Regional Meeting on Gender Statistics in Climate Change and Disaster Risk Reduction

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# Producing disaster statistics from a gender perspective

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### Disaster-Related Statistics Framework (DRSF): A new international statistical guideline



- Developed by Expert Group of NSOs, disaster-management agencies, and international organizations in Asia-Pacific
- Endorsed as statistical guideline by 6<sup>th</sup> Session of ESCAP Committee on Statistics (October, 2018)
- Methodological foundation for technical assistance/ international cooperation; aligned with terminology/indicators:
  - Sendai Framework for DRR 2015-2030
  - Disaster-related targets of 2030 Agenda
- Agreed concepts and definitions → specific instructions/ technical recommendations for production and dissemination
- Encourage development of a common and nationally standardized basic range of disaster-related statistics, comparable to other countries
- Currently applied towards design of technical assistance: development of case studies; statistical training materials in A-P





### **Cycle of disaster-related information**



Statistics Division



### Measuring risk (and organizing related statistics): a critical component of disaster statistics

### Risk =

### f (Hazard exposure, Vulnerability, Coping capacity)

#### Hazard exposure:

- Location of population/ infrastructure
- Probabilistic map of hazard; Complementary maps: population, critical infrastructure, ecosystems, crop areas, land use etc.

#### **Vulnerability:**

- Extension of initial exposure statistics
- Susceptibility
- Characteristics/disaggre gation of population, infrastructure or land exposed to a hazard etc.

#### **Coping capacity:**

- Ability of households/ businesses/ infrastructure to recover without sustaining major/ permanent negative impacts
- Ex. household preparedness, GDP per capita (proxy)

✓ Scalable/flexible✓ Use of existing data





#### Disaster-Related Statistics Framework (DRSF): basic range of internationally comparable statistics related to disasters





**Statistics Division** http://www.unescap.org/our-work/statistics Disaster-related Statistics Framework (p.22)

# Gender in the DRSF: "Before" elements

	Gender issues/variables	Data needs/indicators e.g.	Potential sources
Exposure	<ul> <li>Exposure to hazards:</li> <li>Population (women/men/girls/boys)</li> <li>Housing, buildings, transport facilities, crop areas</li> </ul>	<ul> <li>Basic disaggregation of pop. by sex/other characteristics</li> <li>Type of housing/land use by sex; Agricultural areas by size/ type of crops etc.</li> </ul>	<ul> <li>Population census</li> </ul>
Vulnerability	<ul> <li>Multiple/simultaneous socio- economic factors affecting vulnerability: age, disability status, income status</li> <li>Factors that can increase women's vulnerability: access to resources, voice/decision- making role, access to info, life skills, dependence on natural resources, exposure to VAW</li> </ul>	<ul> <li>Extension of initial exposure statistics</li> <li>Multi-dimensional disaggregation</li> <li>No. of revised legislations to enhance women's access to land; Proportion of women with a bank account/ with access to credit; Share of women land owners by size of land; Proportion of individuals using the internet/mobile- cellular telephones, by sex; Proportion of women subjected to violence by location</li> </ul>	<ul> <li>Household surveys</li> <li>Admin data (CRVS, education, health)</li> </ul>
Coping capacity	Factors influencing resilience e.g. if most decisions related to disaster preparedness/recovery made by men → might overlook important aspects of women's lives, needs and concerns	<ul> <li>Percentage of women involved in disaster-risk reduction activities/decision-making/public governance; proportion of local governments that adopt and implement DRR strategies in line with national DRR strategies</li> </ul>	<ul> <li>Household surveys</li> <li>Admin data (disaster management agency data, CRVS, education, health)</li> </ul>

## **Gender in the DRSF: "After" elements**

	Gender issues/variables	Data needs/indicators e.g.	Potential sources
Direct impacts to the environment	Impacts of disaster on ecosystems, lands, natural resources, etc. on which women might rely more heavily than men	Ex: hectares of forest tree cover, agriculture plantations, pastures and natural grassland affected by a certain type of disaster $\rightarrow$ owned/used by women & men	
Direct human impacts	Impact of disaster on women/men in terms of livelihood, health, survival, etc.	Ex: Number of female/male deaths/injured/missing/invalid; Number of women evacuated/displaced; Number who lost their jobs/occupations by sex	<ul> <li>Admin data (of disaster management agency)</li> </ul>
Direct material impacts and economic losses	Impact of disaster on assets (small agri holdings, livestock/small animals etc.) or natural resources (water source, fuel) on which women might rely more heavily than men	Ex: agricultural lands affected by size; number of critical water supply infrastructures destroyed	
Indirect impacts	Broader economic impact (women's disproportionate poverty/limited education/voice + impact of disaster $\rightarrow$ double burden)	Macro indicators: Net impact on GDP	<ul> <li>Modelled estimation (economic statistics)</li> </ul>

### Risk is complex, need a simple measurement framework...



The risk measurement model:

- Framework to organize, analyse and make better use of (existing) disaggregated data.
- Scalable: individual to household to community and beyond
- Opportunity to recognize gender differences in disaster risk: exposure to hazard, vulnerability and coping capacity
- In principle can be applied to other types of risk, beyond disasters, climate change and environment changes (such as health, VAW...).



