Resilient Infrastructure in LAC: Financing the Response to Disaster Risk

Building infrastructure resilience requires action before, during, and after disasters through prevention, preparedness, continuity of critical services, and reconstruction that reduces vulnerability. Development finance institutions (DFIs) contribute long-term financing, guarantees, information, technical assistance, and other instruments tailored to each stage of disaster risk.

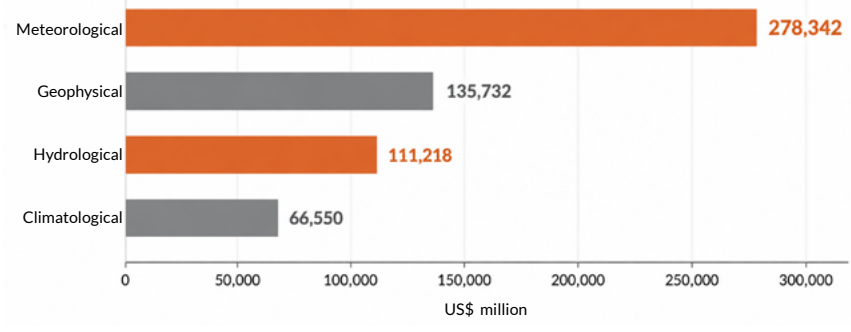


FROM DISASTER RISK TO RESILIENT INFRASTRUCTURE

In 2024, Latin America and the Caribbean (LAC) recorded 82 hazardous events and disasters, directly affecting more than 12 million people, causing over 800 deaths, and generating US$21,777 million in damage and economic losses. Between 1970 and 2024, cumulative economic costs reached US$591,842 million (ECLAC, 2026). Of this total, meteorological hazards ac-

Figure n.º 1. Latin America and the Caribbean: Cumulative Economic Cost of Disasters by Type, 1970–2024

(US$ million)



Source: ECLAC, Statistical Yearbook for Latin America and the Caribbean 2025, based on EM-DAT.

Table n.° 1. Functions of Resilient Infrastructure in Disaster Risk Management

Function	Infrastructure and assets	Purpose	Reference magnitude
Prevention and protection	Drainage, flood defenses, water management, slopes, and nature-based solutions.	Reduce exposure and damage.	Strengthening new infrastructure requires approximately 3% in additional investment and can generate net benefits of US$4,2 million.
Early warning and preparedness	Monitoring, sensors, information, early warning, coordination, and prearranged liquidity.	Anticipate impacts and activate the response.	US$800 million invested in early warning could prevent annual losses of US$3,000–16,000 million.
Continuity of critical services	Energy, transport, water, telecommunications, healthcare, and alternative routes.	Maintain essential services.	Service disruptions cost at least US$390,000 million annually in low- and middle-income countries.
Resilient recovery and reconstruction	Replacement of assets, housing, productive infrastructure, and public networks built to higher standards.	Restore services and assets with lower vulnerability.	LAC faces expected annual losses of approximately US$58,000 million.

Source: Prepared by ALIDE based on UNDRR (Sendai Framework), World Bank/GFDRR, and WMO.
Note: Reference amounts relate to LAC or to low- and middle-income countries, depending on the source.

counted for 47%, followed by geophysical (23%), hydrological (19%), and climatological (11%) hazards (Figure 1). The United Nations Office for Disaster Risk Reduction (UNDRR) also estimates expected annual losses of approximately US$58,000 million in LAC.

Given the scale and diversity of these risks, resilient infrastructure requires interventions at different stages of the disaster cycle. Drawing on the Sendai Framework for Disaster Risk Reduction 2015–2030, the approaches of the World Bank, the Global Facility for Disaster Reduction and Recovery (GFDRR), and the World Meteorological Organization's (WMO) early warning agenda, these interventions can be grouped into four complementary functions: prevention and protection; early warning and preparedness; continuity of critical services; and resilient recovery and reconstruction (Table n.° 1).

DFI INSTRUMENTS BY RESILIENCE FUNCTION

These four functions call for different financial responses. DFIs can address them through long-term credit, guarantees, grants, insurance, technical

DFIs combine long-term financing, guarantees, grants, technical assistance, information, and investment vehicles. Together, these instruments help reduce vulnerabilities before disasters occur.



assistance, information systems, and investment vehicles. A given instrument may contribute to more than one function, but is classified according to its primary use (Table n.º 2).

Table n.º 2. Instruments and Programs of Latin American DFIs by Primary Function

Country	DFI	Instrument or program	Contribution to resilience and reach
1. Prevention and protection			
Belize	Development Finance Corporation (DFC)	CRESAP; climate credit lines; DFC-CBA; GCF	Climate information and rural investment to reduce vulnerability.
Ecuador	BanEcuador B.P. (BanEcuador)	"Financiamiento preventivo ante El Niño"	Drainage, canals, and protective measures against El Niño.
Paraguay	Agencia Financiera de Desarrollo (AFD)	"Procampo Verde"	Efficient water management and productive infrastructure that can reduce vulnerability to drought.
2. Early warning and preparedness			
Bolivia	Banco de Desarrollo Productivo S.A.M. (BDP)	"Sistema Agroclimático"; "Adapta BDP"	Agroclimatic alerts to anticipate risks.
Ecuador	Banco de Desarrollo del Ecuador B.P. (BdE)	"Programa de Financiamiento para Gestión de Riesgos"	US$180 million for local emergency mitigation and response, split equally between credit and non-reimbursable resources.
Mexico	Nacional Financiera S.N.C. (Nafin)	"Esquema Emergente para Desastres"	Credit, guarantees, and assistance following disasters.
3. Continuity of critical services			
Brazil	Banco Nacional de Desenvolvimento Econômico e Social (BNDES)	"Emergencial RS"; "ViaSul"; "RGE Sul"; airport and port	Restores transport and energy infrastructure following floods.
Mexico	Banco Nacional de Comercio Exterior S.N.C. (Bancomext)	"Programa Emergente Odile"; Los Cabos airport	Restores air connectivity following Hurricane Odile; US$50 million, together with credit and guarantees.
Brazil	Banco Regional de Desenvolvimento do Extremo Sul (BRDE)	"Sul Resiliente"	Municipal infrastructure to reduce damage from floods, landslides, and other hazards.
Colombia	Financiera del Desarrollo Territorial (Findeter)	"Territorios que renacen"	In response to the 2026 climate emergency, finances investment and working capital to recover from impacts on communities and territories.
Colombia	Fondo para el Financiamiento del Sector Agropecuario (Finagro)	"Línea Agro Territorial"; LIET	Roads, bridges, and land improvements to restore productive infrastructure following heavy rains.
4. Resilient recovery and reconstruction			
Brazil	Banco de Desenvolvimento de Minas Gerais S.A. (BDMG)	"Edital Municípios"; "BDMG Solidário"	Drainage, sanitation, and infrastructure strengthening to reduce municipal exposure; credit reaching approximately 300 municipalities.
Chile	Instituto de Desarrollo Agropecuario (Indap)	"Crédito Especial por Catástrofe"	Replaces irrigation systems, infrastructure, and assets to restore production after disasters.
Colombia	Banco de Desarrollo Empresarial de Colombia (Bancóldex)	"Fondo Blooming Roots Providencia"	Post-disaster business recovery with climate resilience.
Colombia	Fondo para el Financiamiento del Sector Agropecuario (Finagro)	PECRP; recovery credit lines	Replace agricultural assets and infrastructure to restore production following extreme events.
Ecuador	Banco de Desarrollo del Ecuador B.P. (BdE)	2016 earthquake program; PFIRGAD	Reconstruction and local capacity-building following the earthquake; US$65 million plus US$6.60 million in grants; 140 subnational governments.

Source: ALIDE METIS LAC Development Database, based on official institutional websites and financial product information sheets.

MAIN FEATURES OF THE DFI RESPONSE

The instruments reviewed reveal a response that extends well beyond emergency lending. DFIs combine long-term financing, guarantees, grants, technical assistance, information, and investment vehicles. This combination makes it possible to reduce vulnerabilities before disasters occur, mobilize information and resources when risks materialize, maintain critical services, and support reconstruction.

A territorial and sectoral approach is another notable feature. Programs cover drainage, sanitation, water management, irrigation, bridges, airports, electricity networks, and productive infrastructure, serving subnational governments, producers, micro-, small and medium-sized enterprises (MSMEs), and service operators. Reported outcomes include initiatives reaching hundreds of municipalities, tens of thousands of producers, and millions of users of essential services.

Another characteristic is the link between preparedness and recovery. Early warning systems and prearranged financial mechanisms enable rapid responses, while continuity and reconstruction programs combine resources to restore infrastructure and productive activity. Resilience therefore depends not on any single financial product, but on tailoring instruments and resources to the stage of risk and the type of asset or beneficiary.

OVERVIEW AND PROSPECTS

The review shows that DFIs can intervene at different stages of the risk cycle, rather than solely in post-disaster reconstruction. Their capacity to finance preventive investments, protect assets, sustain essential services, and mobilize recovery resources can support a more comprehensive response to disasters. This is particularly relevant in a region facing expected annual losses of approximately US$58,000 million, where reducing vulnerability before an event can be just as important as having resources available to respond afterward.



This role could be strengthened by more systematically incorporating disaster risk into project appraisal and structuring, and by combining long-term financing with rapidly deployable mechanisms. Linking institutions' own resources with insurance, climate funds, and concessional financing could further expand response capacity.

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