IDB
Improving lives

IDB Disaster Risk Financing Instruments

Disaster Risk Financing Conference
February 21, 2024

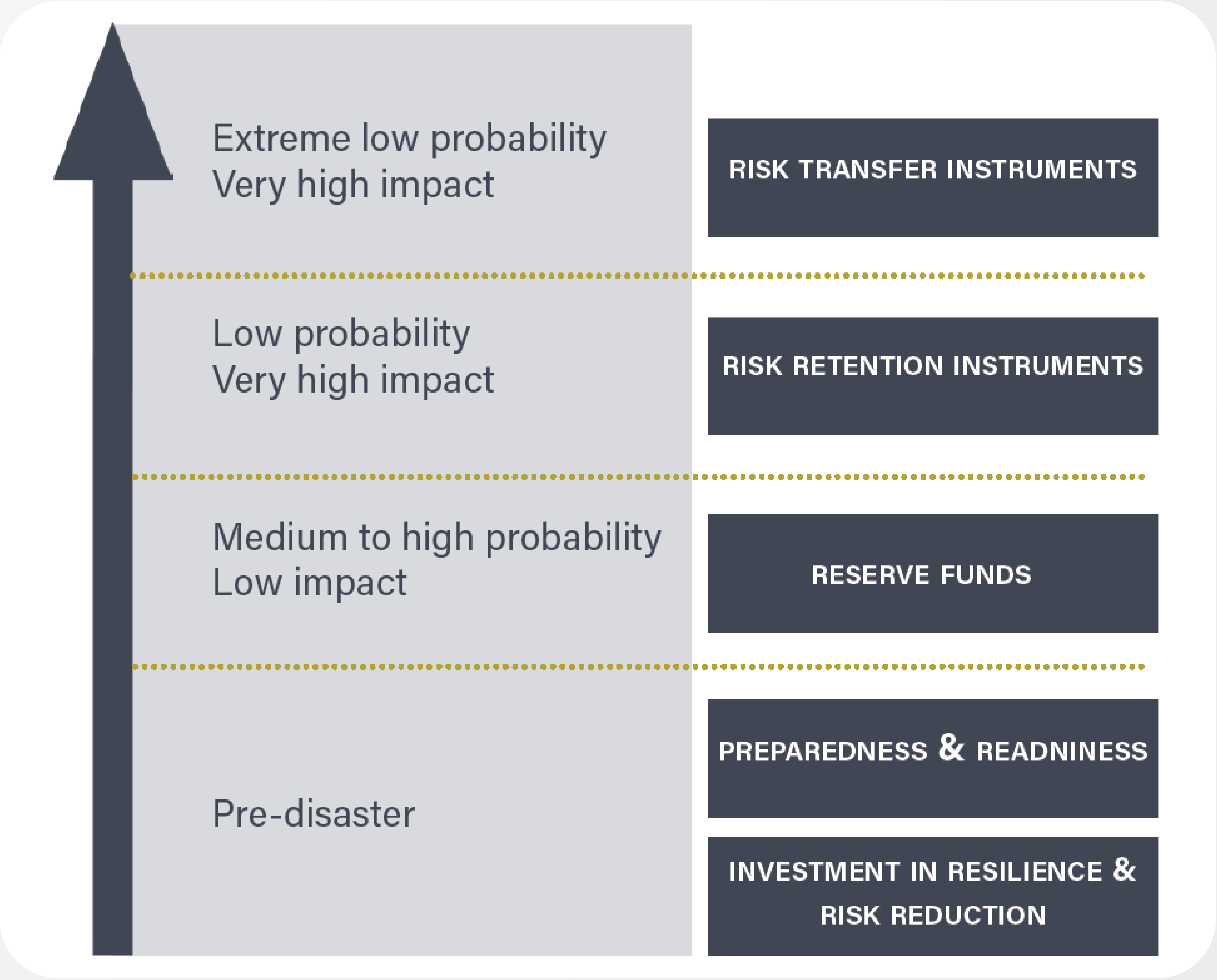
HOLISTIC APPROACH TO DISASTER RISK AND CLIMATE RESILIENCE

- **IDB risk layering approach** to support Caribbean countries build financial resilience to climate and disaster shocks.

- The approach involves **a mix of financial instruments** tailored to each country's risk profile and financial needs.
  - Budgetary resources and reserve funds for prevention, mitigation, and recurrent low-impact events.
  - Contingent debt instruments and risk transfer instruments for events with lower probability but high-impact.

- This approach aims to strike a **balance between risk reduction and risk financing** through different instruments.

RISK LAYERING APPROACH



IDB INNOVATIVE CLIMATE AND DISASTER RISK FINANCE INSTRUMENTS

RISK RETENTION

Contingent Credit Facility (CCF)
Climate Resilient Debt Clause

RISK TRANSFER

Promote risk transfer to the capital and insurance markets.

RISK REDUCTION & INVESTMENT IN RESILIENCE

Investment Loans
Technical Assistance

CONTINGENT CREDIT FACILITY

1 OBJECTIVE

Provide countries with **significant, liquid resources following a natural disaster or a public health event** of severe to catastrophic proportions to help them provide **humanitarian relief, restore basic services to the population**, and other response measures.

2 EX ANTE INSTRUMENT

The **CCF is an ex-ante financing instrument** because contingent loans must be prepared and approved by the Bank before an eligible event occurs.

3 RISK COVERAGE

- **Natural disaster risks**
  Examples: hurricane, earthquake, flood, wildfire, and drought.

- **Public health risks**
  Examples: future pandemics and epidemics

4 SCOPE OF FINANCING

Resources from CCF contingent loans are used exclusively to cover **extraordinary public expenses** incurred after an eligible event and only during the **emergency phase** (6-9 months).

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MAIN FEATURES OF CCF CONTINGENT LOANS

01
Parametric coverage
Parametric coverages that allows fast eligibility verification of events.

02
Rapid Disbursement
Usually within 15-30 days after an eligibility verification request.

03
Cost-Effectiveness
Cost-effective risk retention instrument to finance emergency response.

04
Extended Coverage Period
Coverage drawdown period is 5 years, renewable for another 5 years.

05
Replenishment of Resources
Option to request replenishments of disbursed resources for up to its original approved total coverage.

06
Ex-ante financial approach
Promote ex ante financial management of risks and contingent fiscal liabilities.

07
Disaster Risk Management
Comprehensive Natural Disaster Risk Management Program (CDRMP)

DESIGN OF PARAMETRIC COVERAGES

- Earthquakes
- Hurricanes
- Floods
- Volcanic Eruptions
- Wildfires
- Food Crisis

CONSTANT INNOVATION

2009

Creation of CCF

Nov 2009

1st CCF contingent loan

Dominican Republic

1ST parametric coverages for earthquakes and hurricanes

Dominican Republic

Feb 2012

1st coverage for floods due to excess rainfall

Panama

Jul 2012

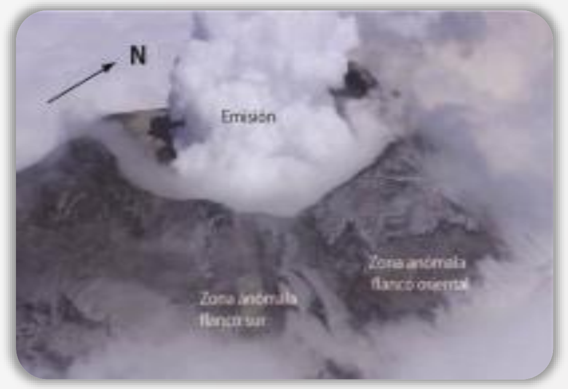
Increase amount limit of CCF coverage

US$300M o 2% of GDP

2014

1st Coverage for lahars (land slide)

Ecuador



2019

2nd MODALITY for non-parametric perils

Droughts, tsunamis

Apr 2020

CCF COVID-19 coverage

US$90M o 0.6% of GDP

May 2020

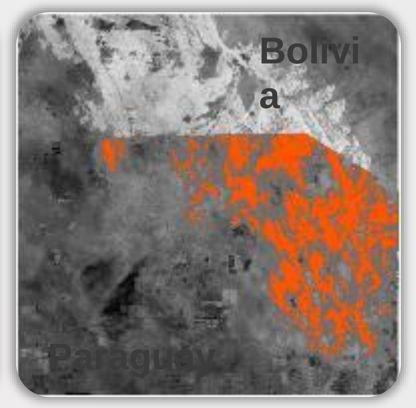
CCF expansion to include public health risks

Future pandemics and epidemics

Nov 2020

1st Coverage for WILDFIRES

Paraguay



HOW DO CCF PARAMETRIC COVERAGES WORK?

PARAMETRIC COVERAGE

Parametric coverage means that the coverage is activated when parameters reach a threshold:

A. Event intensity;
B. Population affected

How is the coverage activated?

PARAMETERS TO MEASURE THE IMPACT

A. Affected population → Amount of resources for disbursement

What determines the amount of resources that can be accessed?

USE OF SATELLITE IMAGERY & GEOSPATIAL DATA

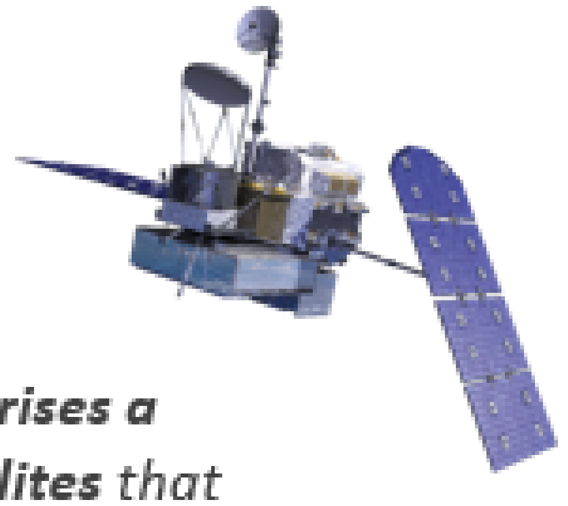
1. USGS, NOAA: event information
2. NASA/ESA: satellite imageries
3. US LandScan: population distribution

What information is used?

HOW DO CCF PARAMETRIC COVERAGES WORK?

National Oceanic and Atmospheric Administration (NOAA) *through the* ***National Hurricane Center*** *publishes information on the track, intensity and wind swath of tropical cyclones.*

NASA publishes satellite data on precipitation levels through a tool called ***Giovanni.***



The Copernicus Sentinel-2 mission comprises a constellation of two polar-orbiting satellites *that monitor Earth's surface changes.*

LandScan *provides global population distribution data at approximately 1 km (30" X 30") spatial resolution.*

USGS
science for a changing world

USGS *controls the National Earthquake Information Center, which is responsible for detecting the location and magnitude of earthquakes around the world.*

FIRMS
Fire Information for Resource Management System

NASA's Fire Information for Resource Management System (FIRMS) *distributes Near Real-Time (NRT) active fire data within 3 hours of satellite observation.*

CATASTROPHIC RISK COVERAGE IN THE LAC REGION BY CCF CONTINGENT LOANS

KEY MILESTONES

3.96 billion

Ex ante financial coverage to improve resilience

17

Member borrowing countries with active coverage

3.26 billion

Of coverage for small and vulnerable member countries (IDB C & D countries)

RISK COVERAGE

EARTHQUAKES

HURRICANES

FLOODS

VOLCANIC ERUPTIONS

DROUGHTS

EPIDEMIC / PANDEMIC OUTBREAKS

WILDFIRES

CRISIS RESPONSE

Earthquake

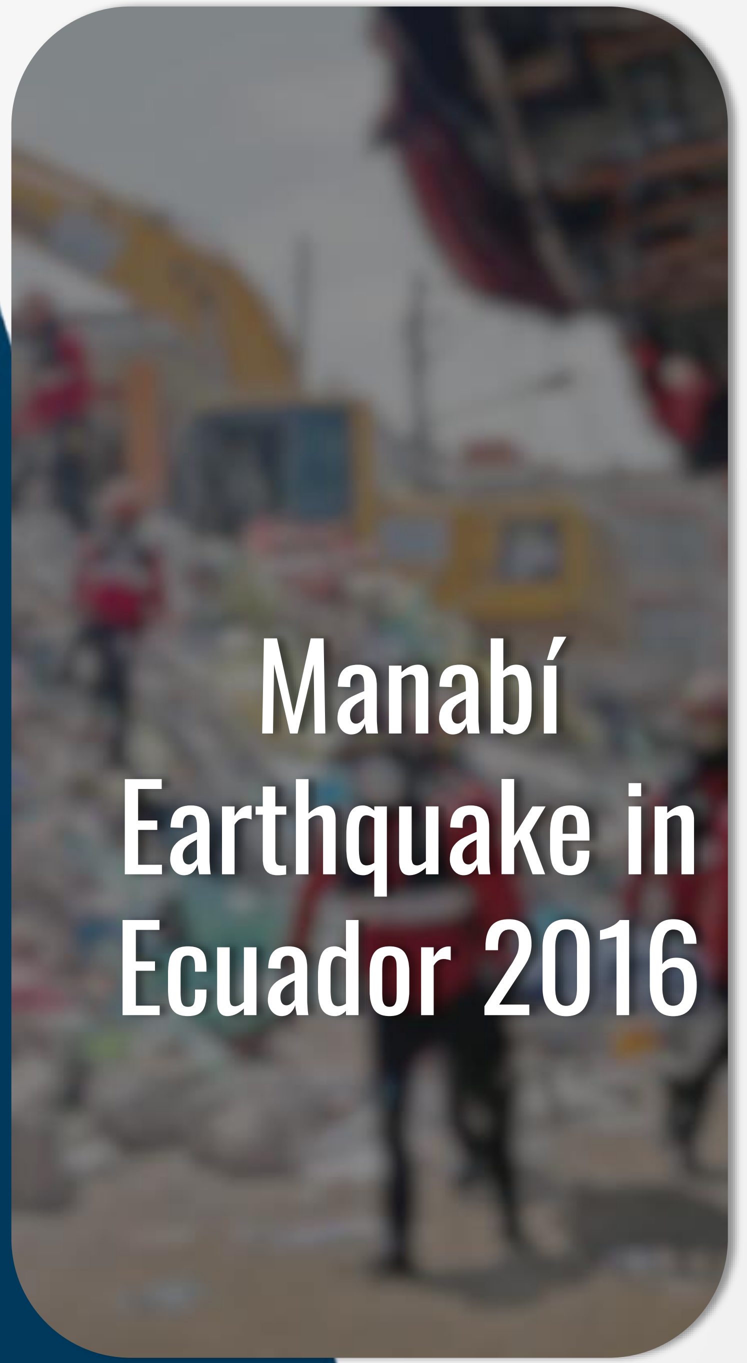
$160M
Ecuador 2016

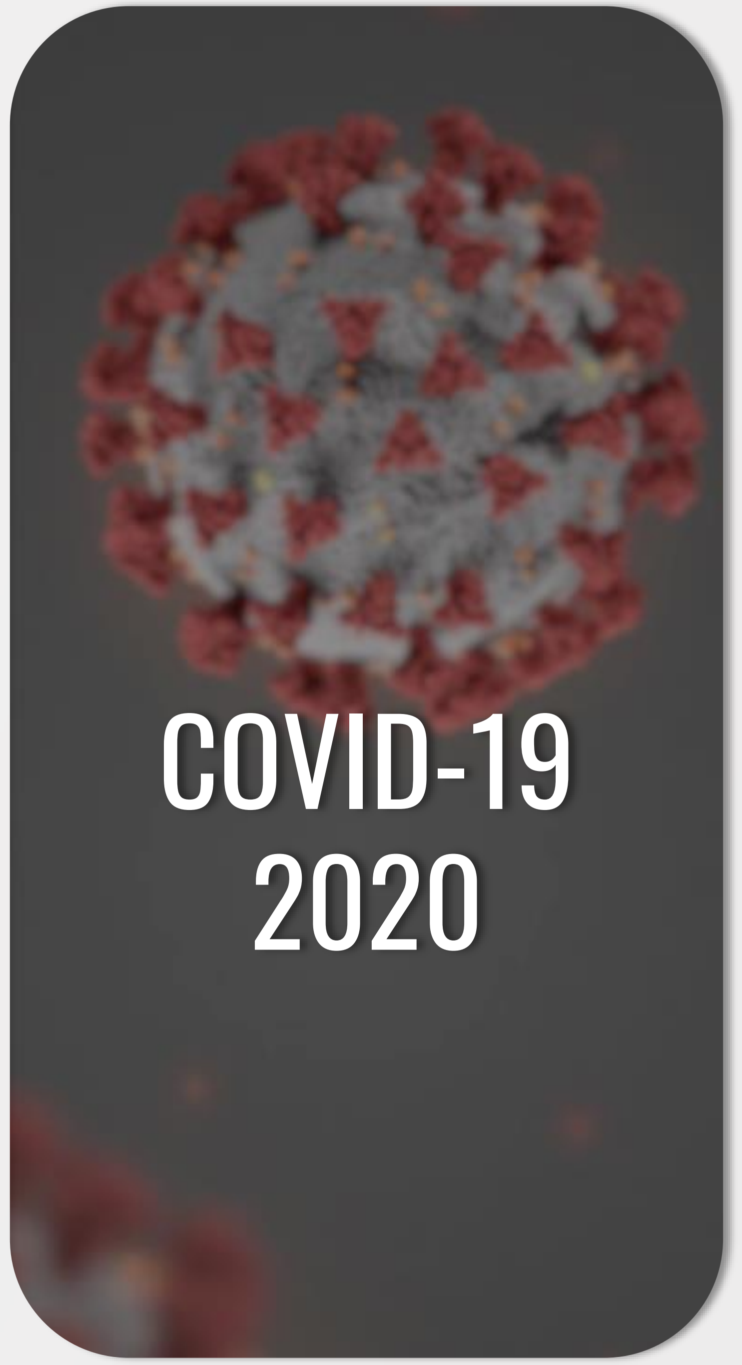
Hurricanes

$155M
Dom. R. 2017 ($16m)
Bahamas 2019 ($76m)
Nicaragua 2020, 2022 ($35m, $10m)
El Salvador 2022 ($18m)

COVID-19

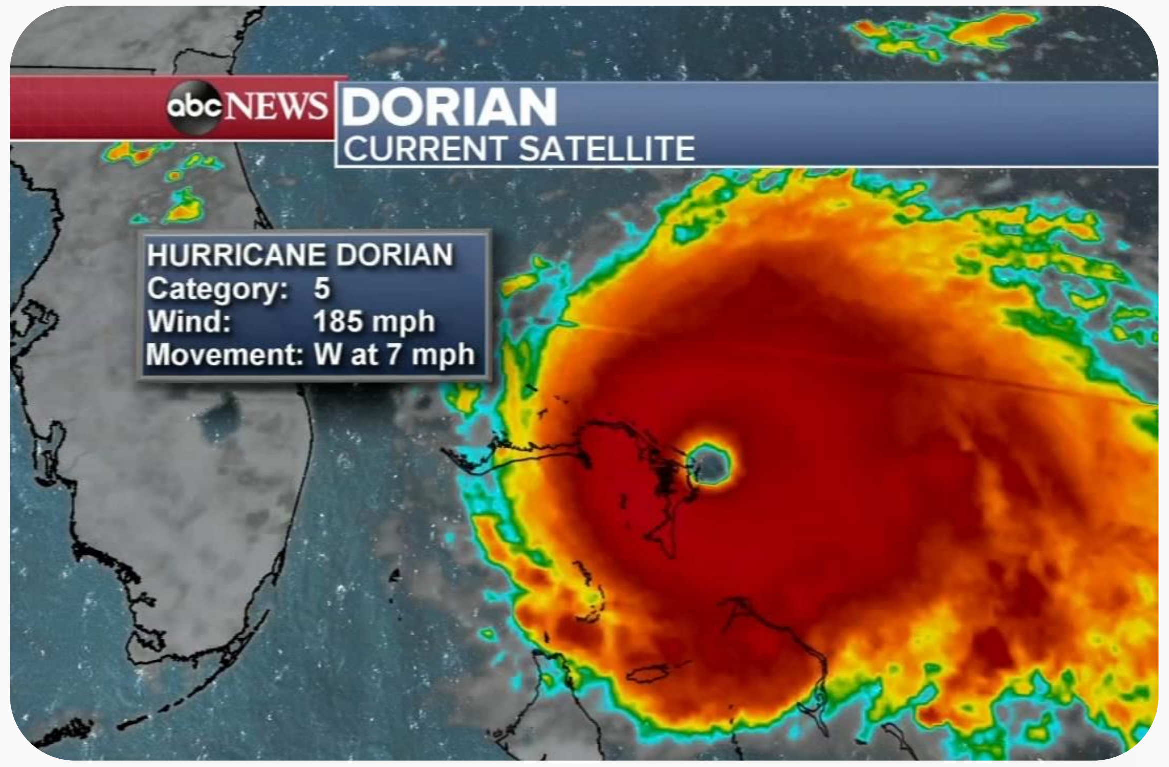
$202M
Ecuador 2020 ($90m)
Dom. R. 2020 ($90m)
Guyana 2020 ($22m)





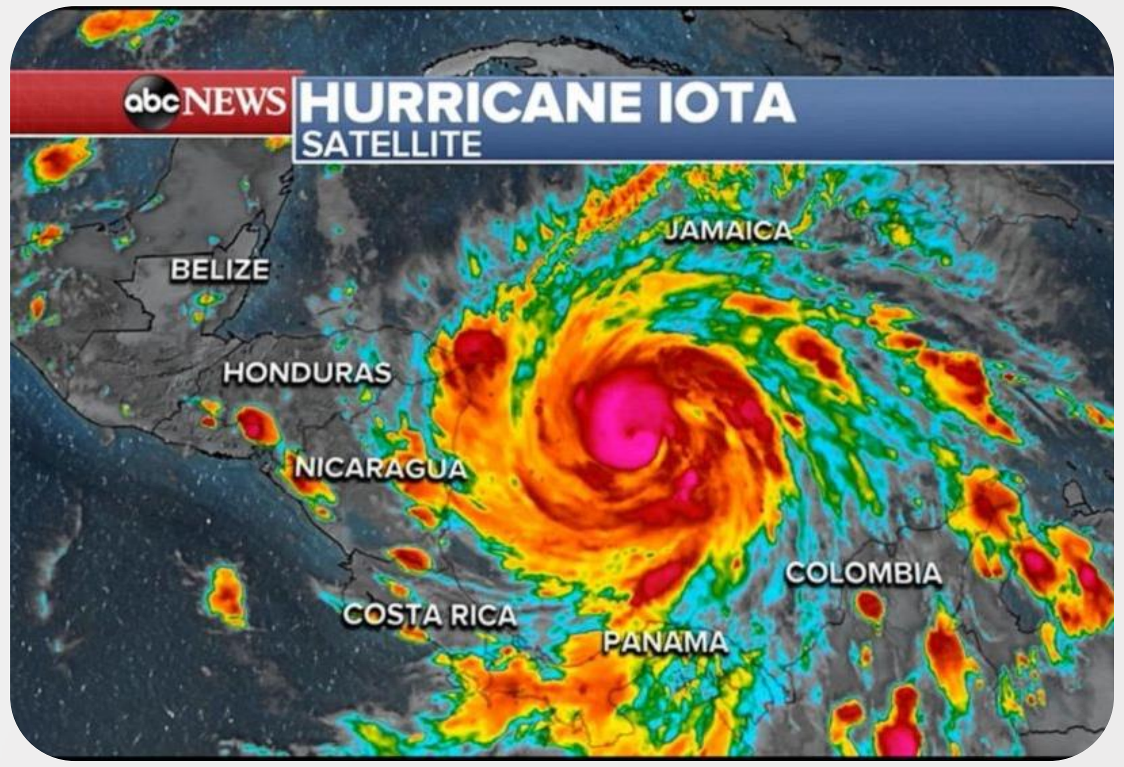
The timeliness of response is crucial

THE BAHAMAS
Hurricane Dorian 2019 (US$76M)
Disbursement 9 days after the event



NICARAGUA
Hurricanes Eta & Iota 2020 (US$35M)
Disbursement 5 days after the country's request

Hurricane Julia 2022 (US$10M)
Disbursement 4 days after the country's request



BAHAMAS
HURRICANE DORIAN 2019

CAT5 Hurricane

US $76 million

22 Public Entities

Humanitarian response:

- Search and rescue
- Medical assistance
- Food and water distribution
- Shelters and housing
- Emergency allowances

Debris removal and environmental cleanup

Rehabilitation of:

- Electricity services
- Water and sewage infrastructure
- Educational centers and other public facilities

NICARAGUA
HURRICANES ETA & IOTA 2020, JULIA 2022

US $45 million

Rehabilitation of electrical networks

ENATREL

Eta & Iota
270 km of electrical distribution networks
Julia
232 km of electrical distribution networks

Rehabilitation of road Infrastructure – MTI

Eta & Iota

- 17 bridges
- 250K inhabitants of Caribe Norte Coast

Humanitarian Assistance - WFP

Eta & Iota
402K beneficiaries
Julia
238K beneficiaries

IDB CLIMATE RESILIENT DEBT CLAUSE - CRDC

- **The IDB was the first MDB to offer the Climate Resilient Debt Clause (CRDC).** Option to defer principal repayments of eligible IDB loans for 2 years following an eligible natural disaster and repay those amounts in future amortization installments.
- IDB's CRDC is designed to **support debt sustainability efforts.** It provides vital financial relief in a time of distress as the deferred payments allow the country to cover public expenses at its discretion.
- **Scalability:** Countries can activate CRDC in several IDB loans to achieve their desired level of coverage.
- **Innovation:** IDB's climate-resilient debt clause uses the same state-of-the-art parametric coverage that was designed for CCF.

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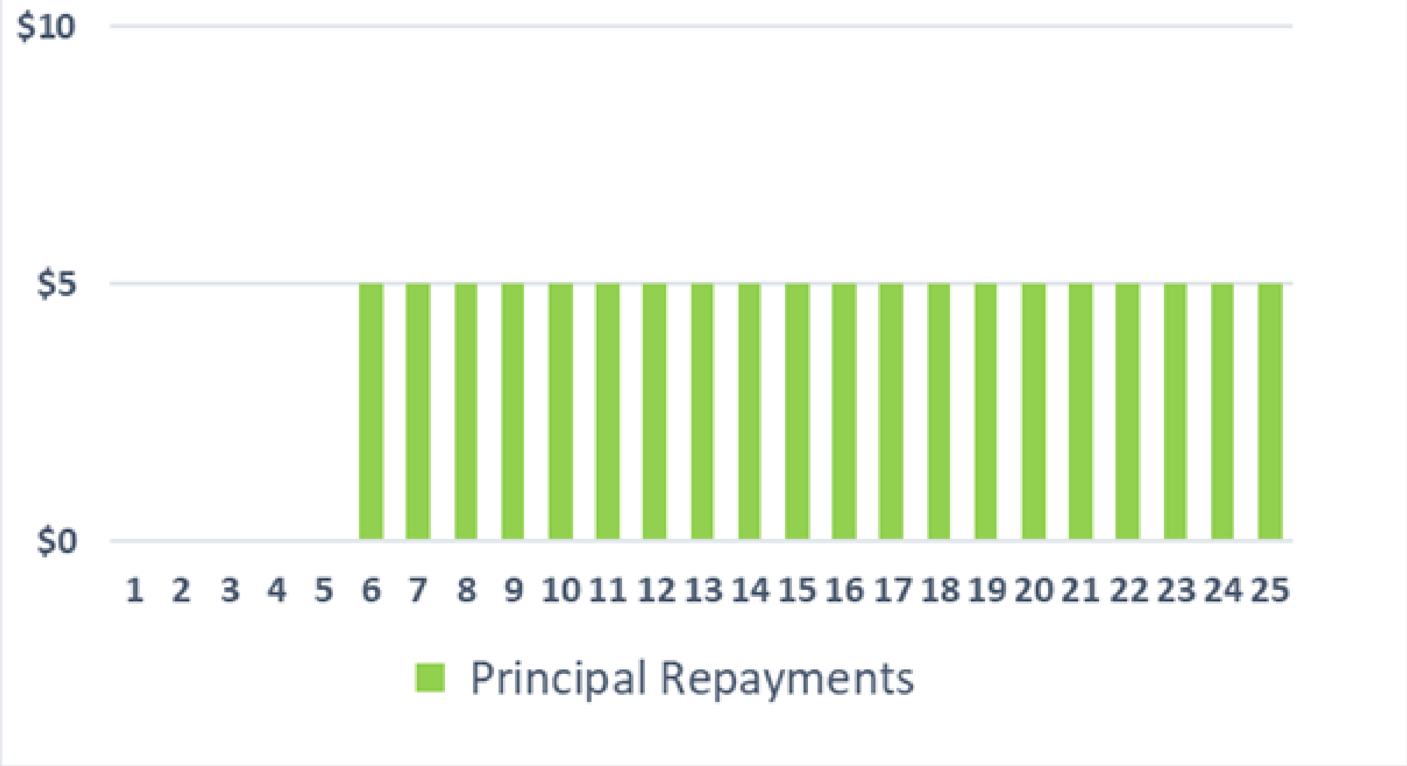
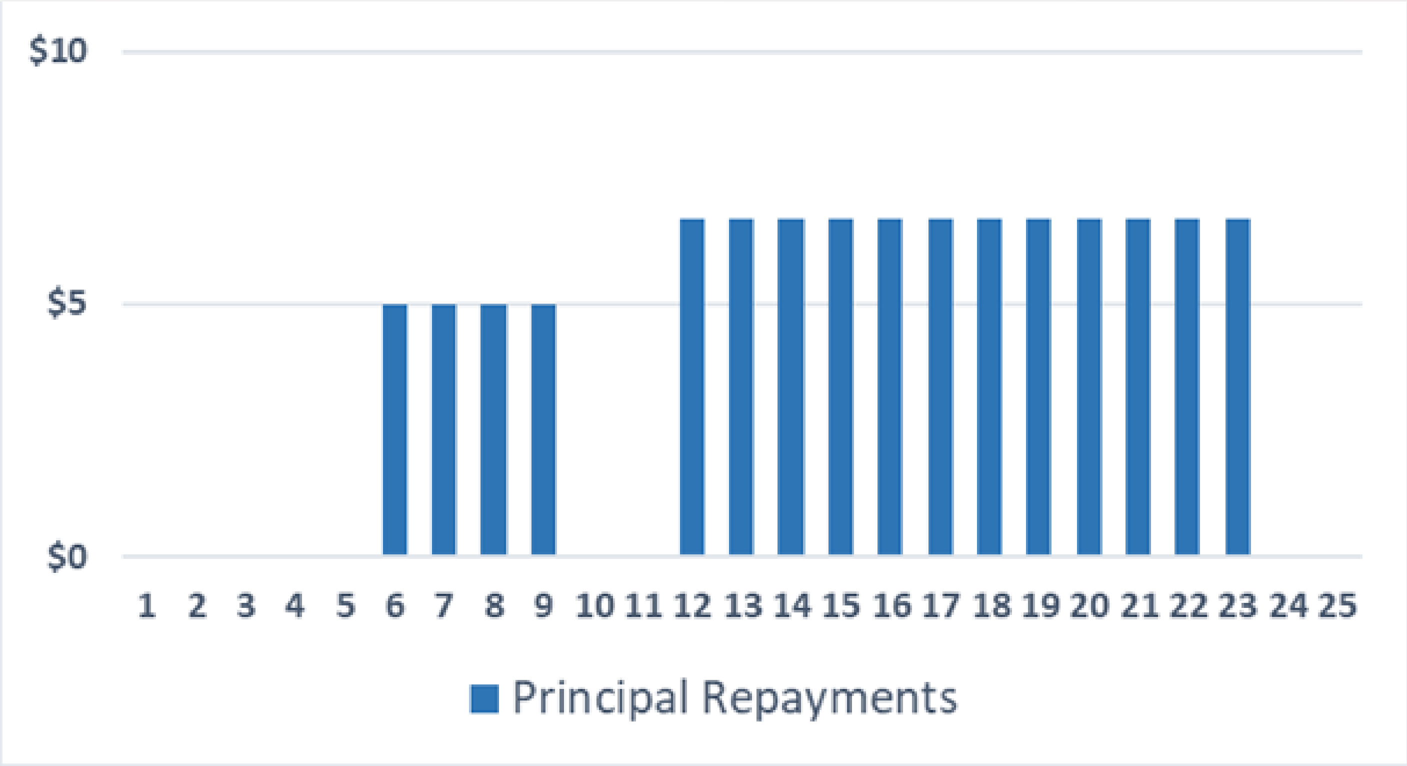
Original Amortization Schedule



Remaining Amortization Schedule after CRDC is exercised



CLIMATE RESILIENT DEBT CLAUSE PORFOLIO

IDB'S CLIMATE RESILIENT DEBT CLAUSE: PORTFOLIO

US$1.4 BILLION

The amount of FFF loans with IDB's innovative climate resilient debt clause (PPO).

KEY MILESTONES

Barbados

From 2021 all eligible loans have been activated the PPO in every loan contract signature. Currently, the PPO has been activated on loans for an approved total of USD **474 million**.

The Bahamas

From the 4th. quarter of 2022 Bahamas has activated PPO clauses on all eligible loans in its portfolio with the Bank, and every time a loan is signed, Bahamas requests activation of the PPO. Currently, the PPO has been activated on loans for an approved total of **USD 379 million**.

Honduras

During the 2nd. quarter of 2023, Honduras activated the PPO for the first time in a loan of USD 32.5 million. Currently, the PPO has been activated on loans for an approved total of **USD 231 million**.

Ecuador

During the 4th. quarter of 2023, Ecuador activated the PPO for the first time in a loan of **USD 106 million**.

EL SALVADOR

During the 4th. quarter of 2023, El Salvador activated the PPO for the firsts two loans for **USD 184 million**.

Final Remarks

1 It is key to advance DRFI strategies that effectively promote risk financing instruments with solutions that encourage investment in resilience and risk reduction.

2 To strengthen disaster resilience in the region, it is imperative to further improve and broaden our Disaster Risk Financing and Insurance (DRFI) instruments.

3 It is crucial to continue building institutional capacity in our countries to enhance their ability to deploy the liquidity provided through financial instruments promptly, facilitating timely responses to the post-disaster recovery process.

Risk Finance and Insurance Group

CMF - Connectivity, Markets and Finance Division