

Developing Climate Resilient Flood and Flash Flood Management Practices to Protect Vulnerable Communities – Georgia.
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ADAPTATION FUND

THEMATIC BRIEF | JUNE 2026

INFRASTRUCTURE AND HUMAN SETTLEMENTS

The Adaptation Fund has supported developing countries with their adaptation needs by funding over **USD 255 million** in **36 projects** where supporting infrastructure and human settlements is the primary goal, representing **15%** of the Fund's total portfolio.

These grants aim to protect vulnerable communities from climate change, increasing the resilience of infrastructure and human settlements to climate change impacts to ensure basic and continuous essential services for all, minimizing climate-related impacts on infrastructure and human settlements.

The projects expect to reach more than **56 million beneficiaries** and increase or protect the income of **389,071 households**.

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

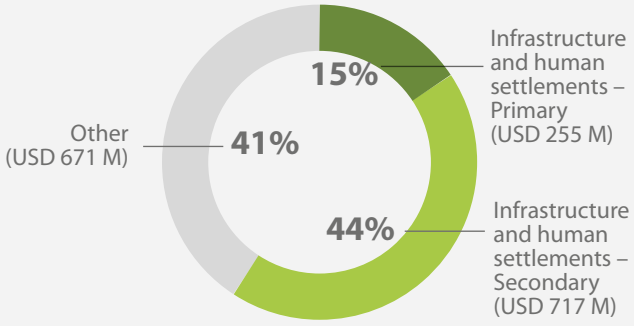
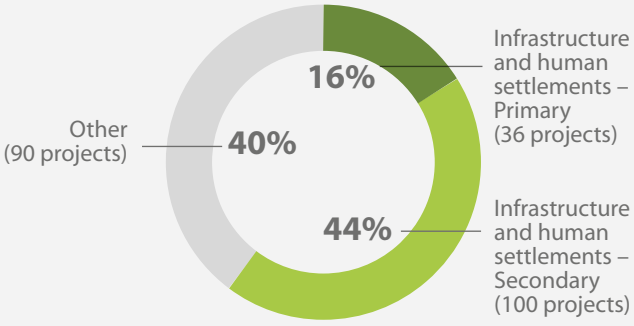


Figure 1.2: Share of Adaptation Fund portfolio mapped to 'infrastructure and human settlements', by **number of projects** (in % & number of projects).



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



Adaptation to Climate-Induced Water Stresses through Integrated Landscape Management – Western Balkans.
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Overview and Strategic Relevance

Climate change is placing growing pressure on buildings, critical infrastructure, and essential services. Floods, storms, landslides, sea-level rise, and extreme heat can damage assets, disrupt services, and increase risks for communities already living in vulnerable or underserved settlements.

The Adaptation Fund supports this thematic area by funding climate-resilient infrastructure, safer settlements, improved drainage and water systems, and risk-informed planning. These grants help reduce physical damage and service disruption, improve safety and access to basic services, and strengthen the capacity of communities and institutions to plan for, withstand, and recover from climate-related hazards.



Enhancing the Climate and Disaster Resilience of the Most Vulnerable Rural and Emerging Urban Human Settlements – Lao PDR.
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The Adaptation Fund Portfolio in Infrastructure and Human Settlements

The Adaptation Fund's portfolio in infrastructure and human settlements spans several operational regions with the largest shares of projects in **Asia-Pacific (53%)**, and **Latin America and the Caribbean (19%)** and **Africa (19%)**. It also has a strong focus on highly vulnerable contexts, with **53%** of projects implemented in Least Developed Countries and Small Island Developing States.



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While the size of the projects varies, the portfolio is predominantly composed of **regular-sized projects[1] (89%)**, with innovation, locally-led adaptation, and small-grant modalities accounting for a smaller share.

Project delivery combines international implementation capacity with direct access: Multilateral Implementing Entities account for **64% of projects**, **National** for **25%** and **Regional** for **8%**.

Of the **36 infrastructure and human settlements projects** under this theme, 9 are closed, 22 are under implementation, and 5 are at the approval stage.

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

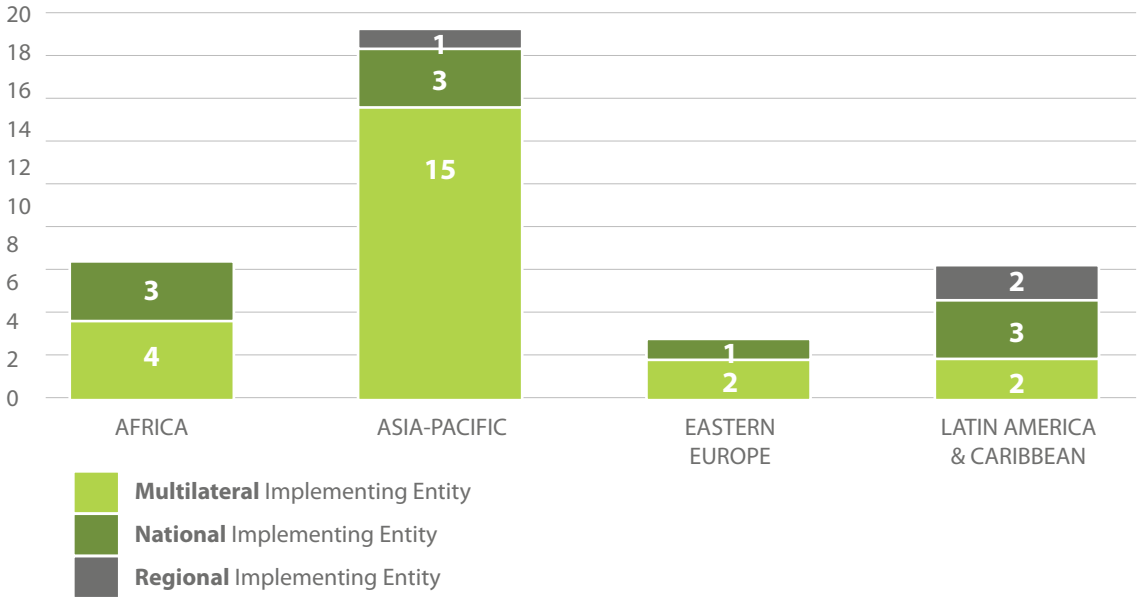


Figure 3.1: Share of Adaptation Fund portfolio mapped to 'infrastructure and human settlements', by implementing entity type (**in % of total portfolio & USD million**).

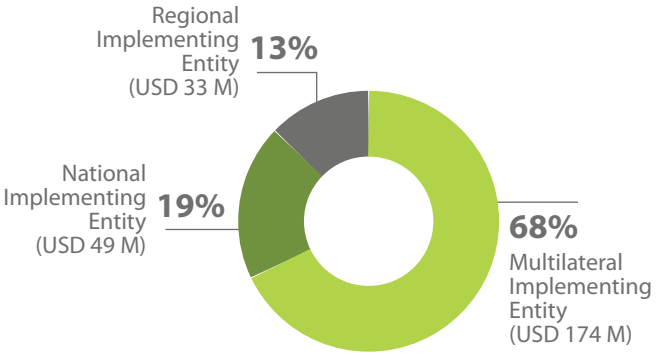
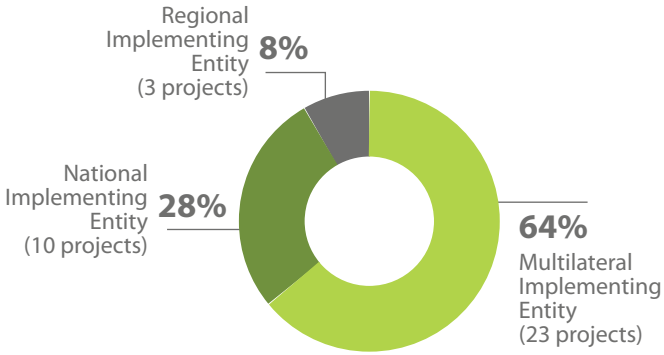


Figure 3.2: Share of Adaptation Fund portfolio mapped to 'infrastructure and human settlements', by implementing entity type (**in % & number of projects**).



Note: *Adaptation Fund 'infrastructure and human settlements' portfolio: USD 255 M across 36 projects.*

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



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Results, Impacts, and Co-benefits

Adaptation Fund projects in infrastructure and human settlements help reduce climate-related losses by protecting physical assets, limiting service disruption, and improving access to safer water, sanitation, drainage, health, and other essential services in vulnerable communities.

Expected impacts from **36 infrastructure and human settlement projects** include approximately:

56 million
people reached directly and indirectly, including 50% women and 5% youth.

389,000
households with increased or protected incomes, including 1,200 female-led households.

86
early warning systems strengthened.

300 km
of infrastructure improved or strengthened.

6,800
hectares of ecosystems restored.

These grants improve service reliability, reduce climate risks, and strengthen the resilience of communities and built environments.

Beyond projects where infrastructure and human settlements is the primary goal, the Fund's broader funding in water supply and sanitation, food and agriculture, ecosystems and biodiversity, and poverty eradication also contribute indirectly to more resilient communities and built environments by strengthening service delivery systems, climate-resilient infrastructure, and integrated land and resource management approaches. Expected additional impacts include:

37 million beneficiaries reached.

2 million hectares of supporting ecosystems restored.

4,100 km of infrastructure improved.

Each adaptation investment can deliver multiple, compounding benefits helping communities reduce climate risks while advancing broader development and environmental objectives. These benefits include contributions to healthier, cleaner living environments, better waste and pollution management, reduced exposure to water- and vector-borne diseases, and stronger stewardship of natural resources and ecosystems.

CASE STUDY:

HONDURAS



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Addressing Climate Change Risks on Water Resources in **Honduras**: Increased Systemic Resilience and Reduced Vulnerability of the Urban Poor

Country:	Honduras
Implementing entity:	UN-Development Program (UNDP) (MIE)
Amount:	USD 5,620,300
Project duration:	2011-2016
Status:	Closed

Honduras is consistently ranked among the world's most climate-vulnerable countries, with high exposure to hurricanes, floods, and droughts. The capital faces severe water rationing and is highly susceptible to landslides and flash floods, with the urban poor disproportionately affected. Climate projections indicate a 5–40% decline in rainfall by the end of the century, further worsening water scarcity and social pressures.

The project focused on increasing resilience to water-related climate risks by integrating climate change considerations into water-sector planning, piloting measures such as water harvesting, flood protection, landslide stabilization and improved water management, and improving the climate information systems needed for risk-informed decision-making. Looking ahead, the project outlines useful lessons for future scale-ups and replication in other areas. It highlights the value of early exit planning, sustained budget commitments, continuity across political cycles, and stronger private-sector engagement.

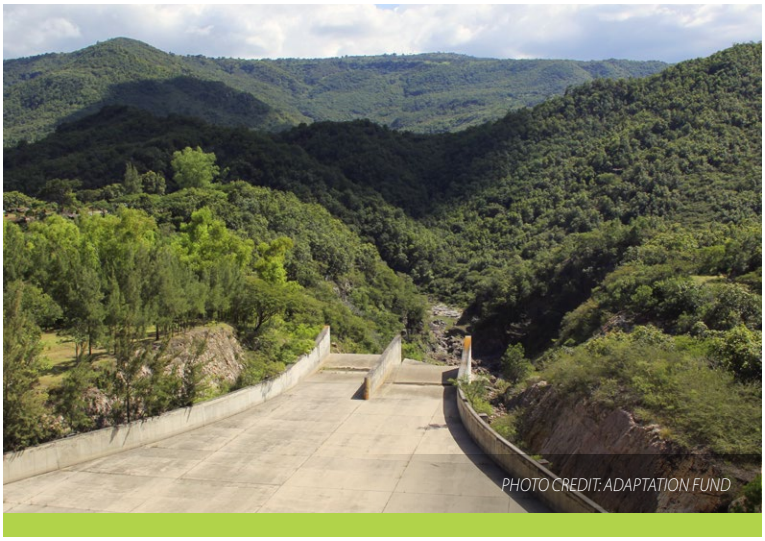


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ACHIEVED OUTCOMES

The project improved institutional capacity to mainstream climate change adaptation into Honduras' water sector, supporting the application of the Water Law and National Plan Law and promoting more inter-sectoral, landscape-based approaches to climate risk management. Key achievements included establishing the Central Forest Corridor Platform, developing 22 watershed action plans, and strengthening the national meteorological network through 46 stations transmitting data to central servers.

Beyond the technical interventions, the project had a larger impact on social capital, building trust and collaboration between community organizations and public institutions. It also helped reposition climate change as part of the national policy agenda, shifting it from an exclusively environmental issue to a broader socioeconomic priority. Together, these interventions contributed to reduced climate-related water risks, improved early warning and planning capacity, and supported broader benefits for watershed protection and water security.



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Category	Achieved outcomes
Beneficiaries	119,271 beneficiaries with improved resilience to climate change.
Natural assets protected or rehabilitated	59,000 hectares of primarily watersheds, micro-watersheds, sub-basins, protected areas, and forest ecosystems linked to the water supply of Tegucigalpa were protected, including areas within the Central Forest Corridor.

Source: Addressing Climate Change Risks on Water Resources in Honduras: Increased Systemic Resilience and Reduced Vulnerability of the Urban Poor, Project Evaluation, 2016.



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CASE STUDY:
SOLOMON ISLANDS



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Enhancing Urban Resilience to Climate Change Impacts and Natural Disasters: **Honiara**

Country:	Solomon Islands
Implementing entity:	UN-Habitat (MIE)
Amount:	USD 4,395,877
Project duration:	2018-2027
Status:	Under implementation

The Solomon Islands is highly vulnerable to climate change, facing recurrent tropical cyclones, sea-level rise, flooding, and other climate-related shocks. In Honiara, these risks are worsened by a significant "adaptation deficit". This is driven by one of the fastest rates of urbanization in the world and reflected in the rapid expansion of informal settlements in high-risk areas such as riverbanks and steep slopes, often without secure tenure or access to basic services. Rising temperatures and more intense extreme weather events are expected to further exacerbate these underlying socioeconomic vulnerabilities.

In response, the Adaptation Fund approved USD 4.4 million to strengthen urban climate resilience at multiple levels across the city. At the community level, the project is supporting local climate action planning and the implementation of priority infrastructure measures, including drainage, bridges, and improved water supply systems. At the ward level, the project is working with councils and communities on disaster risk reduction, urban agriculture, food security, and ecosystem resilience. At the city-wide level, the project is improving institutional capacity to integrate climate risk into urban policy, land-use planning, and building regulations.

This project is structured to be highly replicable, using Honiara as a model for other rapidly urbanizing centers in Solomon Islands and the wider Asia-Pacific region, although its sustainability depends on embedding lessons into policy and maintaining local capacity and financing beyond Adaptation Fund support.

EXPECTED OUTCOMES

The project is expected to develop or strengthen 25 adaptation assets, based on a conservative estimate of around five infrastructure or resilience measures per hotspot community. These may include improved drainage, evacuation infrastructure, waste management infrastructure, and/or more resilient water supply systems. There are plans to develop women-focused climate risk and integrate climate change into educational programs for youth and children. The project will also foster partnerships among government agencies, Royal Melbourne Institute of Technology (RMIT) University, and international stakeholders, while integrating community planning into city-level policy processes to enhance the participation of vulnerable informal settlements in decision-making.



Enhancing the climate and disaster resilience of the most vulnerable rural and emerging urban human settlements – Lao PDR

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Category	Expected outcomes
Beneficiaries	6,000 direct beneficiaries.
Households	750 households benefiting through increased income or avoided losses from assets, employment, water, and health benefits.

Source: Addressing Climate Change Risks on Water Resources in Honduras: Increased Systemic Resilience and Reduced Vulnerability of the Urban Poor, Project Evaluation, 2016.



Communities across the Western Balkans are strengthening their resilience to climate-induced flooding through a regional adaptation initiative - North Macedonia.

PHOTO CREDIT: IFAD

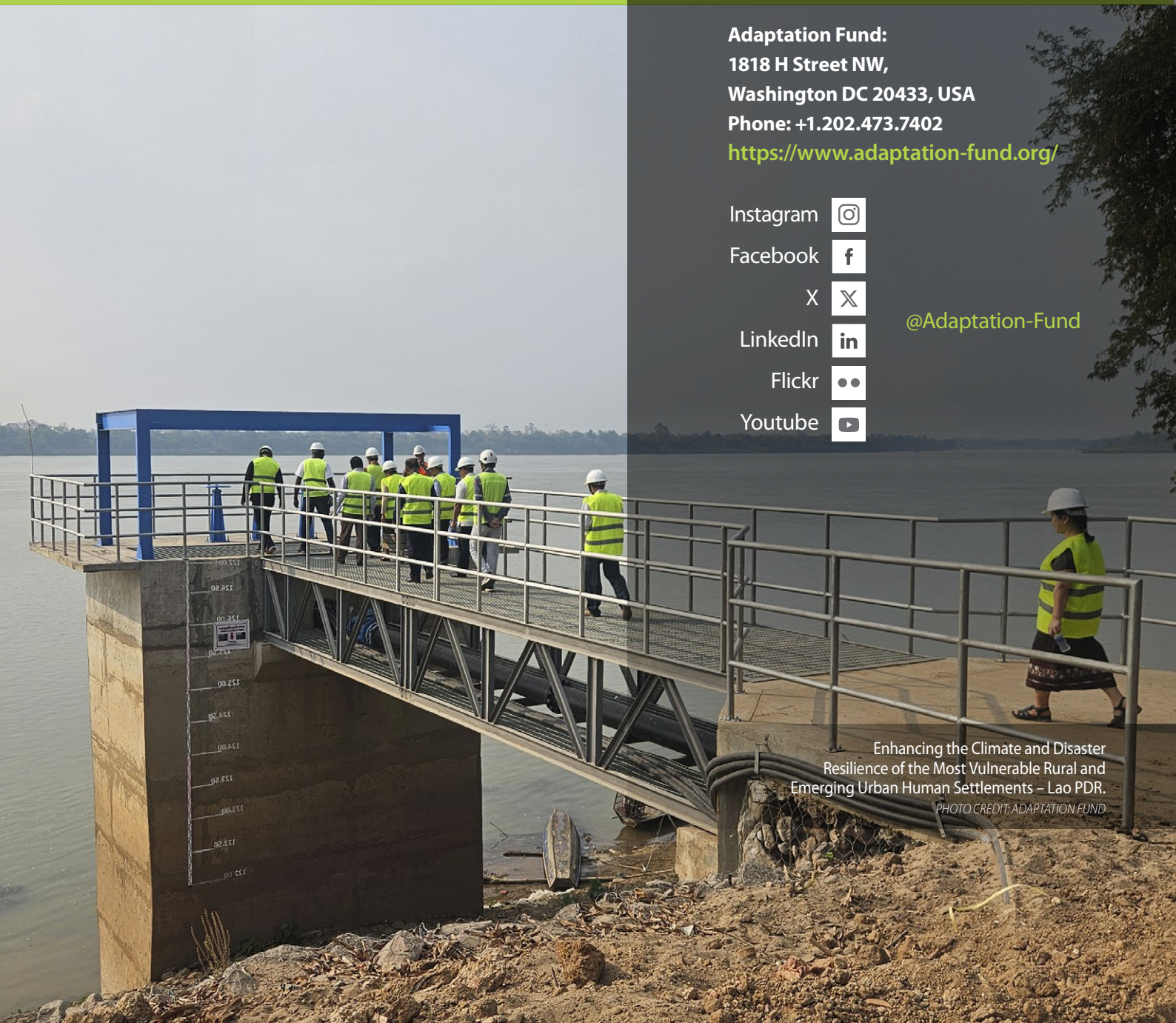
Methods

Data are drawn from the Adaptation Fund's portfolio database (226 projects as of June 2026). Core indicator values represent expected or achieved results, as recorded in approved project or evaluation documents, respectively, and are extracted through an AI-assisted protocol. Portfolio aggregates include projects classified as 'regional' or 'global', referred to here as multi-country projects.

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