Disaster-related statistics and the linkages to SEEA

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Why Disaster-Related Statistics (DRS) & Disaster-related Statistics Framework (DRSF)?

• Policy frameworks (e.g., the 2030 Agenda, the Sendai Framework, national policies and strategies, etc.) define **WHAT** should be measured to achieve DRR goals and targets.
  • Countries differ in DRS practices → incoherent
  • Many institutions involved in collecting disaster “related” data → fragmented

• Role of DRSF is **HOW** to meet above information demands.
  • A tool for integrating and improving quality of statistics from *multiple sources and multiple government agencies*
Components of the DRSF

3 core elements of Disaster risk measurement

**Before**
- Hazards resulting in sudden disasters and slow processes resulting in disasters
- Exposure
- Vulnerability
- Coping capacity

**During and after a disaster**
- Direct impacts to environment and cultural heritage
  (loss of critical ecosystems, water resources, cultural heritage zones or objects...)
- Direct human impacts
  (deaths or missing, injured or ill, displaced or evacuated, damages to dwellings, loss of jobs...)
- Direct material impacts and economic loss
  (on fixed assets/valuables, critical goods and services, critical infrastructures...)

**Indirect impacts**
(decline in economic value added as a consequence of direct economic loss and/or human and environment impacts)

**Disaster risk reduction activity**
Components of the DRSF (con’t)

<table>
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<th>Basic range of disaster-related statistics</th>
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<td><em>Disaster occurrences</em></td>
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<td>Background statistics and exposure to hazards</td>
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<td>Human impacts</td>
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<td>Direct material impacts in physical terms</td>
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<td>Direct environmental impacts</td>
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<td>Disaster risk reduction expenditure accounting (DRRE)</td>
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Indirect impacts?
The linkages: DRS and SEEA

**SEEA-CF**

**Assets**
*Reduction in stocks: catastrophic losses*

**Physical flows**
*Disrupt supply & use of products, increase wastes & water emissions, impacts to HHs?*

**Monetary flows**
*DRR expenditure accounts*

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**SEEA-EA**

**Changes in ecosystem assets**
*(extent + condition)*

**Changes in ecosystem services***

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*Reduction in stocks: catastrophic losses*
Many issues...

- Scope of “environment” and “ecosystem” assets and their impacts from disasters (align with SEEA?)
- Treatment of changes in ecosystem services from disasters
- Treatment of climate-induced disasters (e.g., slow-onset, multi-year events)
- Defining DRR activities and expenditure (learn from EPEA&EGSS?)
- Measurement and valuation of disaster impacts
- Disaster definition, and related classification/terminologies
- Role of NSOs
- ...
... a lot of work has begun to address them.

- Disaster-Related Statistics Framework (DRSF)
- Recommendations on the role of official statistics in measuring hazardous events and disasters
- Measuring hazardous events and disasters: set of core disaster-risk-related indicators
- Hazard Information Profiles (HIPs)
- IAEG-DRS: global common framework for DRS
  - Issue papers on economic losses, DRRE accounts, environmental and ecosystem losses
  - Practical guides on disaster occurrence statistics and direct economic impacts on dwellings
  - Work is underway; opportunities for the SEEA community to contribute ➔ HOW?
THANK YOU