

ADAPTATION FUND

Enhancing Climate Resilience in San Cristóbal province, Integrated Water Resources Management and Rural Development Programme – Dominican Republic.
PHOTO CREDIT: ADAPTATION FUND

THEMATIC BRIEF | JUNE 2026

ECOSYSTEMS AND BIODIVERSITY

The Adaptation Fund has supported developing countries with their adaptation needs by funding over **USD 280 million** in **38 projects** where supporting climate-resilient ecosystems and biodiversity initiatives is the primary goal, representing **17%** of the Fund's total portfolio.

Through these grants, the Fund has helped to strengthen ecosystem services and natural resources such as wetlands, coastal zones, and watersheds, enhancing adaptive capacity to key climate-related hazards.

These projects are expected to reach over **9 million beneficiaries**, increase or protect the incomes of **164,000 households**, and restore **1.2 million hectares** of natural assets.

Figure 1.1: Share of Adaptation Fund portfolio mapped to 'ecosystems and biodiversity', by **grant amount** (in % of total portfolio & USD million).

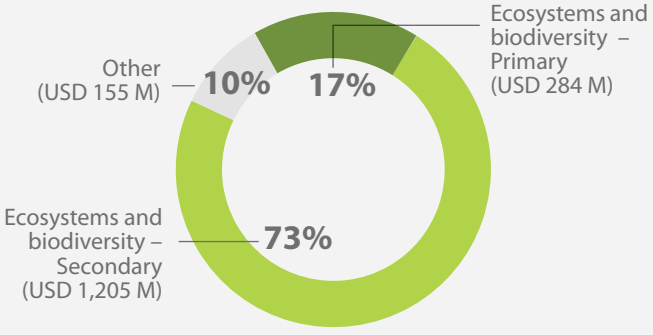
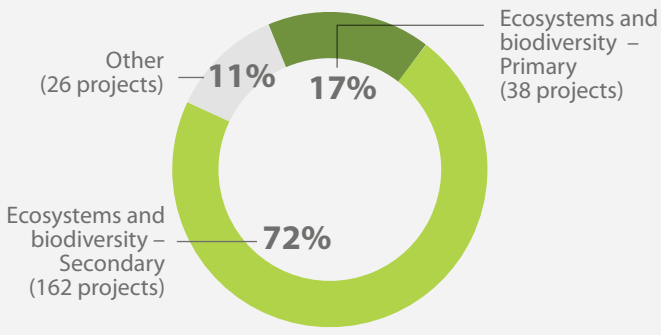


Figure 1.2: Share of Adaptation Fund portfolio mapped to 'ecosystems and biodiversity', by **number of projects** (in % & number of projects).



Note: *Projects are categorized as "Primary" (directly focused on ecosystems and biodiversity), "Secondary" (indirectly supporting ecosystems and biodiversity without it being their primary focus), or "Other" (projects with no substantial ecosystems and biodiversity component).*

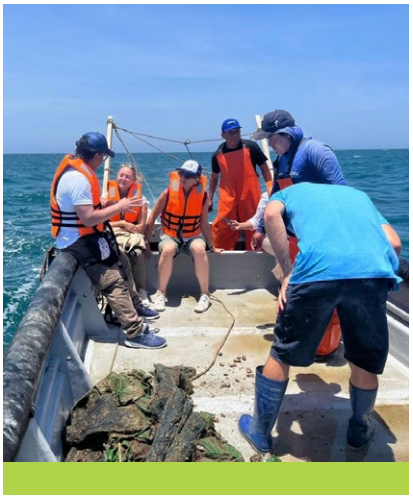


Adapting to Climate Change through Integrated Water Management – Panama.
PHOTO CREDIT: ADAPTATION FUND

Overview and Strategic Relevance

Healthy ecosystems are fundamental to climate resilience, providing natural protection against floods, erosion, drought, salinization, and other climate-related hazards while sustaining water security, food systems, livelihoods, and biodiversity. As climate change accelerates ecosystem degradation and biodiversity loss, the Global Goal on Adaptation (GGA) recognizes the restoration, conservation, protection, and adaptive management of ecosystems as a key priority for strengthening resilience.

The Adaptation Fund supports this thematic area by providing grants for ecosystem-based adaptation, watershed and coastal restoration, sustainable natural resource management, and community-led conservation initiatives. By restoring and strengthening the resilience of natural systems, these interventions help reduce climate risks, safeguard essential ecosystem services, and support sustainable livelihoods, while generating benefits for biodiversity and environmental sustainability.



Adaptation to the Impacts of Climate Change on Peru's Coastal Marine Ecosystems and Fisheries.
PHOTO CREDIT: ADAPTATION FUND

The Adaptation Fund Portfolio in Ecosystems and Biodiversity

The Adaptation Fund's portfolio in ecosystems and biodiversity spans several operational regions with the largest shares of projects in **Latin America and the Caribbean (37%)**, **Asia-Pacific (32%)**, and **Africa (18%)**. It also has a strong focus on highly vulnerable contexts, with 37% of projects implemented in Least Developed Countries and Small Island Developing States.

Project delivery balances international expertise and direct access, with **31%** projects led by **National**, **18%** by **Regional**, and remaining by Multilateral Implementing Entities.



Adapting to Climate Change through Integrated Water Management in Panama.
PHOTO CREDIT: ADAPTATION FUND

While the portfolio is largely comprised of regular-sized projects[1] , it also includes **an important share of innovation (13%)**, locally-led adaptation, and small-grant project types.

Of all 38 projects, 6 are closed, 16 are under implementation, and 16 didn't start implementation yet.

Figure 2. Geographical distribution of projects by type of implementing entity.
Distribution of Adaptation Fund projects mapped to 'ecosystems and biodiversity', by region, broken down by the type of implementing entity responsible for project delivery.

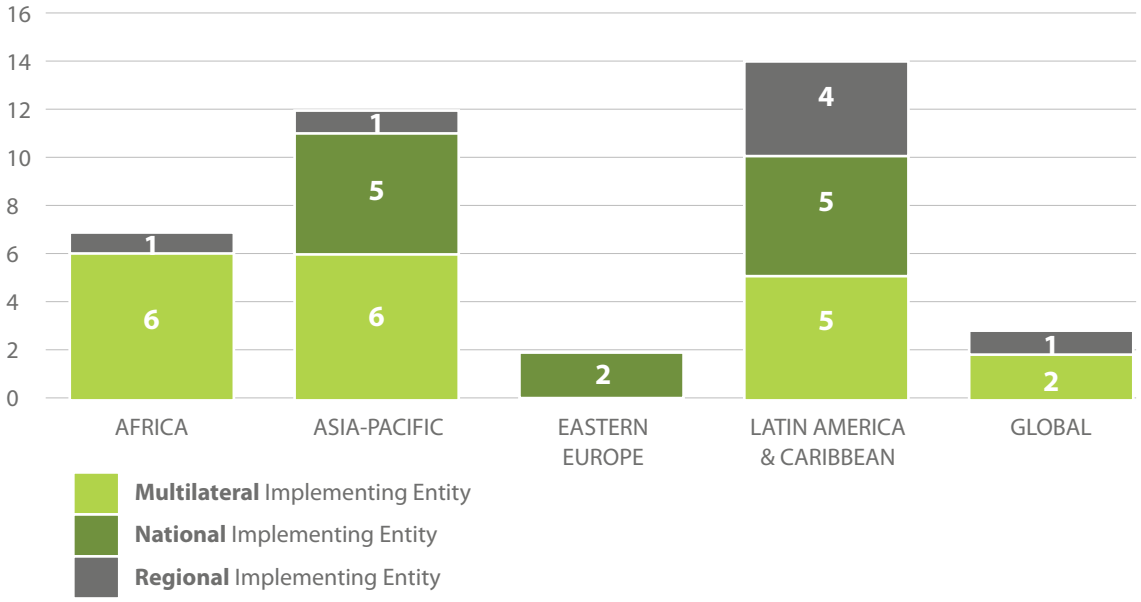


Figure 3.1: Share of Adaptation Fund portfolio mapped to 'ecosystems and biodiversity', by implementing entity type (**in % of total portfolio & USD million**).

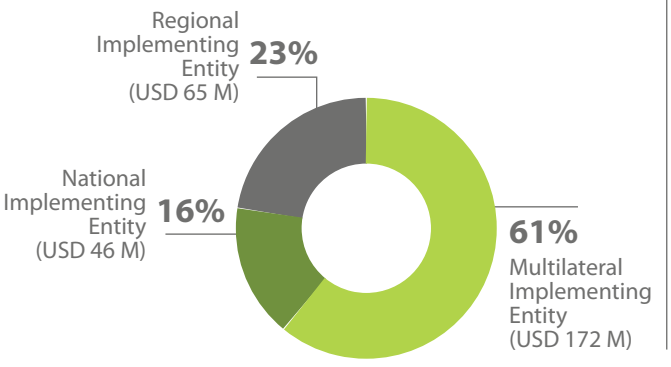
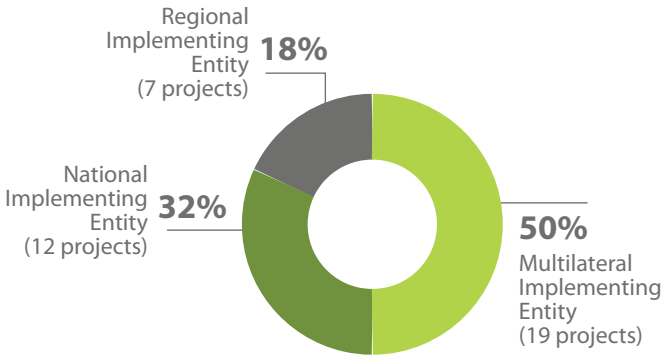


Figure 3.2: Share of Adaptation Fund portfolio mapped to 'ecosystems and biodiversity', by implementing entity type (**in % & number of projects**).



Note: *Adaptation Fund 'ecosystems and biodiversity' portfolio: USD 280 M across 38 projects*

1 Regular-sized projects are defined as projects requesting Adaptation Fund grant financing of more than USD 1 million (Adaptation Fund, 2017).



Enhancing Climate Resilience in San Cristóbal province, Integrated Water Resources Management and Rural Development Programme – Dominican Republic.
PHOTO CREDIT: ADAPTATION FUND

Results, Impacts, and Co-benefits

The Adaptation Fund's ecosystem and biodiversity projects reduce climate-related losses by restoring and protecting natural systems, strengthening their capacity to buffer climate hazards such as floods, erosion, and salinization, and sustaining critical services such as water regulation, coastal protection, and landscape stability.

Expected impacts from ecosystem and biodiversity projects include approximately:

9 million people reached directly and indirectly, including 45% women and 24% youth.

164,000 households with increased or protected incomes, including over 2,600 female-led households.

1.2 million hectares of ecosystems restored.

48 early warning systems strengthened.

3,000 km of climate-resilient infrastructure improved.

Ecosystem and biodiversity outcomes extend well beyond projects where ecosystems and biodiversity is the primary goal. Investments in food and agriculture, water supply, infrastructure and poverty reduction also contribute to ecosystem health by restoring degraded landscapes, strengthening watershed and coastal functions, and expanding nature-based solutions.

Expected additional impacts include:

95 million beneficiaries reached.

4 million hectares of supporting ecosystems restored.

5,300 km of infrastructure improved.

Taken together, these results show a consistent pattern across the Fund's portfolio: adaptation projects generate multiple, mutually reinforcing benefits for biodiversity, for livelihoods, for community resilience, extending well beyond the primary goals of individual project.

CASE STUDY:

HONDURAS



PHOTO CREDIT: ADAPTATION FUND

Ecosystem-Based Adaptation in Communities of the Central Forest Corridor in **Tegucigalpa**

Country:	Honduras
Implementing entity:	UN-Development Program (UNDP) (MIE)
Amount:	USD 4,379,700
Project duration:	2019-2024
Status:	Closed

Honduras is highly vulnerable to climate change, with increasing temperatures, reduced rainfall, and ecosystem degradation affecting water resources, livelihoods, and local economies. These pressures are particularly acute in the Central Forest Corridor (CFC), which provides critical ecosystem services, including water supply for Tegucigalpa and surrounding communities.
The Adaptation Fund provided USD 4.4 million to help increase the climate resilience of vulnerable communities in the CFC. The project focused on strengthening local governance, implementing ecosystem-based adaptation measures, and improving climate information and monitoring systems. Its objective was to secure livelihoods and maintain the ecosystem goods and services on which local communities and Tegucigalpa depend.



Ecosystem-Based Adaptation in Communities of the Central Forest Corridor in Tegucigalpa – Honduras.
PHOTO CREDIT: ADAPTATION FUND

ACHIEVED OUTCOMES

By project completion, more than 20,000 people benefited directly and indirectly from the project, including 4,473 families with improved access to water supply services. The project trained 5,583 people in climate change adaptation, sustainable agriculture, forest management, and water resource management, with women accounting for 67% of participants.

The project supported all 14 participating municipalities in integrating climate adaptation into their budgeting processes and updated 14 municipal forest protection plans. It also established watershed governance structures and strengthened local regulatory frameworks for climate adaptation and natural resource management. In addition, more than 1,500 hectares of forest were restored through reforestation and assisted natural regeneration, thereby improving ecosystem resilience and water security within the corridor.

The project also generated important local impacts by strengthening community capacities, restoring degraded ecosystems, and improving forest and water management practices. Its participatory approach, strong engagement with local institutions, and integration of gender and indigenous perspectives provide a foundation for replication in similar landscapes. Wider scaling depends on continued institutional coordination, sustainable financing, and longer-term governance arrangements for the Central Forest Corridor. Other achieved outcomes include:

Category	Achieved outcomes
Beneficiaries	21,290 direct and indirect beneficiaries reached (50% women).
Early Warning Systems	14 municipal early warning systems established or strengthened.
Natural assets protected or rehabilitated	36,750 hectares of ecosystems protected or rehabilitated.

Source: Ecosystem-Based Adaptation at Communities of the Central Forest Corridor in Tegucigalpa- AdaptarC HONDURAS, Final Evaluation Report (2024)





Ecosystem-Based Adaptation in Communities of the Central Forest Corridor in Tegucigalpa – Honduras.
PHOTO CREDIT: ADAPTATION FUND

CASE STUDY:
INDIA



PHOTO CREDIT: BAIF DEVELOPMENT RESEARCH FOUNDATION

Building Adaptive Capacities of Communities, Livelihoods and Ecological Security in the Kanha-Pench Corridor of **Madhya Pradesh**

Country:	India
Implementing entity:	National Bank for Agriculture and Rural Development (NABARD) (NIE)
Amount:	USD 2,556,093
Project duration:	2017-2022
Status:	Project Implementation Completed

The Kanha–Pench Corridor (KPC) in Madhya Pradesh is an ecologically important landscape that connects the Kanha and Pench Tiger Reserves and supports critical ecosystem services, including water regulation, biodiversity conservation, and forest-based livelihoods.

However, increasing pressure from resource extraction, forest degradation, climate variability, and declining ecosystem services has heightened the vulnerability of local communities, many of whom depend on forests, agriculture, and livestock for their livelihoods. Climate change is expected to further affect forest health, agricultural productivity, water availability, and livelihood security across the corridor.



Climate smart actions and strategies in north western Himalayan region for sustainable livelihoods of agriculture-dependent hill communities – India.
PHOTO CREDIT: BAIF DEVELOPMENT RESEARCH FOUNDATION

The Adaptation Fund is provided USD 2.6 million to help build the adaptive capacity of vulnerable communities in 56 villages across the Kanha-Pench Corridor. The project adopts a three-pronged approach focused on strengthening community institutions, conserving and restoring ecosystems, and promoting climate-resilient livelihoods. Activities include community mobilization, restoration of degraded lands and forests, improved water and soil management, climate-resilient agriculture, livelihood diversification, and knowledge sharing.

Its integrated landscape approach, combining ecosystem conservation, community governance, and climate-resilient livelihoods, aims to provide a replicable model for strengthening resilience in other forest-dependent and climate-vulnerable regions.

ACHIEVED OUTCOMES

By project completion, the project strengthened the adaptive capacities of approximately 7,609 households across 56 villages in the Kanha-Pench Corridor. Climate-resilient agriculture practices were adopted by 4,582 households, while 1,913 households diversified their livelihoods through activities such as goat rearing, fish farming, kitchen gardening, and non-timber forest product (NTFP) based enterprises. Women played a central role, with 1,651 women participating in self-help groups (SHGs), trainings, and exposure visits.

The project improved ecosystem resilience through watershed development and ecological restoration. A total of 1,823 hectares were treated through watershed activities, improving water availability and agricultural productivity, while 2,096 hectares of degraded land were restored through the removal of invasive Lantana camara. These interventions supported biodiversity recovery, increased availability of NTFPs, and strengthened the resilience of local ecosystems and livelihoods.

The project also strengthened community institutions, including SHGs and Village Development Committees, promoting participatory natural resource management and local ownership of adaptation activities. The integrated ecosystem-based adaptation approach demonstrated strong potential for replication in similar forest-dependent landscapes, although long-term sustainability will depend on continued institutional support, maintenance of assets, and stronger market linkages.

Category	Expected outcomes
Households	Approximately 7,609 households reached across 56 villages.
Early Warning Systems	5 agrometeorological stations were established, providing weather information to 2,360 households.
Natural assets protected or rehabilitated	2,096 hectares of degraded land restored

Source: Terminal Evaluation Report, Building Adaptive Capacities of Communities, Livelihoods and Ecological Security in the Kanha-Pench Corridor of Madhya Pradesh (2026)



Climate smart actions and strategies in north western Himalayan region for sustainable livelihoods of agriculture-dependent hill communities – India.

PHOTO CREDIT: BAIF DEVELOPMENT RESEARCH FOUNDATION

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.



Adaptation Fund:
1818 H Street NW,
Washington DC 20433, USA
Phone: +1.202.473.7402
https://www.adaptation-fund.org/

Instagram
Facebook
X
LinkedIn
Flickr
Youtube

@Adaptation-Fund

Ecosystem-Based Adaptation in Communities of the Central Forest Corridor in Tegucigalpa – Honduras.
PHOTO CREDIT: ADAPTATION FUND