Earthquake in Mexico
19 September 2017, 13:00 local time
Magnitude 7.1, epicenter 122 km SE of Mexico City, 51 km deep
27 building collapsed in Mexico City
Number of deaths (accounted for by 22:00 local time) >140
Mexico addressing Sendai Disaster Risk Reduction Framework
I. Introduction

II. National System of Statistical and Geographical Information
   II.A Demographic and Social Subsystem
   II.B Economic Subsystem
   II.C Government Subsystem
   II.D Geographic & Environmental Subsystem

III. Aligning to Sendai global targets

Conclusions
I. Introduction

Key Elements

- **Statistical and Geospatial Information within the same institution, since 1983**
- **Constitutional-level autonomy, since 2008**
- **Coordination of the National System of Statistical and Geographic Information (SNIEG)**
II. National System of Statistical and Geographical Information
Economic 11 STC
Geographical & Environmental 8 STC
Demographic & Social 12 STC
Government & Justice 6 STC

STC: Specialized Technical Committee
IIA. Demographic and Social Subsystem

Use of the geo-referenced National Housing Inventory Visualized within the Digital Map of Mexico
IIA. Demographic and Social Subsystem

Population Census

The main purpose of the 2010 Population and Housing Census is to establish the total population of the country, update information on their main demographic and socioeconomic characteristics, and locate their distribution in the national territory; as well as listing the households and data on their basic characteristics. In addition, it seeks to enrich the historical series of demographic and socio-economic information, maintaining in general the comparability with the censuses carried out in Mexico and in other countries;
IIB. Economic Subsystem

National Statistical Directory of Economic Units (DENUE)
National Censuses of Government

The National Censuses of Government are statistical methods that allow society in general to know, based on statistical and geographical information captured from administrative records, the state that the public institutions that integrate the Mexican State in the three branches of the Union, (Executive, Legislative and Judicial), in their respective spheres of government (Federal, State and Municipal), with the purpose of supporting the processes of policy design, implementation, monitoring and evaluation. Public affairs in matters of government, public security, procurement and justice, and the penitentiary system.
IID. Geographical and Environmental Subsystem

- Energy Sector Information
- Emissions, Waste and Hazardous Substances
- Land Use, Vegetation and Forest Resources
- Climate Change
- Basic Geographical Information
- Basic Geographical Information
- Water
- Rural and Urban Development

Geographic and Environmental System
IID. Geographical and Environmental Subsystem

Land Use and Vegetation Information Series
**IID. Geographic and Environmental Subsystem**

- Geodesy
- Hydrographic Features
- Reefs, perpetual snow and salt
- Geographical Names
- Hydrographic
- Orthophotos
- Sense of Roads
- National Geostatistical Framework
- Terrain Data
- Water Infrastructure
- Surface and Groundwater
- Protected Natural Areas
- Cadastre of Social Property
- Floors
- Fango, Flood, Sandy and Marshy
- Geology
- Cartographic Framework
- Geostatistical Framework
- Energy Resource
- Mangroves and Wetlands
- Land use and vegetation
- Physiography
- Satellite Images
- National Road Network
- Localities
- Climates
- Geostatistical Codes
- Geographical Addresses
International co-operation on Disaster-related statistics

1. Asia-Pacific Expert Group on Disaster-related Statistics

Expected outcome:
Disaster Related Statistics Framework (DRSF)

- Description of a basic range of Disaster-related statistics
- Relationships with internationally-agreed Sendai Framework & SDG Indicators
- Technical guidance on measurement methodologies to help improve quality (including international comparability) of the basic range of statistics
2. Conference of European Statisticians (CES) Task Force on measuring extreme Events and Disasters

Expected outcomes:

• Recommendations to National Statistical Offices for measuring extreme events and disasters, to be approved by the CES Bureau in February 2019
• Contributions to the work of the UNESCAP Expert Group
• Contributions to the Global Partnership on Disaster-related statistics
Participation in Working Groups:

Inter-Agency and Expert Group on Sustainable Development Goals (IAEG- SDGs)
Co-chairs: Mexico and The Philippines.
Working Group on Geospatial Information for the SDG indicators (co-chaired by Mexico and Sweden).

United Nations Committee of Experts on Global Geospatial Information Management (UN-GGIM)
Co-chairs: Mexico, United States and China.
• Chair: UN-GGIM: Americas;
• Member of the UN-GGIM WG on Geospatial Information and Services for Disasters
III. ALIGNING TO SENDAI GLOBAL TARGETS
A: Substantially reduce global disaster mortality by 2030, aiming to lower average per 100,000 global mortality between 2020-2030 compared with 2005-2015.

A-1 (compound) Number of deaths and missing persons attributed to disasters, per 100,000 population

A-2 Number of deaths attributed to disasters, per 100,000 population

A-3 Number of missing persons attributed to disasters, per 100,000 population

A-2 = ((468)(100,000)/119,530,753))

A-2 = 0.39*

* In 2015

CENAPRED. Socioeconomic impact of disasters in Mexico during 2015
B: Substantially reduce the number of affected people globally by 2030, aiming to lower the average global figure per 100,000 between 2020-2030 compared with 2005-2015

B-2 = ((2,868,829)(100,000)/119,530,753

B-2 = 2400.07*

*In 2015

CENAPRED. Socioeconomic impact of disasters in Mexico during 2015

B-1 (compound) Number of directly affected people attributed to disasters, per 100,000 population.

B-2 Number of injured or ill people attributed to disasters, per 100,000 population.

B-3 Number of people whose damaged housing were attributed to disasters.

B-4 Number of people whose destroyed housing were attributed to disasters.

B-5 Number of people whose livelihoods were disrupted or destroyed, attributed to disasters
C: Reduce direct disaster economic loss in relation to global gross domestic product (GDP) by 2030

C-3 = $17,781,700,000* pesos

*In 2015

CENAPRED. Socioeconomic impact of disasters in Mexico during 2015

C-1 (compound) Direct economic loss attributed to disasters in relation to global gross domestic product
C-2 Direct agricultural loss attributed disasters
C-3 Direct economic loss to all other damaged or destroyed productive assets attributed to disasters
C-4 Direct economic loss in the housing sector attributed to disasters
C-5 Direct economic loss resulting from damaged or destroyed critical infrastructure attributed to disasters
C-6 Direct economic loss to cultural heritage damaged or destroyed attributed to disasters
D: Substantially reduce disaster damage to critical infrastructure and disruption of basic services, among them health and educational facilities, including through developing their resilience by 2030

D-3 = 769*

*In 2015

CENAPRED. Socioeconomic impact of disasters in Mexico during 2015

- D-1 (compound) Damage to critical infrastructure attributed to disasters
- D-2 Number of destroyed or damaged health facilities attributed to disasters
- D-3 Number of destroyed or damaged educational facilities attributed to disasters
- D-4 Number of other destroyed or damaged critical infrastructure units and facilities attributed to disasters
- D-5 (compound) Number of disruptions to basic services attributed to disasters
- D-6 Number of disruptions to educational services attributed to disasters
- D-7 Number of disruptions to health services attributed to disasters
- D-8 Number of disruptions to other basic services attributed to disasters
G: Substantially increase the availability of and access to multi-hazard early warning systems and disaster risk information and assessments to the people by 2030.

G-1 Number of countries that have multi-Hazard early warning systems
G-2 (compound) Number of countries that have multi-Hazard monitoring and forecasting systems
G-3 Number of people per 100,000 that are covered by early warning Information through local governments or through national dissemination mechanisms
G-4 Percentage of local governments having a plan to act on early warnings
G-5 (compound) Number of countries that have accessible, understandable, usable and relevant Disaster Risk Information and assessment available to the people at the national and local levels
G-6 Percentage of population exposed to or at Risk from disasters protected through pre-emptive evacuation following early warning

G-4 = \( \frac{790}{2457} \times 100 \)

G-4 = 32.15%
Conclusions

The complexity of the data needed for disaster risk reduction, must be fulfilled integrating different sources of information:

- Household surveys,
- Government censuses,
- Geospatial data,
- Administrative registers,
- Among others.
The National System of Statistical and Geographical Information enables Mexico to produce and integrate various sources of information in support of official statistics, addressing global initiatives and monitoring disasters.