfall and worsening flood events are placing people, infrastructure, and livelihoods at risk. Resident consultations in George Town have identified a rise in heat-related illness among elderly people and children. Awareness of climate-related illness among the community and health practitioners remains low, and such cases are often not systematically diagnosed, limiting the health system's preparedness.

The Adaptation Fund is providing USD 10 million to implement nature-based solutions across the George Town and Bayan Lepas mukims. The program combines urban greening, blue-green corridors, and stormwater management infrastructure with community resilience initiatives and a dedicated climate-related public health program. A key feature is Malaysia's first public health initiative to systematically monitor heat-related illness in selected hospitals, alongside efforts to strengthen understanding of climate-sensitive diseases and improve the health sector's capacity to respond to climate risks.



Nature-based Climate Adaptation Programme for the Urban Areas of Penang Island – Malaysia

PHOTO CREDIT: ADAPTATION FUND

EXPECTED OUTCOMES

The project aims to reduce urban surface temperatures and flood exposure through nature-based infrastructure, while building institutional capacity to track and respond to climate-related health risks. In addition to delivering urban cooling and improved stormwater management and establishing a dedicated climate-related public health program, the project expects to improve surveillance of heat-related and climate-sensitive diseases and build awareness and preparedness among healthcare professionals, vulnerable communities, and local decision-makers. Other expected outcomes are as follows:



Nature-based Climate Adaptation Programme for the Urban Areas of Penang Island – Malaysia
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Category	Expected outcomes
Beneficiaries	343,736 direct and indirect beneficiaries.
Early warning systems	One peer support network on mobile application for disaster preparedness.
Households	343,739 households with increased income or avoided decrease in income.

Source: Nature-based climate adaptation program for the urban areas of Penang Island, Project Document (2022)



Nature-based Climate Adaptation Programme for the Urban Areas of Penang Island – Malaysia
PHOTO CREDIT: ADAPTATION FUND

CASE STUDY:
LAO PEOPLE'S DEMOCRATIC REPUBLIC



Enhancing the climate and disaster resilience of the most vulnerable rural and emerging urban human settlements – Lao PDR.
PHOTO CREDIT: ADAPTATION FUND

Enhancing the Climate and Disaster Resilience of the Most Vulnerable Rural and Emerging Urban Human Settlements in **Lao People's Democratic Republic**

Country:	Lao People's Democratic Republic
Implementing entity:	UN-Habitat (MIE)
Amount:	USD 4,500,000
Project duration:	2017-2024
Status:	Project Implementation Completed

The Southern Lao People's Democratic Republic is highly exposed to climate-driven floods, droughts, storms, and landslides, which often trigger disease outbreaks and damage critical infrastructure. Flooding and water contamination contribute to outbreaks of diarrhea, typhoid, and other waterborne diseases, while dengue and malaria remain significant public health concerns in vulnerable communities. The impacts are felt acutely in the communities of Attapeu, Sekong, and Saravane, where high levels of poverty, limited access to basic services, and the remoteness of many ethnic minority communities increase vulnerability to climate and health risks.

Since 2017, the Adaptation Fund has provided USD 4.5 million to UN-Habitat to strengthen the climate and disaster resilience of the most vulnerable rural and emerging urban settlements. The project aims to increase sustainable access to climate-resilient water, drainage, sanitation, and health-related infrastructure, while building institutional and community capacity to plan for and respond to climate hazards and disease outbreaks. Implementation is guided by a participatory, community-driven "People's Process", through which communities help identify, prioritize, construct, and maintain locally appropriate resilience investments.



Enhancing the climate and disaster resilience of the most vulnerable rural and emerging urban human settlements – Lao PDR.
PHOTO CREDIT: ADAPTATION FUND

ACHIEVED OUTCOMES

The project strengthened the health resilience of vulnerable communities in Attapeu, Salavan, and Sekong provinces by expanding access to reliable and climate-resilient water supply systems. By improving year-round availability of safe water for drinking, cooking, and household use, the project helped reduce exposure to water insecurity and climate-related health risks associated with floods and droughts. Communities reported improved access to clean water for drinking, cooking, and household use, while many households gained access to piped water and water taps for the first time. The final evaluation also noted that people's health had improved as a result of access to clean water and that communities were able to access water throughout both wet and dry seasons, strengthening resilience to climate-related water insecurity.



Enhancing the climate and disaster resilience of the most vulnerable rural and emerging urban human settlements – Lao PDR.
PHOTO CREDIT: ADAPTATION FUND

Category	Achieved outcomes
Beneficiaries	More than 100,000 direct and indirect beneficiaries reached through ecosystem restoration, climate adaptation, and livelihood interventions.
Points of infrastructure	422 km of biophysical flood control and water management structures established, including 250.2 km of demarcated riverbanks.

Source: Terminal Evaluation of "Enhancing the Climate and Disaster Resilience of the Most Vulnerable Rural and Emerging Urban Human Settlements in Lao PDR (2024)



Enhancing the Climate and Disaster Resilience of the Most Vulnerable Rural and Emerging Urban Human Settlements – Lao PDR.
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Methods

Data are drawn from the Adaptation Fund's portfolio database (226 projects as of June 2026), which is classified using the GGA thematic areas typology based on project documentation. Core indicator values represent expected or achieved results as recorded in approved project documents or evaluation reports respectively, extracted through an AI-assisted protocol.



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