



United Nations Statistical Commission, 52nd session  
**Side event**

Tuesday 9 February 2021, 11 a.m. NY time

# Regional situation of climate change and disaster statistics in Latin America and the Caribbean

**Rolando Ocampo**

Statistics Division Director  
Economic Commission for Latin America and the Caribbean (ECLAC)



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# The Caribbean, Climate Change and Disasters

The Caribbean sub-region is in an **asymmetrical position** in relation to climate change. The region has made a historically **very small contribution** to climate change (**0,3%** of GHG global emissions) yet it is **highly vulnerable** to its effects including disasters and its impacts on people, housing and infrastructure.

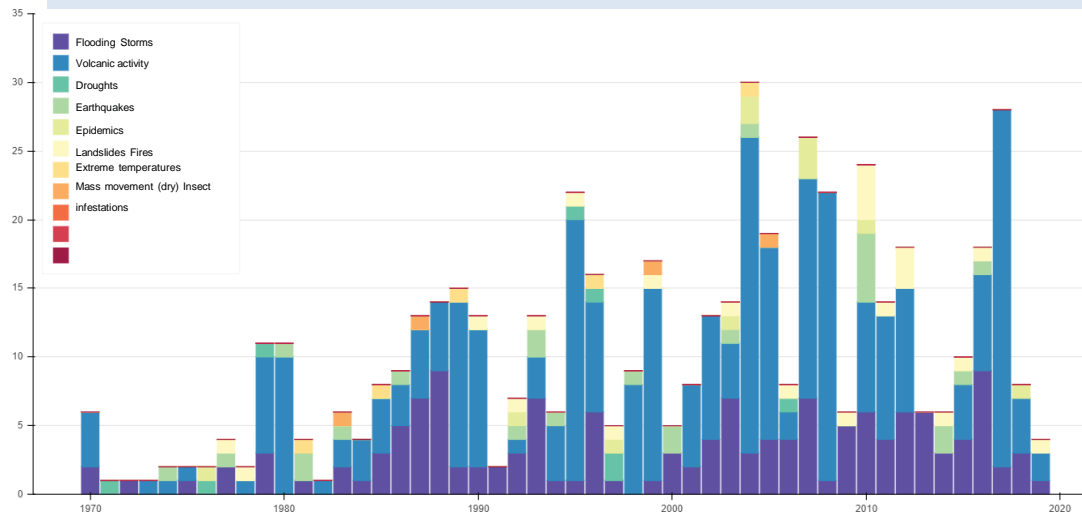
Between 1970 and 2020, 91.7% of disasters on this subregion had their origin in meteorological or hydroclimatic phenomena such as droughts, floods, storms and tropical cyclones.

One of the exceptional features of the Caribbean is that disasters may engulf an entire country and, in relative terms, be of a magnitude that outstrips that of any other region. For example, during the 2017 hurricane season, the total cost of the destruction wreaked by Hurricane Irma and Hurricane María in the British Virgin Islands and Sint Maarten exceeded 100% of the gross domestic product (GDP) of those countries.

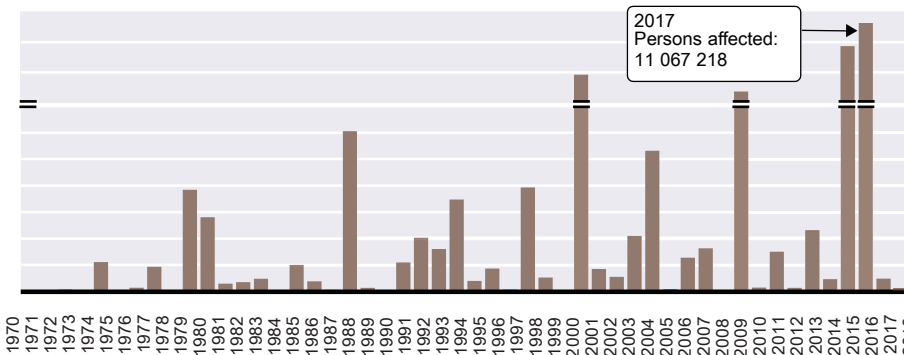


# The Caribbean: disasters(1970 – 2020)

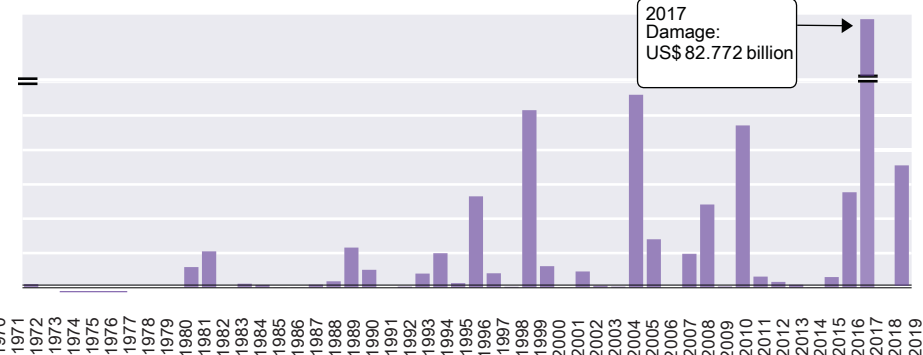
## Caribbean: Number of occurred disasters by type



## CARIBBEAN: Directly affected persons (in need of immediate basic (water, shelter, food) and medical assistance)



## CARIBBEAN: Damage (USD billion)

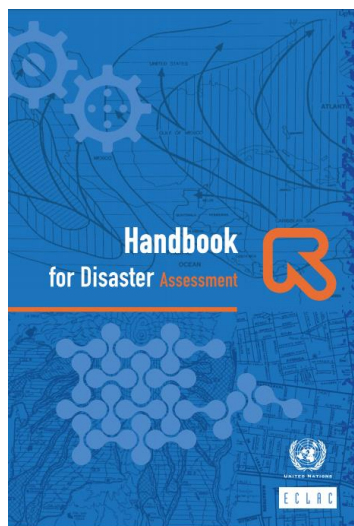


Source: ECLACSTAT based in EM-DAT (Centre for Research on the Epidemiology of Disasters (CRED) Catholic University of Louvain. The International Disaster Database )

# ECLAC's recent DALAs in the Caribbean

Since 2015, ECLAC has led nine Damage and Losses Assessments (DALA) in the Caribbean. All of them were associated with Hurricanes. These technical cooperation were carried out in the following countries: Anguilla, Bahamas, Belize, the British Virgin Islands, Sint Maarten, and Turks and Caicos Islands. The last of these assessments was that of Hurricane Dorian in the Bahamas, which cost USD 3.6 billion.

In the coming months, ECLAC will publish the database of these disaster assessments. It is a unique database since it allows to see the effects of these events by economic sectors and by institutional, public and private sectors. This is important for studying the impacts of climate change in the Caribbean.



# State of the art in the LAC region of environment, climate change and disasters statistics

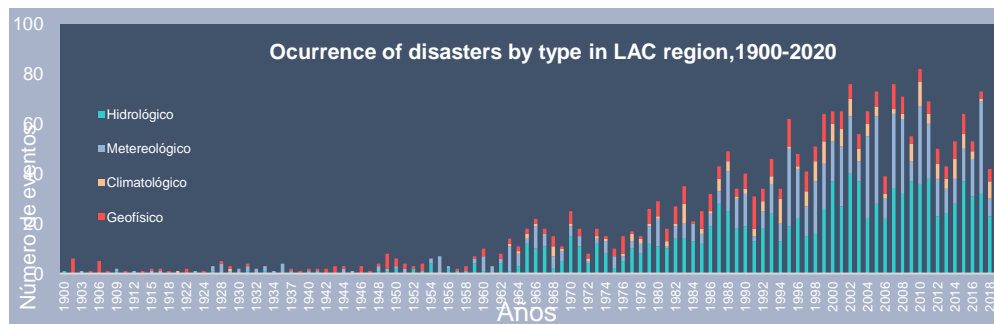


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- Indicators that require environment, climate change and disaster statistics to be compiled:
  - Of SDG targets and goals almost **70%**, and **50%** of SDG indicators
  - Of SENDAI FW: **100%** of indicators
  - Of Paris 2015 Agreement on Climate Change: **100%**
- There is an ever-growing **demand** for these metrics, both from **international and national agreements and development plans and policy targets**.
- Of the three pillars of sustainable development, the newer and weakest is monitoring/measuring **environment, climate change and disaster dynamics**
- Statistical production of climate change and disaster statistics is insufficient and **heterogenous** in the LAC region.

**What is not measured, can not be properly managed nor solved**



# Our ability to **produce** environment, climate change and disasters indicators faces:

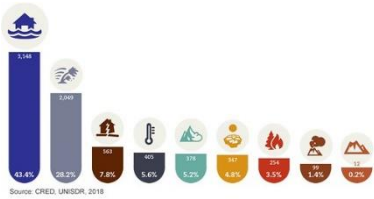


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## Statistical challenges:

Numbers of disasters per type 1998-2017



- Insufficient and/or irregular collection of environmental, climate change and disasters **data** within National Statistical Systems.
- **Non-traditional sources** of statistical information underutilized (i.e. remote sensing, geospatial, monitoring stations and administrative records)
- **Methodologies** to measure some aspects of climate change and adaptation, and disaster risk, impact and resilience are under development

## Institutional challenges:



- **Institutionalization** and regular **budget** allocation needed in both NSOs and line ministries.
- **Technical capacities** in the emerging statistical domain is needed (hence this project).
- Insufficient **institutionalized regular statistical cooperation** between NSO - Ministry of Environment – Disaster/Emergency, line Ministries and academia

# Availability of climate change-related statistics and indicators in the Caribbean Sub-region

Depending on the country the situation varies, but in general:

➤ **Climate process drivers:**

- Statistics relatively more available (energy, agriculture, other economic activities and GHG net emissions).

➤ **Climate change evidence:**

- Historical data series available for precipitation and temperature variation (terrestrial and seas).

➤ **Climate change impacts and vulnerability:**

- Data available for occurrence and impact of disasters on affected people. Economic losses due to disasters less available.
- Sea level rise data is less available

➤ **Mitigation**

- Energy renewability, energy intensity of GDP, forest cover and disaster preparedness data relatively more available.

➤ **Adaptation:**

- The least developed and more difficult to capture statistically (spatially specific programs and measures).



# Caribbean SIDS opportunities related to climate change and disasters statistics production:



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- ✓ This new DA12th ECLAC project: Caribbean SIDS relevant climate change and disasters indicators for evidence-based policies
- ✓ Champion countries in the Caribbean: more developed climate change and disasters statistics & 2 working groups in the Statistical Conference of the Americas
- ✓ Ongoing work on environment, climate change and disasters statistics, particularly CARICOM (within the CARICOM's Regional Strategy for the Development of Statistics (2019-2030) + UNEP's ILAC initiative
- ✓ 2020 round of population censuses in the Caribbean: will provide important social and climate change information (population distribution, waste, water, energy, etc.)
- ✓ Jamaica is pioneering in measuring the impact of disasters on ecosystems (beaches)
- ✓ Possibility of jointly gaining access to common geospatial information and lowering its cost for climate change and disasters statistics and indicators production





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**Thank you!**



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