

Eleventh meeting of the Statistical Conference of the Americas of  
ECLAC

**Caribbean activities related to measuring environment, climate change and  
disasters indicators for policy decision-making**

The logo for CEPAL (Comisión Económica para América Latina y el Caribe) is displayed in a white-bordered blue rectangle. The letters 'C', 'E', 'P', 'A', and 'L' are white and spaced out within the rectangle. The background of the slide is a colorful collage of nature-related illustrations, including a waterfall, a toucan, a jaguar, a llama, a tent, a turtle, a bird, and various sea creatures like jellyfish and fish.

**CEPAL**

**Implementation of a Resilience database  
for the Caribbean**

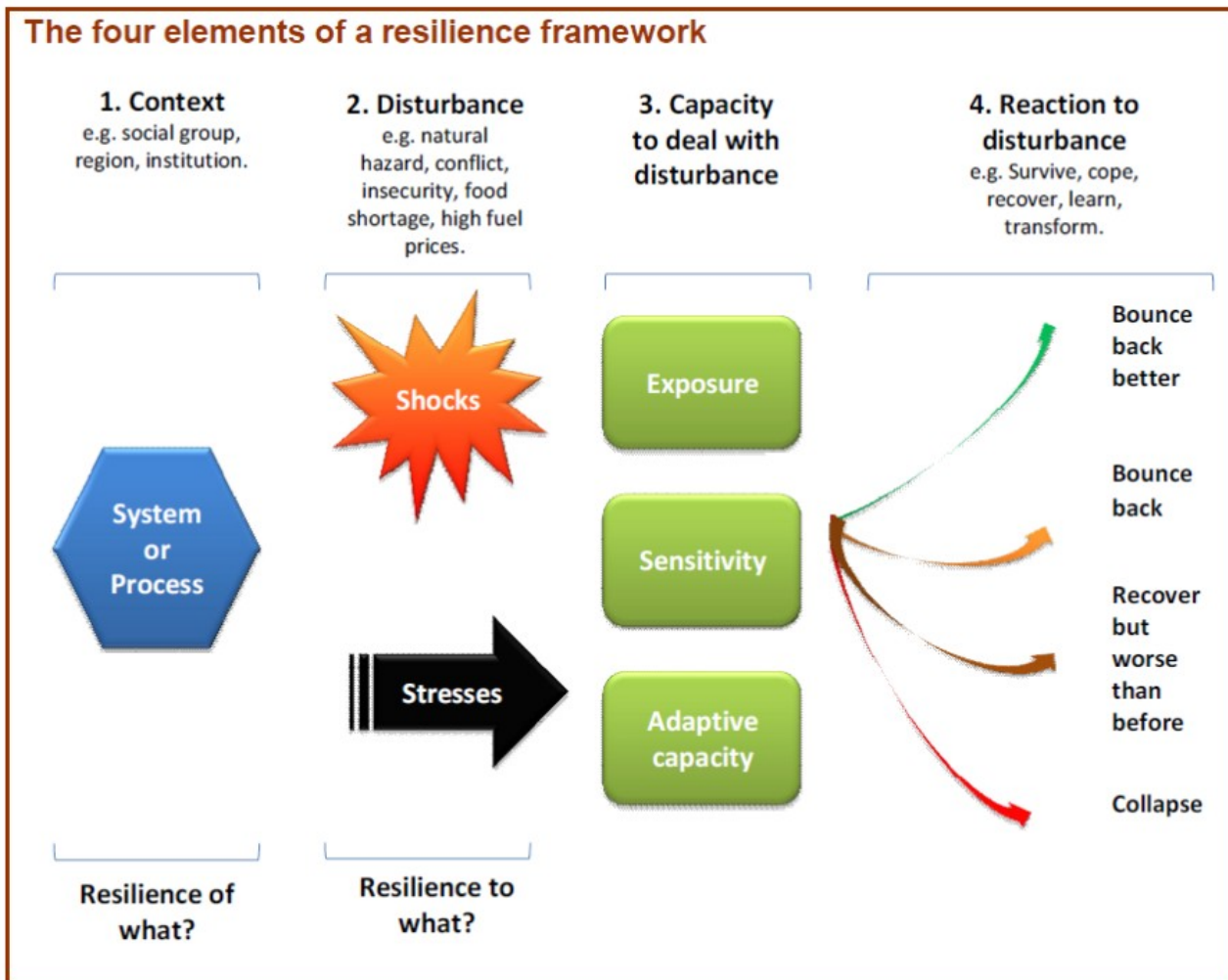
**Francisco Javier Jiménez Nava  
Consultant**



In the context of disaster risk, **RESILIENCE** is the ability of a system, community or society exposed to hazards to resist, absorb, accommodate, adapt to, transform and recover from the effects of a hazard in a timely and efficient manner, including the preservation and restoration of its essential basic structures and functions through risk management.

UNDRR Terminology (2017)

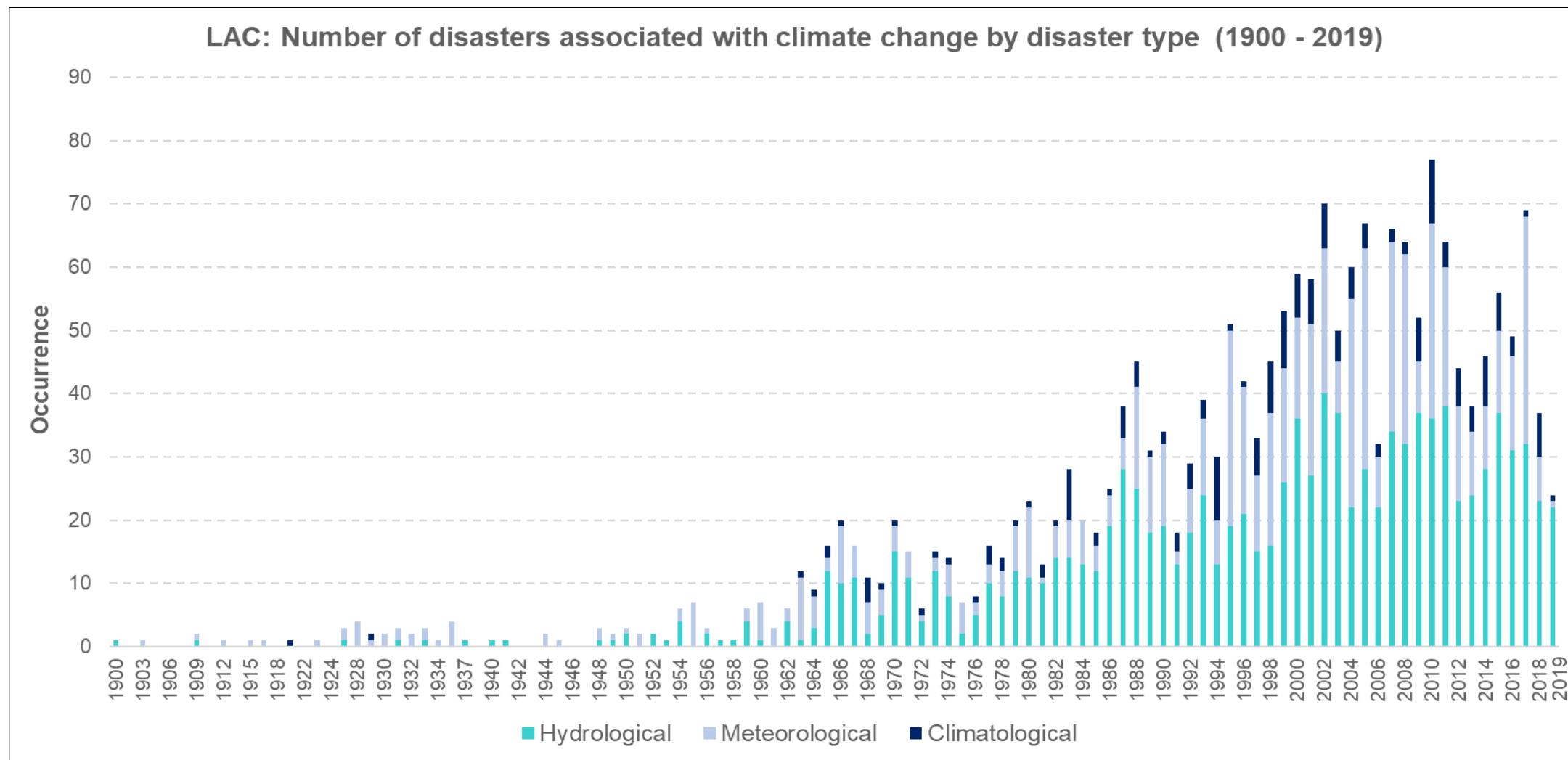




The exposed systems to hazards must be evaluated in their sensitivity and adaptive capacity to effectively protect persons, communities and countries, their livelihoods, health, cultural heritage, socio-economic assets and ecosystems.

For these purposes, the access to statistical and geospatial data and information is essential.

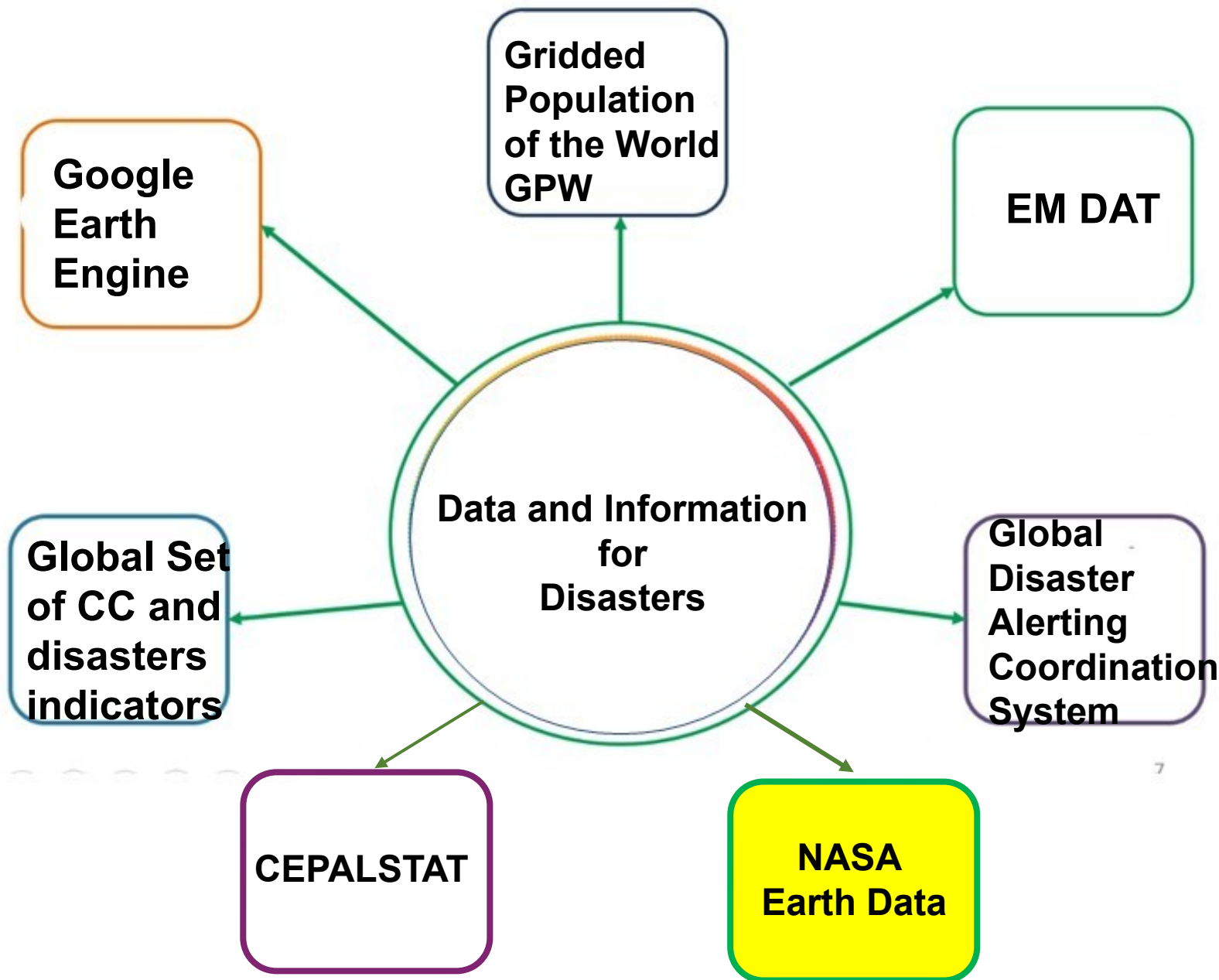
# Occurrence of disasters related to climate change



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# Sources of information



- Google Earth Engine
- DATA Open Street Map
- NOAA National Hurricane Center
- VENTUSKY
- Global Set of Indicators of CC and Disasters
- Socioeconomic Data and Applications Center SEDAC
- .Copernicus

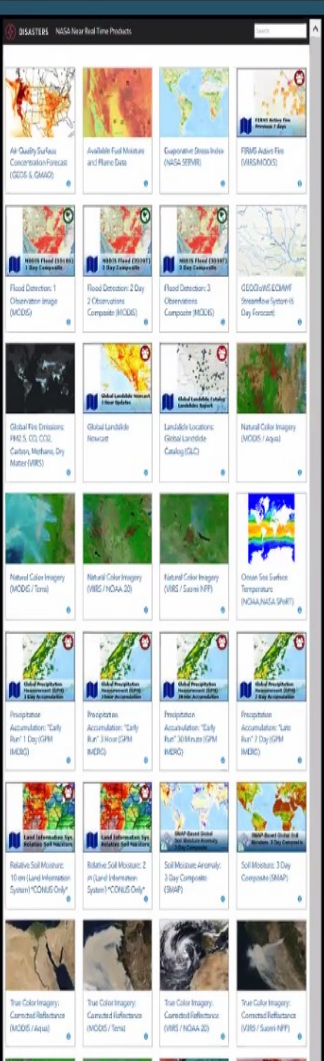
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# Earth observation tools and information

## Near Real-Time Products

- Global unless noted otherwise
- Coarser resolution
- Automatically updated every few hours to daily or weekly
- Many products for the Caribbean
  - Black Marble Nighttime Blue/Yellow Composite
  - FIRMS Active Fire Points (MODIS, VIIRS)
  - Global Landslide Nowcast
  - Flood Detection – 2, 3 Observations (MODIS)
  - Precipitation Accumulation – 30 min, 3 hour, 1 day (GPM IMERG)
  - Soil Moisture and Soil Moisture Anomaly – 3-Day Composite (SMAP)
  - Evaporative Stress Index – weekly
  - Global Fire Emissions – Daily (VIIRS)
  - True Color Imagery – Daily (MODIS at 250m, VIIRS at 375m)
  - Natural Color Imagery – Daily (MODIS at 250m, VIIRS at 375m)



- Event specific products
- Near real time products
- Story maps
- Radar satellite images
- Vector data
- Gridded data
- Georeferenced socio-economic data

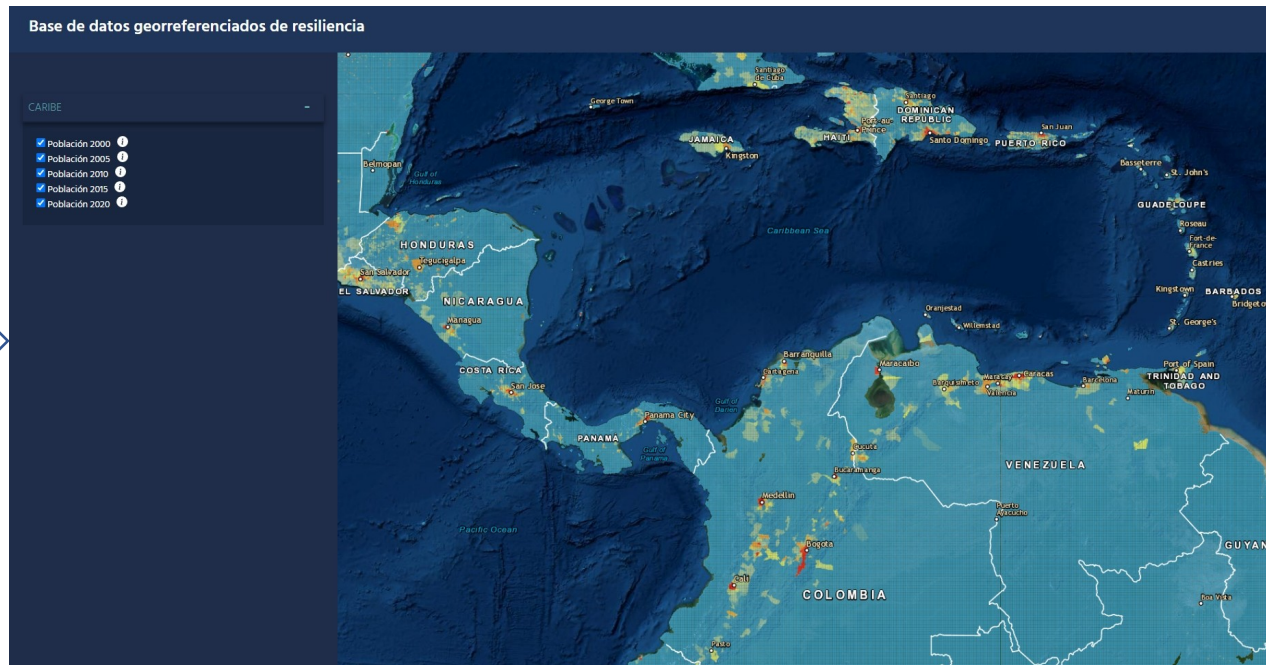


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# Work in progress

Data and information sources



Country needs



# Conclusions

- There is growing evidence of the intensity and frequency of climate related extreme events.
- Disasters must be seen through the reducing risk and building resilience, rather than just a response to a one-off disaster event.
- The Resilience data base for the Caribbean will be a tool for the incorporation of disaster risk reduction and resilience into development activities.



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