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 <u>WHAT</u> 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 <u>HOW</u> 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

Emergency

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)

3 core elements of Disaster risk measurement

Disaster risk reduction activity



Indirect impacts:

Components of the DRSF (con't)

Basic range of disasterrelated statistics Disaster occurrences

Background statistics and exposure to hazards

Human impacts

Direct material impacts in physical terms

Direct material impacts in monetary terms

Material impacts to Agriculture

Direct environmental impacts

Disaster risk reduction expenditure accounting (DRRE)



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

SEEA-EA

Changes in ecosystem assets

(extent + condition)



Changes in ecosystem services



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 \rightarrow HOW?

THANK YOU



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