

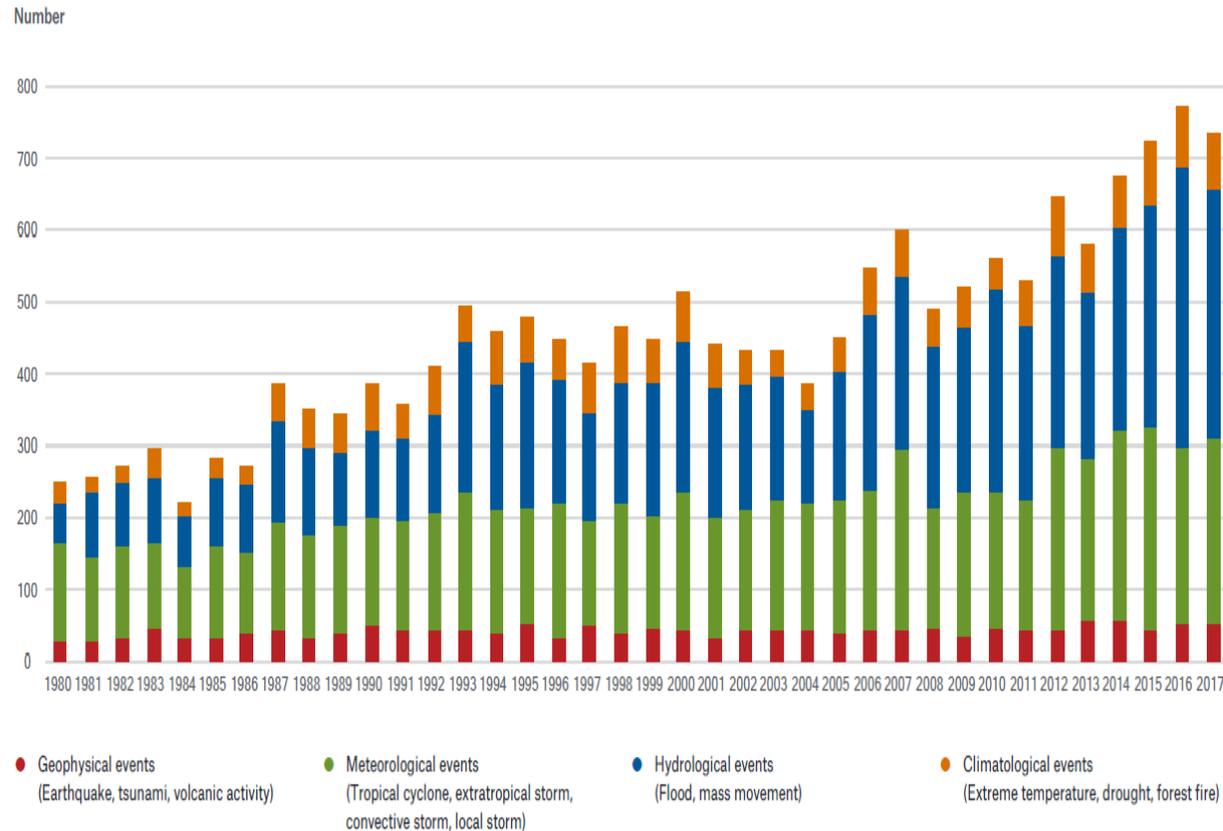
**BUILDING RESILIENCE IN DEVELOPING  
COUNTRIES VULNERABLE TO LARGE  
NATURAL DISASTERS**

**Krishna Srinivasan**  
**The Fifth Tokyo Fiscal Forum**  
**November 20-21, 2019**



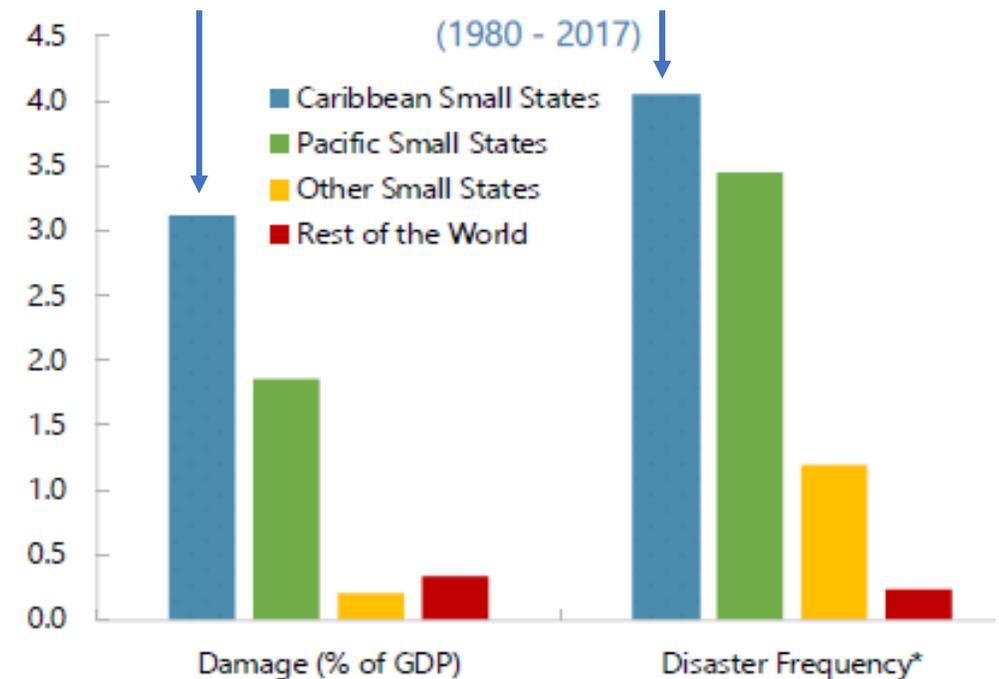
# Increasing Vulnerability to Natural Disasters

## Increasing frequency of natural disasters



Sources: Munich Re; EM-DAT; and IMF staff computations.

## Caribbean states among the top-25 most vulnerable region

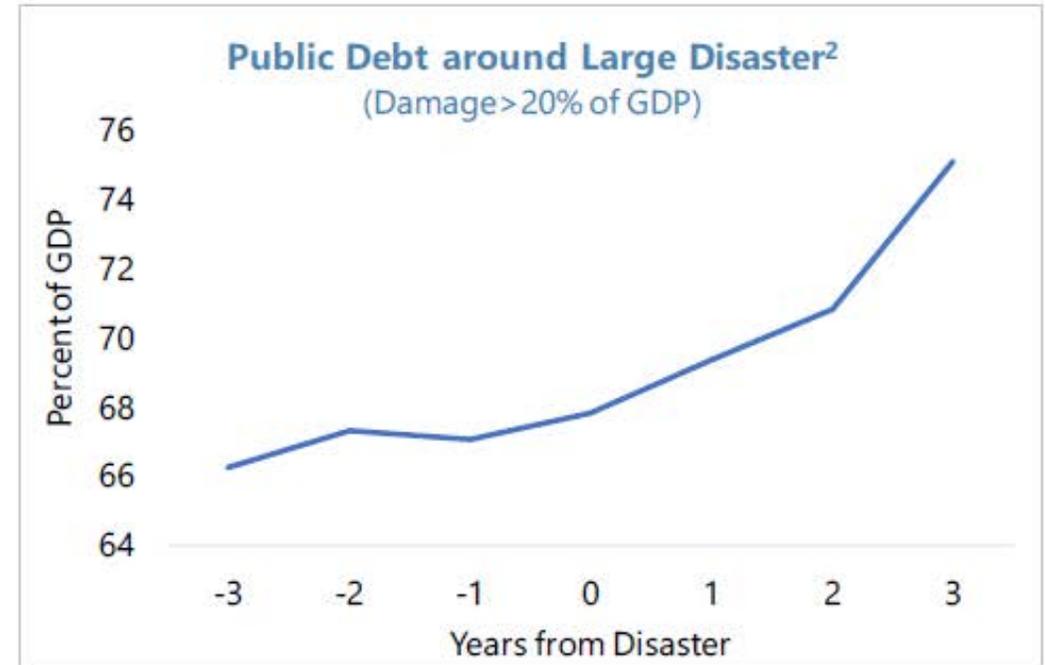
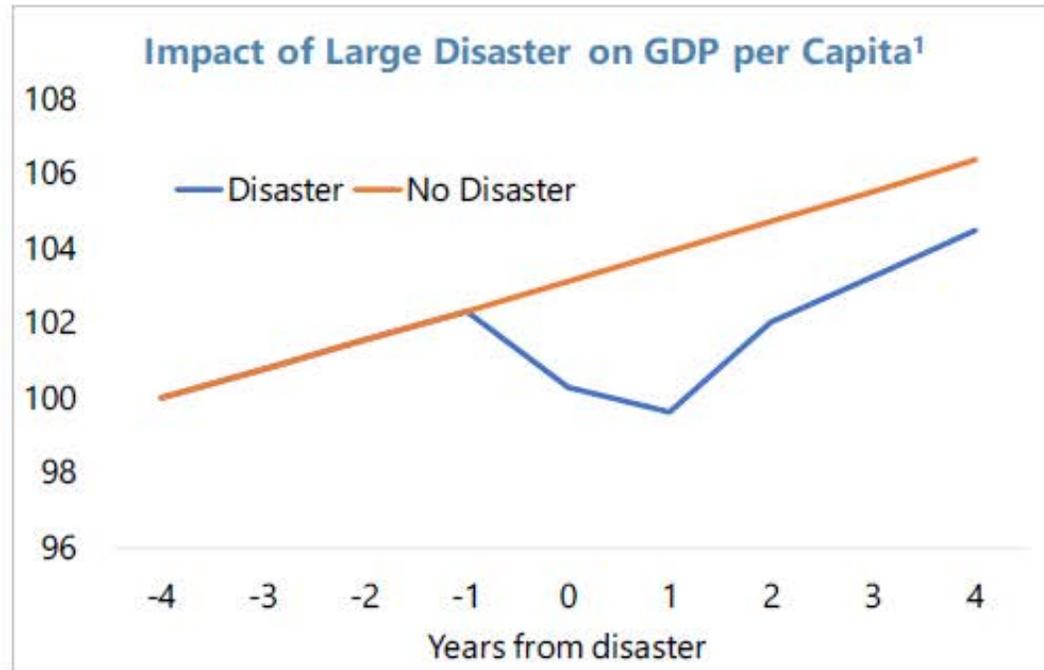


Sources: EM-DAT, WEO, and IMF staff estimates.

\*Frequency is the annual average of all natural disaster incidents from 1980-2017 per 10,000 Km sq. of land area.

# Disasters are Macro-critical, with Long-lasting Effects...

Take a big toll on growth and development outcomes... ...and contribute to higher debt



Sources: EM-DAT database and IMF staff estimates.

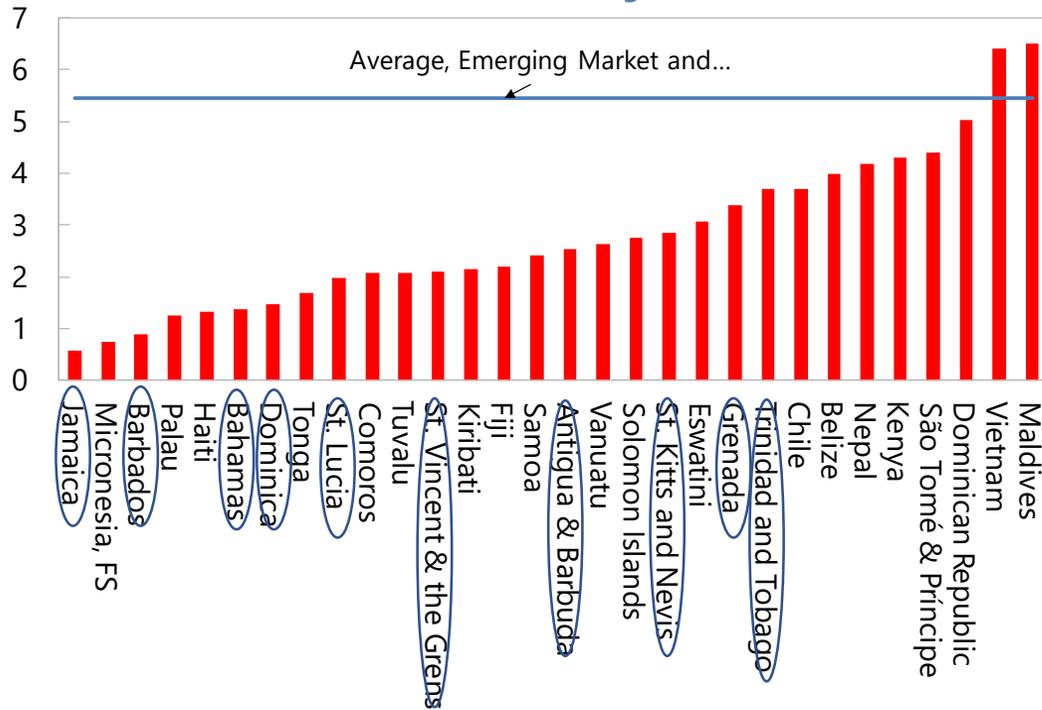
Source: IMF staff estimates.

Notes: Figures average data for 15 episodes in developing countries between 1991 to 2016 for which data are available and which caused damage greater than 20 percent of GDP (based on 11 episodes for public debt).

# ...Perpetuating a Vicious Cycle of Low Growth, High Debt

## Low average growth and...

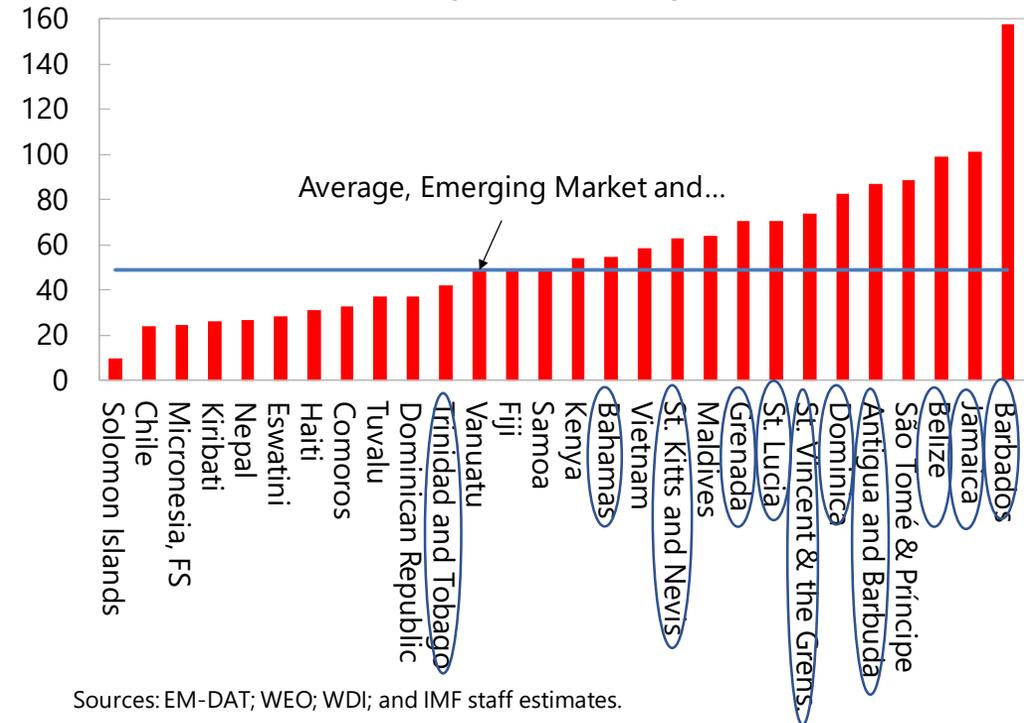
Figure 1. Real GDP Growth Rate  
(Percent, Average 1998-2017)



Sources: EM-DAT; WEO; WDI; and IMF staff estimates.

## ...high debt, often driven by contingent liabilities

Figure 2. Public Debt in 2017  
(Percent of GDP)



Sources: EM-DAT; WEO; WDI; and IMF staff estimates.

# → Building Resilience a Matter of Survival, not a Choice

## Current Architecture

- **Growing recognition** that emphasis needs to shift toward **ex-ante** resilience building

*“An ounce of prevention is worth a pound of cure”*

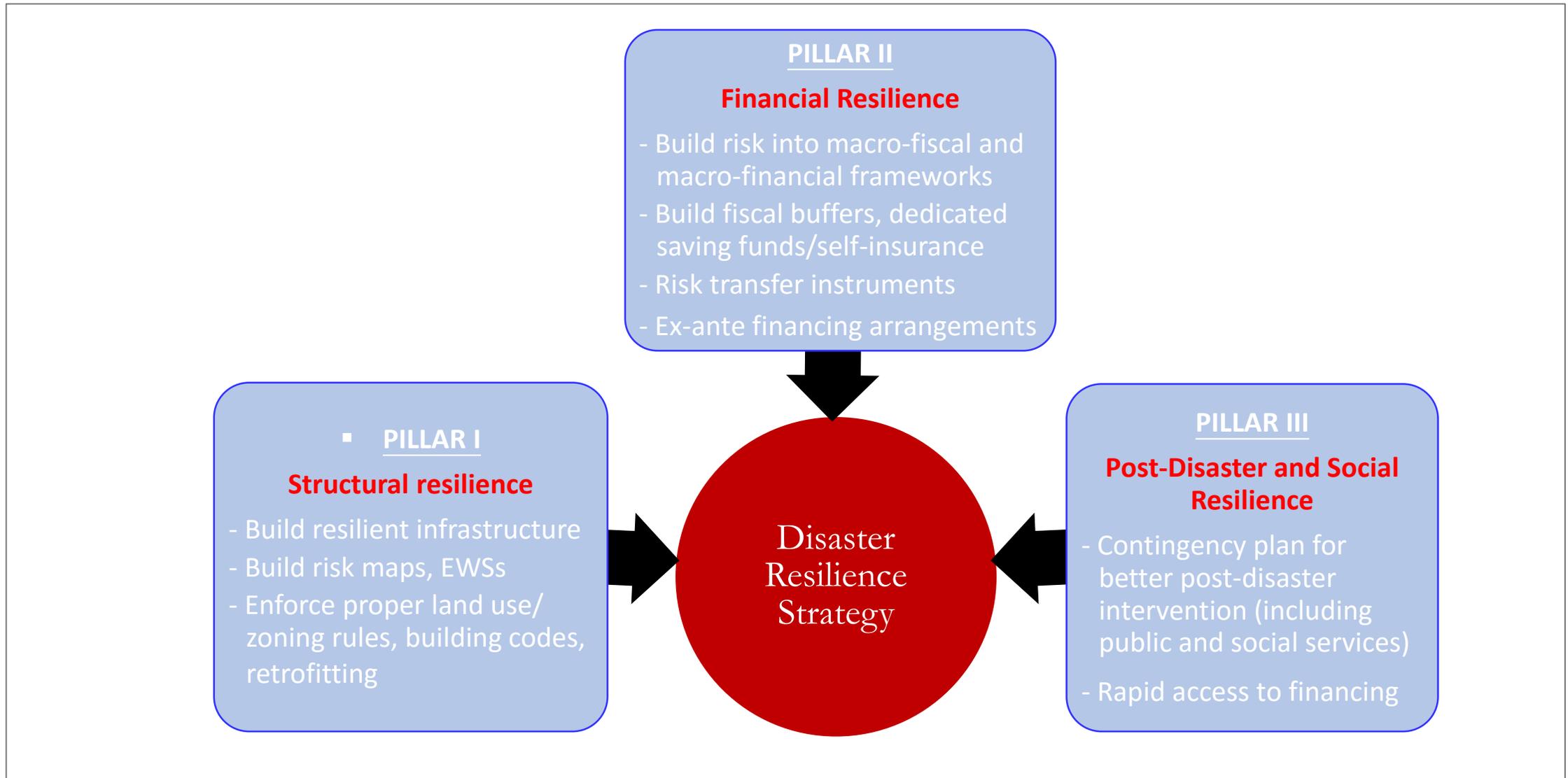
- Sendai Framework for Disaster Risk Reduction
  - Understanding risk
  - Strengthening risk governance
  - Investing in risk reduction
  - Enhancing preparedness to respond to disasters
- World Bank DRM and DRFI frameworks:
  - Risk identification
  - Risk reduction
  - Risk preparedness
  - Financial protection
  - Resilient recovery
- WB is already actively engaged in many countries

## Gaps?

- Strategies to address natural disasters exist, but....fragmented
- Most countries **address specific aspects of natural disasters**, but a comprehensive framework is lacking
- Need for a **comprehensive and holistic** approach for building resilience that addresses all aspects of resilience to disasters and is macro-fiscally sustainable

# Resilience-building Through the Lens of a Disaster Resilience Strategy

## Three Complementary Pillars



**Complementarity:** Greater structural resilience → Over time reduced need for/cost of financial protection and post disaster assistance

# Current Landscape and Obstacles Facing the Pillars

## PILLAR I

### 1. Structural resilience

### 2. Underinvestment in resilience:

Resilience gap  $\approx$  2-3% of GDP p/a

#### •- Limited fiscal space

- - High debt levels
- - Low borrowing capacity
- - Inadequate revenue mobilization

#### 1.- Short time-horizons:

- ✓ - Costs high and upfront
- - Benefits over long term

#### ➤- Capacity constraints in:

- - Designing investments
- - Accessing climate funds

## PILLAR II

### Financial resilience

Use of risk retention and transfer instruments **limited**

- **Cost**—high premia (insurance)
- **Weak fiscal** positions (funds)
- **Capacity** constraints (tools)
- **Social** traditions/insurability
- **Markets/Tools** underdeveloped

## PILLAR III

### Post-Disaster and social resilience

- **Progress made** (e.g., regional intergovernmental agency)
- But **many countries face constraints** in developing ex-ante preparedness to respond to disasters

**Way forward** →

Create fiscal space  
Financing support from development partners  
Capacity building support from development partners

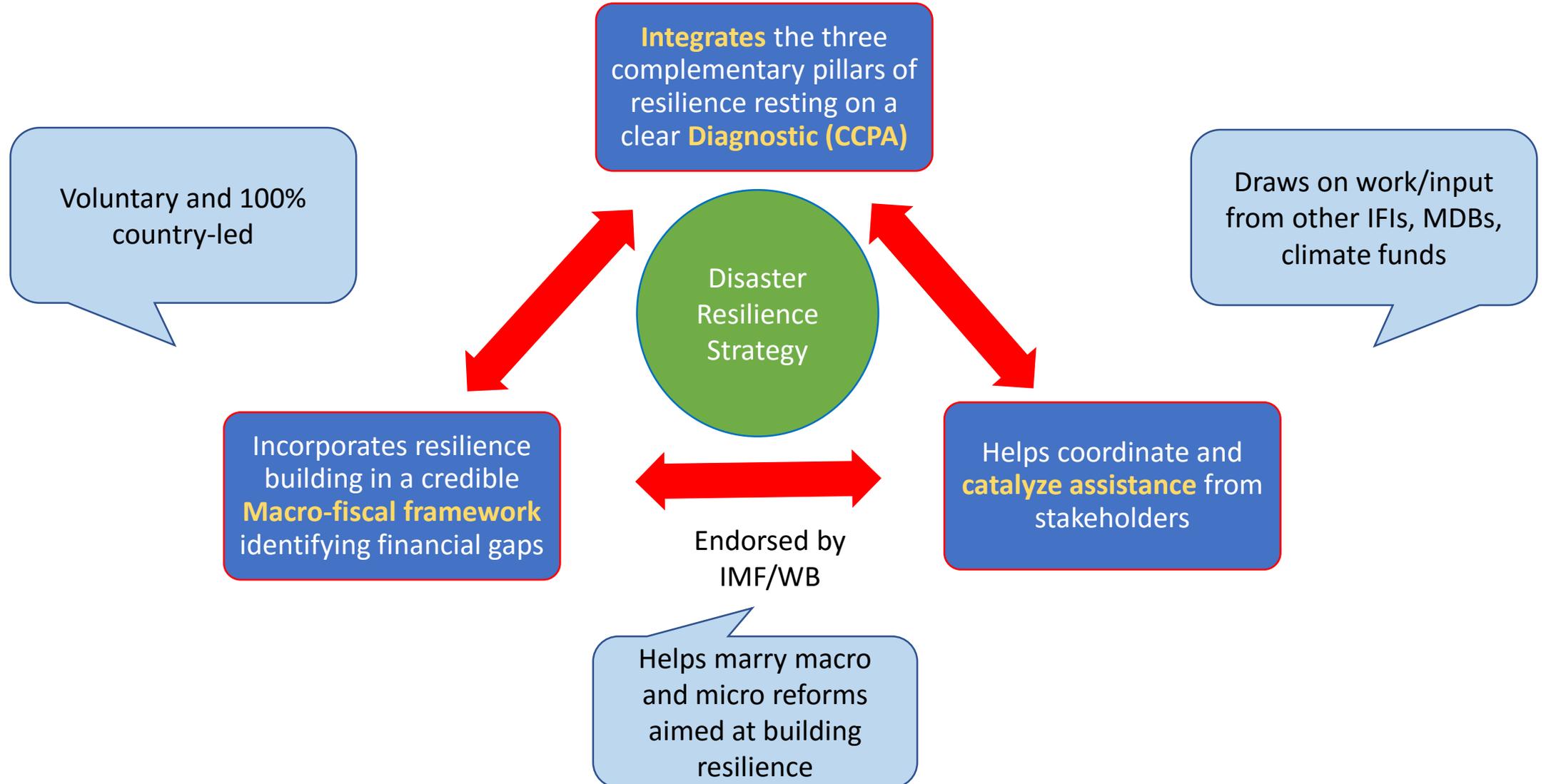
→ **Coordinated action**

# A Coordinated Approach Through DRS

- **Numerous stakeholders** seeking to help countries build resilience
- **Fragmented** nature of current practices →
  - **Potential overlaps and inconsistency** of multiple approaches/stakeholders
  - **Gaps** in integrating resilience building into macro-frameworks to ensure fiscal sustainability
- **Limited capacity** to take full advantage of support from stakeholders/secure financing
- **Need for a coordinated framework** across all stakeholders
- **Disaster Resilience Strategy (DRS)** →  
A platform for organizing effective collaboration across IFIs and development partners

# What Would a DRS Do?

## Provides an Operational Framework



# Coordinated Action to Build Resilience...

## Umbrella Strategy for Building Resilience

DRS

- Designed/owned by the country with contributions of stakeholders
- Builds on national strategies when available
- Assess gaps in resilience building
- Identify, cost, prioritize, and sequence investment needs to fill these gaps
- Efforts to finance through a domestic revenue mobilization plan

Roles of  
different  
stakeholders

- **IFIs:** Policy/TA support to develop, fund, and implement DRS; identify investment, funding, capacity gaps; facilitate access to funds
- **Donors:** Support/augment countries' fiscal efforts to create room for resilience building
- **Climate funds:** Provide financing, simplify access to financial resources

Leverage  
existing tools

CCPA, Article IV consultations, CD tools (e.g., PIMA diagnostic and DIG and other models), WB lending/policy tools... could inform the DRS

# The Role of the IMF

Support country efforts to build ex-ante and ex-post resilience to natural disasters

## Surveillance

1.

- 2.- More **systematic integration of disasters** in macro-fiscal, macro-financial frameworks and policy discussions
- 3.- **Analytical support** to assess costs/benefit impacts of resilience strategies on the economy
- 4.- **Enhanced collaboration with Bank** teams on quantifying costs and benefits; exploring state-contingent debt instruments...
- 5.- **Operationalizing DRS**: Two pilot studies to help Dominica and Grenada authorities to prepare a DRS, building on the CCPAs (w/WB)

## Lending Toolkit

- Provide **BoP support** through
  - **Disbursing or precautionary** arrangements
  - **Post disaster** assistance (RCF RFI...)
  - **Conditionalities** to incorporate resilience building

## Capacity Building

- Establish **macro-fiscal frameworks** incorporating disaster risk
- Incorporate disaster risk in **financial stability** assessments (e.g., in FSAPs)
- Support efforts to develop **MTFF** and **medium-term budgeting** frameworks
- Assess **debt sustainability** implications of resilience strategies
- Help **set-up disaster/resilience funds**
- Support development of **risk sharing tools and markets**
- **Ensure collaboration** with other TA providers to avoid duplication

THANK YOU