Physical Climate and Natural Disaster Risk Assessment of IDB Invest projects:

Building climate resilience in Latin America and the Caribbean

Latin America and the Caribbean is one of the world regions most severely impacted by the effects of natural disasters and climate change. The threats posed by climate change, especially to vulnerable populations, have created an urgent need to build resilience across the region, to minimize the harmful consequences for our ecosystem services and thereby minimize socio-economic risks. That is why we have mainstreamed physical climate and natural disaster risk assessments (PCRA) for all projects, in accordance with the IDB Invest Environmental and Social Sustainability Policy [2].

As the private sector arm of the IDB Group, IDB Invest supports clients to reduce vulnerabilities, increase the resilience of human and natural systems at large, and realize a multitude of other socio-economic and environmental co-benefits [3]. To do so, early incorporation of resiliency measures into our projects is key – and more effective than risking higher recovery costs in the future.

Risk components.

CLIMATE CHANGE – AN UNDERLYING RISK DRIVER

According to the Intergovernmental Panel on Climate Change (IPCC), "In the context of climate change, risks can arise from potential impacts of climate change as well as human responses to climate change. Relevant adverse consequences include those on lives, livelihoods, health and wellbeing, economic, social and cultural assets and investments, infrastructure, services (including ecosystemservices), ecosystems and species"[4] .

How the risk assessment process works:

Screening — Location and Sector Information

Identification of adaptation policy context.

Identification of the project's exposure and vulnerability to natural hazards, based on geolocation and sector:
- The screening considers both historical conditions and climate change scenarios.
- Where a location-specific assessment is not applicable, the best proxy will be used.

Low risk projects
No further analysis required.

Analysis — Client & Project-specific Information

Project-specific analysis of material risks and identification of outstanding vulnerabilities in relation to:
- The project design
- The project's impact on the wider system
- The client's risk management capacity

Depth of assessment will be commensurate with the risk context.

Independent engineer review
In certain cases for infrastructure projects.

Building Resilience

Facilitation of physical risk management by strengthening adaptive capacity as deemed necessary. This may include
- Implementing resiliency measures in the project and in client systems through the Environmental and Social Action Plan (ESAP).
- Delivering climate-related advisory services.
- Supervising project progress and reporting as required.

The PCRA is designed to assess the resilience of projects to natural disasters and climate change, in line with the adaptation goals of the Paris Agreement. The assessment covers the project design, its impact on the wider system, and the capacity of the client to cope with a hazardous event, trend, or disturbance [5].

IDB Invest supports clients to enhance project resilience, informed by and commensurate with the risk context.

What kind of physical climate and natural hazards are being screened for through the PCRA process?

The PCRA process aims to enhance project resilience and community safety in relation to both climate-related hazards (acute and chronic) as well as geophysical natural hazards.

The PCRA assesses climate-related hazard levels according to IPCC climate scenarios [6], utilizing Geographic Information System technology for location-based exposure, and considering sector sensitivity. Recognizing the inherent uncertainty in risk assessment, especially concerning longer-term hydrometeorological scenarios and models, we combine historical data with multiple scenarios to comprehend potential hazard exposure across diverse future possibilities. If potentially material risks are identified in the screening process, a deeper analysis of those risks is conducted.

Drought · Flood · Sea level rise

Water scarcity · Wildfire · Heatwave

Hurricane wind · Landslide · Precipitation Changes

Tsunami · Volcano · Earthquake

How does IDB Invest support and incentivize its clients?

IDB Invest supports its clients in building sustainability and resilience through ESAPs as well as financial and non-financial product offerings. Client support may relate to the project design and its resilience to natural hazards, or to the client's capacity to assess and manage climate-related risks and shocks. IDB Invest has also created applied-knowledge products on adaptation.

How does the PCRA relate to the adaptation goals of the Paris Agreement?

The Paris Agreement established the Global Goal on Adaptation [7] to enhance adaptive capacity, strengthen resilience, and reduce vulnerability to climate change. Responding to the need to align financial flows with pledges of the Paris Agreement, the Multilateral Development Banks (MDBs) have developed joint principles for assessing Paris alignment [8]. The PCRA operationalizes these principles as well as the Paris alignment commitment of IDB Invest as it relates to making finance flows consistent with a pathway towards climate-resilient development.

IDB Invest processes, including the PCRA, aim to prevent maladaptation. This occurs when actions meant to aid projects, systems, or communities in dealing with climate change impacts inadvertently lead to negative consequences or worsen vulnerabilities.

Does the PCRA process apply to Financial Intermediaries? How are they assessed?

The PCRA applies to all IDB Invest projects, including financial intermediaries, such as banks and investment funds. Physical climate and natural disaster risks are identified, analyzed and managed when IDB Invest finances are directed towards climate vulnerable sectors, such as agribusiness, tourism and infrastructure. In such cases, IDB Invest supports the financial institution to improve its ability to manage physical climate risks, in line with international best practice and standards.

Curious to know more?

Explore the adaptation agenda of IDB Invest through the following resources:
- The **IDB Invest Environmental and Social Sustainability Policy** that guides our work.
- Our commitment to Paris alignment through the **IDB Group Paris Alignment Implementation Approach;** and the business case for investing in adaptation in the IDB Invest position paper **"Scaling Adaptation Finance in the Private Sector".**

1. Climate Change 2022: Impacts, Adaptation and Vulnerability. Working Group II Contribution to the IPCC Sixth Assessment Report

2. IDB Invest Environmental and Social Sustainability Policy (2020). Page 6 'Climate Change Adaptation, Mitigation and Low Carbon Development'.

3. IDB Group Climate Change Action Plan 2021-2025. (2021)

4. IDB Invest White Paper. 'Scaling Adaptation Finance in the Private Sector'. (2022)

5. Definition provided by IPCC Special Report on the impacts of global warming of 1.5°C' (2018)

6. Climate Change 2022: Impacts, Adaptation and Vulnerability. Working Group II Contribution to the IPCC Sixth Assessment Report

7. Paris Agreement to the United Nations Framework Convention on Climate Change, Dec. 12, 2015. Article 7.1

8. Joint MDB Methodological Principles for Assessment of Paris Agreement Alignment (June 2023)

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