Eighth Meeting
Expert Group on Environment Statistics
20 October 2021

Environment, climate change and disaster statistics and indicators in Latin America and the Caribbean

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UNITED NATIONS

ECLAC

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3. Technical Assistances in the region
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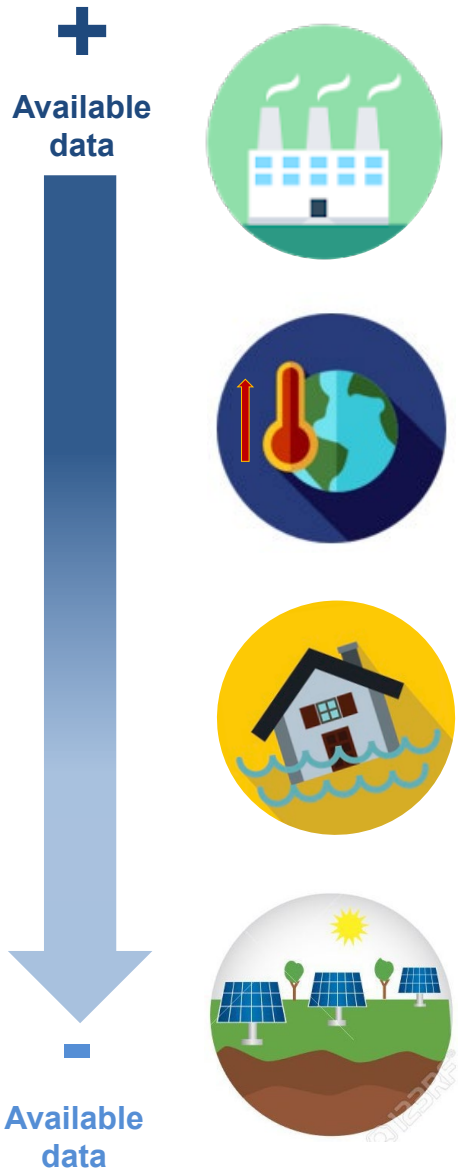
Background in the region

Availability of climate change and disasters-related statistics and indicators in the Latin America and the Caribbean

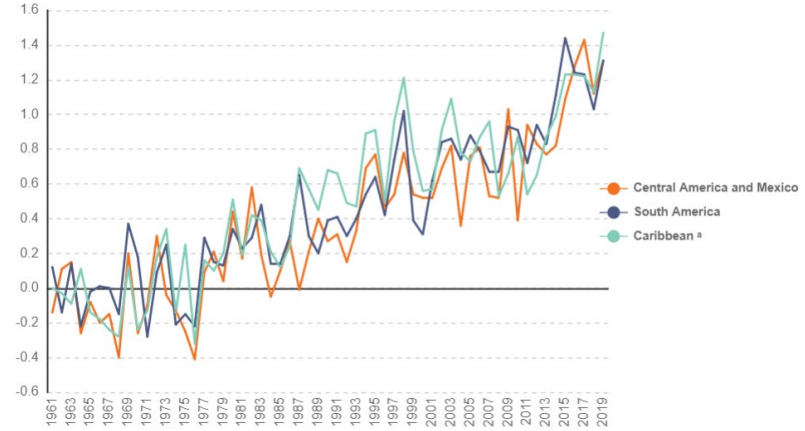


Depending on the country the situation varies, but in general:

- **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).

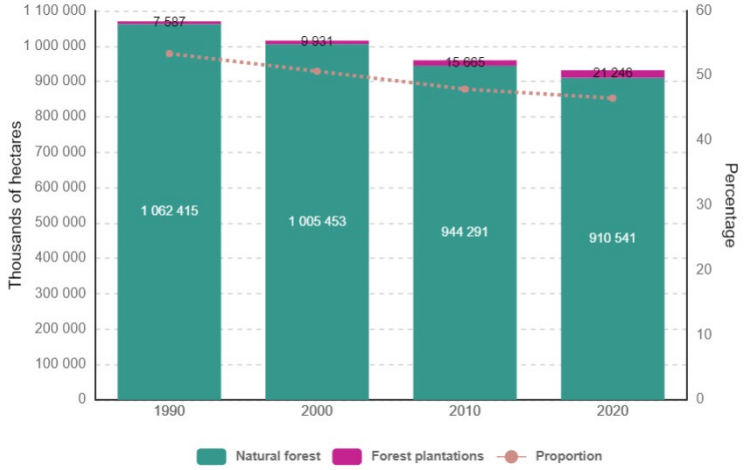
Environment and Climate Change Indicators

Mean annual temperature change,
Degrees Celsius, 1961–2019



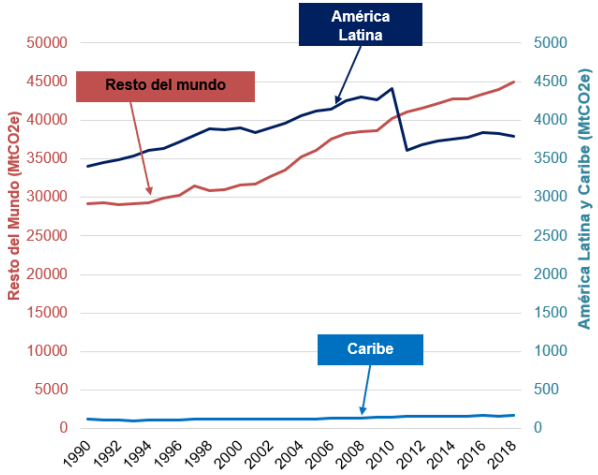
Source: FAO, Database for Statistical Data (FAOSTAT), includes Cuba and the Dominican Republic

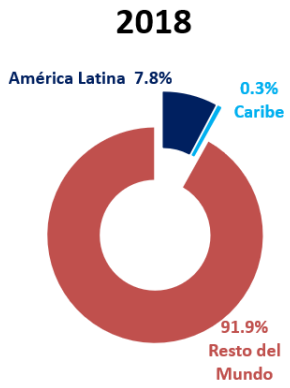
Forest cover
Thousands of hectares and percentages, 1990-2020



Source: ECLAC, calculated based on FAO, Global Forest Resources Assessment

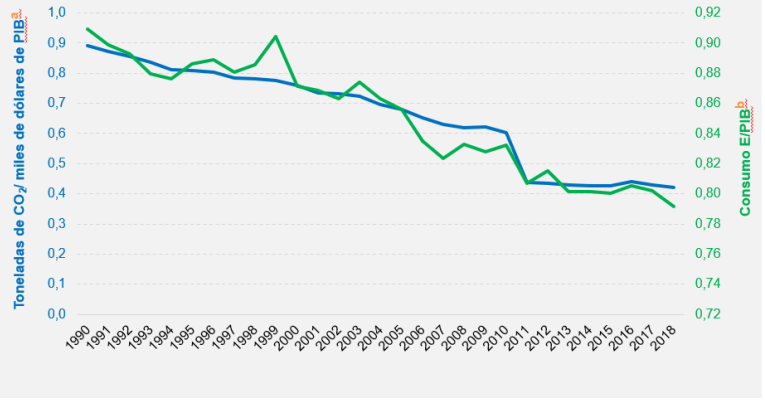
Greenhouse gas (GHG) emissions,
Million tons of carbon dioxide equivalent, 1990-2016





Fuente: CEPALSTAT basado en CAIT, http://cait.wri.org/;

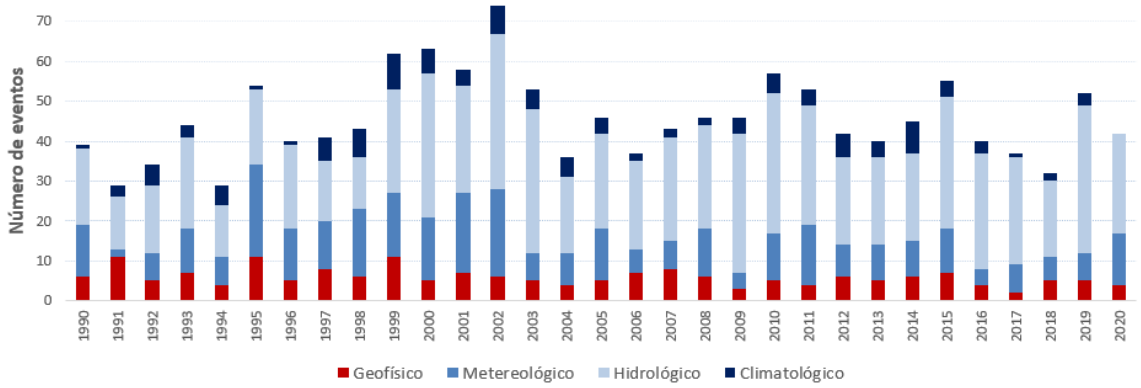
Carbon and energy intensity of GDP,
Tons of CO_2 and thousand USD dollars of GDP, 1990-2016



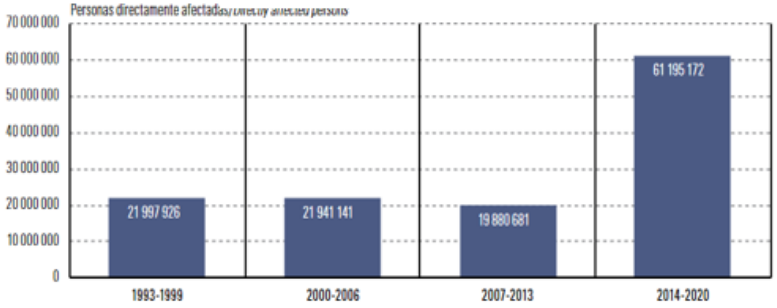
[a] Fuente: Calculado por CEPAL basado a: numerador CAIT, http://cait.wri.org/; denominador CEPALSTAT https://estadisticas.cepal.org/cepalstat/Portada.html
[b] Fuente: CEPAL en base a OLADE, http://www.olade.org/

Disaster Indicators

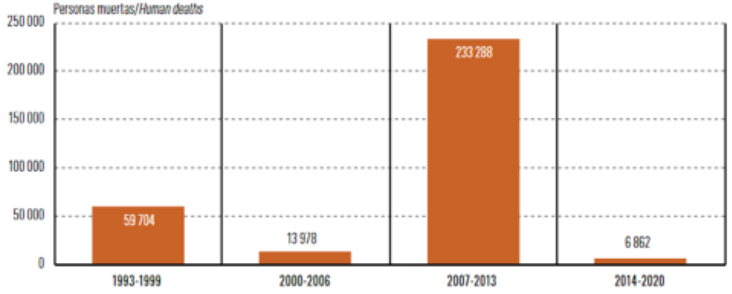
Number of disasters and people affected



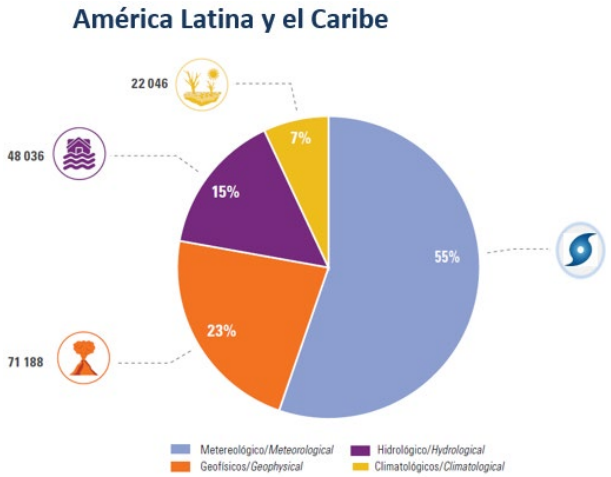
Personas directamente afectadas

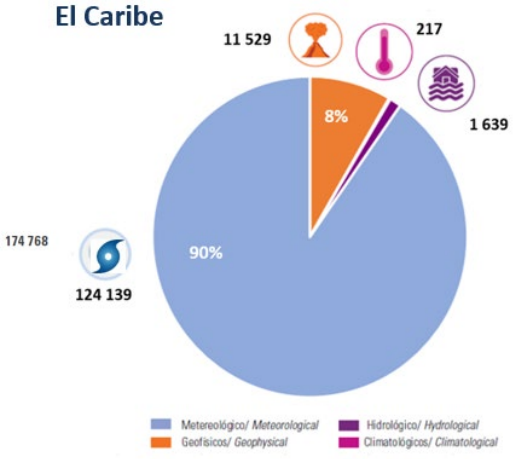


Personas muertas



Cumulative economic cost, by type of disaster





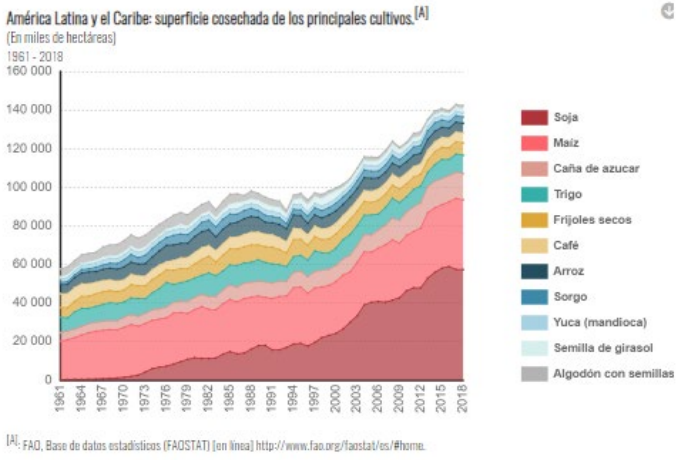
[A] Centro de Investigaciones sobre la Epidemiología de los Desastres (CRED), Base de Datos Internacional sobre Desastres (EM-DAT) [en línea] http://www.emdat.be/.

[A] Centre for Research on the Epidemiology of Disasters (CRED), International Disaster Database (EM-DAT) [online] http://www.emdat.be.

Our products and platforms

➢ CEPALSTAT DATABASE https://statistics.cepal.org/portal/cepalstat/index.html?lang=es

Regional climate change profile is working progress



En América Latina y el Caribe se observa una expansión acelerada de la superficie cosechada durante los últimos 50 años, destacando el aumento de la superficie cosechada destinada a la soya, que durante los últimos diez años se ha visto incrementada en más de 14 millones de hectáreas.

Ver más

Our products and platforms

- **Statistical Yearbook (Environment Statistics Chapter):**

  https://www.cepal.org/es/publicaciones/ae

- **Covid-19 impact in air pollution in cities (LA):**

  https://www.cepal.org/en/publications/45885-effects-quarantines-and-activity-restrictions-related-coronavirus-disease-covid

- **COVID-19): systems approach to disaster risk in the Caribbean**

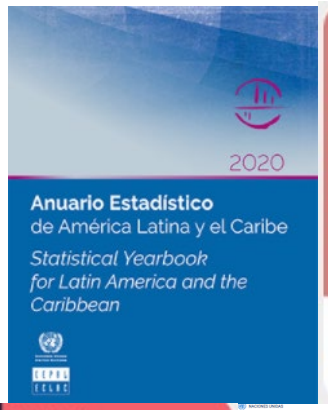
  https://www.cepal.org/es/publicaciones/46731-la-pandemia-enfermedad-coronavirus-covid-19-oportunidad-aplicar-un-enfoque

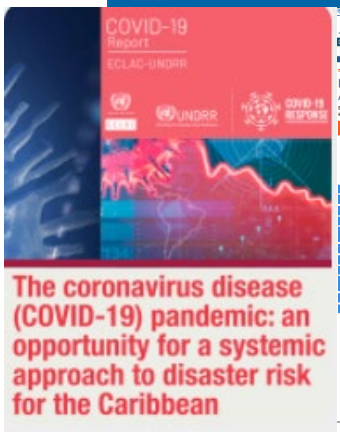
- **Environment Statistics Biblioguide**

  https://biblioguias.cepal.org/estadisticasambientales

- **Regional Network of Env Stats:**

  https://comunidades.cepal.org/estadisticas-ambientales/es





ECLAC project: Caribbean SIDS relevant climate change and disasters indicators for evidence-based policies

UN ECLAC : Caribbean First Strategy

ECLAC Caribbean project (1/2)

Project Objective:

To **enhance the climate change and disaster risk reduction statistical and institutional capacities** of target countries in the Caribbean to improve policy coherence in the implementation of the SDGs, the SAMOA Pathway, the Paris Agreement, and the Sendai Framework.

Partners:

In collaboration with UNSD and CARICOM Secretariat.

Project Expected results:

At the national level:

- Strengthened national statistical and institutional capacities of Caribbean countries to sustainably produce and disseminate relevant internationally agreed climate change and disasters indicators.

At the regional level:

- Strengthened regional capacities of Caribbean practitioners to use the indicators for sustainable evidence-based development policies
- Establish a geo-referenced resilience database of the occurrence and impact of hazardous events and disasters in the Caribbean

ECLAC Caribbean project (2/2)

Planned Activities 2021:

- Workshops "Generating climate change and disasters indicators for policy decision-making" in: **Suriname** (held on July), **Saint Lucia** (Nov), **Antigua and Barbuda** (first week of Dec)
- Two Side-Events to exchange lessons learned and experiences:
  to the 52nd session of the UN Statistical Commission (held on Feb)
  to the Statistical Conference of the Americas of the ECLAC (Nov).}

Planned Activities 2022:

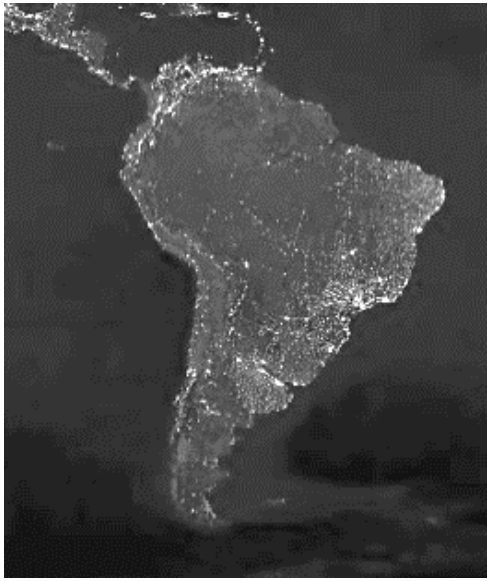
- Workshops "Generating climate change and disasters indicators for policy decision-making" in: **Belize, Dominica, Grenada, Saint Kitts and Nevis, Saint Vincent and the Grenadines**
- One online training module created for and delivered to English-speaking Caribbean countries.
- A dedicated Caribbean English-speaking countries online discussion group created within the existing Regional Network on Environment Statistics and two webinars delivered for both target and non-target countries.

Planned Activities 2023:

- One final Caribbean subregional workshop delivered for all Caribbean countries

https://comunidades.cepal.org/estadisticas-ambientales/es

Technical Assistances in the region



Remote Technical Assistant

Activities

1. To **support the measurement of environmental and climate change indicators** for the construction and maintenance of a system of national environmental indicators:

   Argentina, Bolivia, Cuba, and Dominican Republic.

2. To **strength capacity building**, with an Introductory training course on environment statistics used:
   - First delivered for **Panama** (Nov 2020),
   - Second for **Dominican Republic** (May 2021)
   - Third for **Ecuador** (Dec 2021)
   - **Blended methodology**, combining:

     Could be customized for any country in the region

     Self-paced modules,

     Weekly live webinars with the trainers,

     Exercises with real administrative records data and metadata,

     One tutor for each 15-20 participants

3. To **promote the generation of Ecosystem Accounting,** in 2022 will carry on a training in the entire region that will cover conceptual and practical issues with technically sessions.

4. To **support the production of climate change statistics and indicators,** based on the Global Set.

Regional challenges

Statistical and Institutional challenges

Statistical challenges:

- Insufficient and/or irregular collection of environmental, climate change and disasters **data** within National Statistical Systems.
- **Newer 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 and authorities in the context of National Statistical Systems
- **Inter-agency technical capacities and common language** is needed (hence this project) for all teams in all relevant institutions
- Insufficient **institutionalized regular statistical cooperation** among NSO - Ministry of Environment – Disaster/Emergency, line Ministries and Academia

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Thank you!

Environment, Climate Change Statistics Area
ECLAC Statistics Division
https://www.cepal.org/en/topics/environmental-statistics

UNITED NATIONS

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