# Impact of Climate Change on Countries of the Caribbean

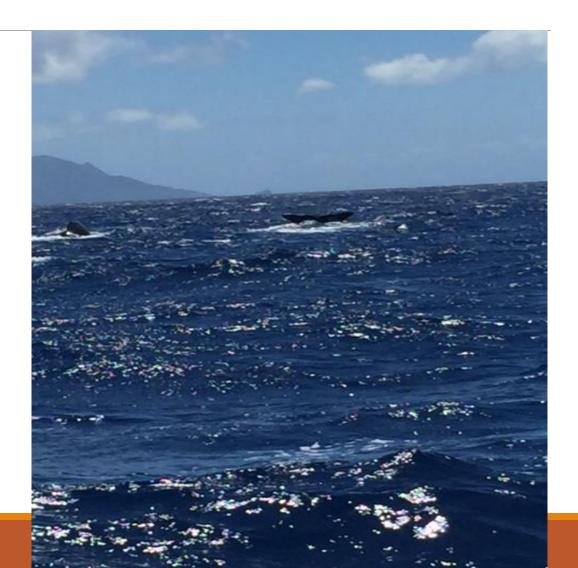
LINKS TO VULNERABILITY AND ECONOMIC INSTABILITY

#### Countries of the Caribbean



# Tropical Paradise? Only Half the Story





# High Risk

- > Hurricanes
- > Tropical Storms
- > Floods and Storm Surge
- **>** Landslides
- ➤ Drought
- > Sea level rise
- **Erosion**
- > Loss of the shoreline

## Vulnerability to Natural Disasters







# What We Already Know

# From 1990 - 2017 there have been 328 natural disasters resulting 31 billion US dollars in debt (ECLAC Data)

# Why

- > Every natural disaster did not cause complete destruction
- ➤ Middle Income and High income
- ➤ Loss of concessional financing
- > Self financing rebuild
- >Loans to rebuild
- ➤ Next natural disaster...
- > Repeat Cycle

Vulnerability to Natural Disasters











2005 Flood Guyana



#### What else do we Know

- Climate change worsens
- >Storms frequency and intensity increase

#### Caribbean Debt

#### Caribbean

Ten (10) Caribbean countries have a 10 year average debt to GDP ratio that exceeds 60%.

4 countries exceed 90%

2 exceed 120%.

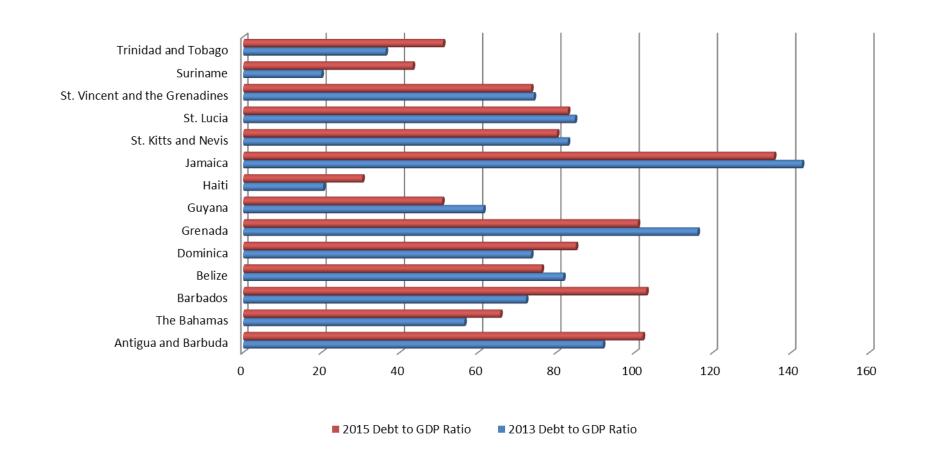
#### **Latin America**

Only two countries in Latin America, Brazil and Uruguay, have a 10 year average debt to GDP ratio of 65%.

For the other 16 Latin countries, the 10 year national debt to GDP ratio falls below 48%.

ECLAC in its 2016 Regional Fiscal Panorama reports: "The Caribbean is currently one of the most heavily indebted parts of the world and, ... In fact, the Caribbean's debt situation is much worse than that of other small open economies and has reduced the fiscal space available to governments".

#### Debt to GDP Ratio



# Comparing Debt

#### SUB-SAHARAN AFRICA

- >only 5 have sustained a debt to GDP ratio above 60% over the past 10 years.
- ➤ 3 countries have had their debt to GDP ratio rise above 60% in the past 3-5 years.
- The other 38 countries have not exceeded 59%.
- ➤ Based on OECD GDP per Capita thresholds, only 13 countries are considered middle income.

#### **EMERGING ASIA**

- The debt to GDP ratio is generally low, with only 4 out of 29 countries in the region surpassing 60%.
- ➤ 4 have been consistently over 60% for the past 10 years.
- ➤ All other countries are below 55%.
- Two-thirds (2/3rds) of Asian countries are low middle income with only 11 categorized at LDCs.

#### 2017 Hurricane Season

- >Irma (Cat 5)
- ➤ Maria (Cat 5) Rapidly intensifying storm

# Category 1-5 in less than 18 hours unprecedented

#### 2017 Hurricane Season

IRMA

Antigua and Barbuda Dominica

St. Martin & St. Marteen Antigua and Barbuda

St. Kitts and Nevis Montserrat

British Virgin Islands St. Kitts and Nevis

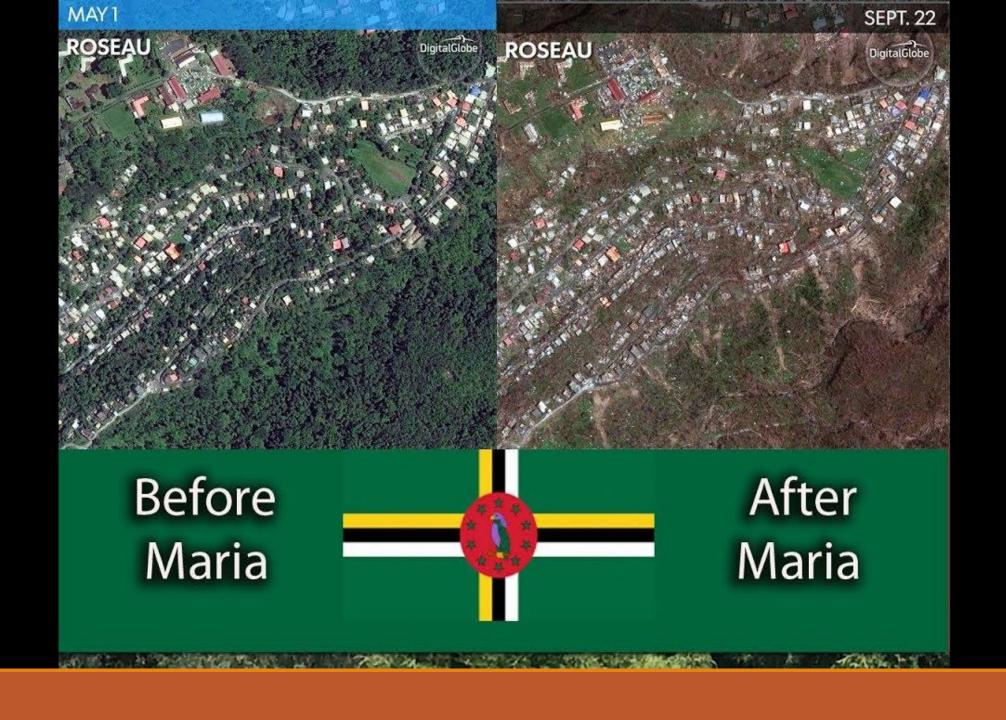
Turks and Caicos Puerto Rico

Cuba Virgin Islands



# Dominica – Nature Island of the Caribbean

- ➤ Way of life evolved around environment
- ➤ Most Citizens make their living in harmony with the environment
- Forests and marine environment protected by law
- ➤ Morne Trois Pitions National Park protected forest for 40 years, a UNESCO WHS for 20
- Forests not cut for any economic activity
- ➤ No major hotels chains



#### Impact on Dominica

90% of infrastructure

100% of agriculture

- ➤ Housing; Education; Health; Water and sanitation; Fisheries; Forestry;
- >Transport; electricity; Telecoms; Airports and sea ports

\$1.3 billion US in Damage

250% loss of the 2016 GDP

#### Impact

#### **HUMAN AND SOCIAL**

- ▶ Death
- ➤ Physical and emotional Injuries
- Interruption medical services, dialysis patients, death of centenarians,
- Emergence of water borne and diseases leptospirosis etc..

#### **ECONOMIC**

- > Destruction of infrastructure
- Interruption and stoppage of economic activity
- ➤ Closure of business
- ► Loss of jobs
- > Tourism

#### Impact

#### **SECURITY**

- ➤ Safety and Security of all people elderly and children
- ▶ law and order: looting, violence, emergence of gangs
- ➤ Inability to secure borders
- Inability to monitor the transshipment of drugs

#### **BIODIVERSITY**

- **≻**Marine
- **≻**Plant
- **≻**Wildlife

(Major hotspot for both marine and terrestrial biodiversity)

Caribbean biodiversity is at major risk of species extinction









## Build-Disaster-Rebuild Cycle

FACTS

Extreme Vulnerability Climate change

Locked in build-rebuild cycle Adaptation

Categorized "Middle and high income" Outliers

High debt Disaster/climate change <u>related</u>

Limited to no fiscal space

Unsustainable High debt

Graduation from ODA Unrealistic

# Assessing the Risk

"We are on the frontline and this is not a metaphorical war...or a metaphorical line...it is one in which we bury the dead, console the grieving, nurse our wounds and call out for reinforcements." Prime Minister Roosevelt Skerrit COP23, Bonn Nov. 16<sup>th</sup> 2017.



## Message

- Climate Change poses an existential threat for the countries of the Caribbean region.
- Extreme vulnerability of the Caribbean region (MICS/HICS) makes for outliers to any economic or financial formula or categorization.
- Funding that is independent of OECD MIC/HIC categorization
- ➤ Operationalize the COP21 Paris Accord
- ➤ ECLAC proposal for Debt swap Climate Funds for Debt