Developing the Disaster Risk Reduction Expenditure (DRRE) in the System of National Accounts: Experience of the Philippines

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I. Development of DRRE in the Philippines

2017
- UNDRR Intergovernmental Expert Working Group on Terminologies and Indicators Related to Disaster Risk Reduction (2016-2017)
- UNDRR Development of SENDAI Framework
- UN Expert Group on Environment Statistics (Climate Change & Disaster)

2018
- PILOT COUNTRY project of Development of DRSF by UNESCAP; (Philippines, Fiji, Bangladesh and Indonesia)
- Philippine, host Expert Group on Disaster (Asia-Pacific) (country sharing of experiences)
- ESCAP Country Training on Disaster Statistics

2019
- First Estimates of DRRE - Public Expenditure
- Presented results during:
  1. National Convention on Statistics, Philippines
  2. 62nd World Statistics Congress, Malaysia
  3. UNDRR Fora
  4. IAC Environment Statistics

2020 Onwards
- DRRE - Expanded coverage To cover Corporations and Households
- Participating in the UNESCAP TWG on Disaster-related Statistics
- Training on Disaster Statistics
- UNECE Forum, Geneva
The DRRE of the Philippines supports both the country’s national priorities including international commitments.

To monitor progress related to actionable priorities in the Sendai Framework and SDG targets.

To demonstrate how investments in disaster risk reduction not only can save lives and help reduce poverty but also can be wise investments from the cost-benefit economic point of view.

Framework for the Development of Environment Statistics (FDES)

Sendai Framework for Disaster Risk Reduction 2015 - 2030
II. Framework, Data, Data Sources and Methodologies

The DRSF identified the compilation Disaster Risk Reduction Expenditure (DRRE) including the statistics that supports the DRRE for better analysis of the occurrence of disaster that would result in a more effective disaster reduction risk management.
Before Disaster
Risk Assessment

<table>
<thead>
<tr>
<th>Exposure</th>
<th>Vulnerability</th>
<th>Hazard Data</th>
<th>Coping Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Population/density - GDP per capita</td>
<td>• Age structure - Poverty</td>
<td>• Elevation maps - Meteorological</td>
<td>• Preparedness (household level)</td>
</tr>
<tr>
<td>• Land cover/area - Household income</td>
<td>• Disable - Gender</td>
<td>• Past hazards - % of soil types</td>
<td>• Early Warning Systems</td>
</tr>
<tr>
<td></td>
<td>• Slums - Median income</td>
<td>• Slope &amp; river flows</td>
<td>• Expenditures on DRR</td>
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<td></td>
<td></td>
<td>• Precipitation index</td>
<td>• Investments on DRR</td>
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<td>• Geographical (landsides)</td>
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</tbody>
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Human Impact

• Death/Missing - Injured/Ill
• Evacuation - Relocation
• Affected people due to damaged/destroyed houses
• Loss of jobs - People receiving aids

Evaluations, Relocation, People Receiving Aids

Disaster OCCURRENCE

During Disaster
Disaster Occurrence

Dwellings

• Bldgs/structure - Machineries
• Valuables - Natural Resources
• Critical goods/services
• Cultural heritage - Economic Impacts

Reconstruction and Recovery

After Disaster
Disaster Impact

Disaster Risk Management Expenditure (DRRE) Activity

1. Transfer from Central to Local Government
2. International Transfer (ODA) to the Country
3. International Transfer (ODA) Outflows
4. Total Expenditures on DRRE by category.
5. Total Expenditures on DRRE by government
6. Total Expenditures on DRRE by non-govt
7. Beneficiaries on Total Expenditures
8. Beneficiaries on Total Transfers Received

Linking with the System of National Accounts 2008
III. Coordination Mechanisms

1. Inter-agency Committee on Environment Statistics (PSA created)
   Technical Working Group on Disaster Statistics (PSA created) as venue for recommendations on the production, use and dissemination of disaster statistics.

2. Philippine Council on Disaster Risk Reduction Management (created by the disaster management agency for disaster policies)

3. Philippine Statistical Development Plan (PSDP)
   Updated to include program and statistical activities on improving disaster statistics.

4. PSA as coordinator and lodging house of the SDG Indicators
   to monitor the Sustainable Development Goals for 2030 Agenda
   (Indicators under Sendai Framework are included)

Data Sources and Data

- Income and Expense Statements by department (national, local and govt owned corporations)
- National expenditure program by department
- Overseas development assistance – from foreign donors (proxy indicator)
- Actual Expenditures on Disaster by the National Disaster Risk Reduction Management;
  Number of affected population
- Nat. Accounts GFCE, HFCE, etc.; Family Income & Expenditures;
  Census/Annual Surveys of Establishment
Methodologies
Scope and Classification

By Public and Private

- **Public Expenditure**
  - refers to disaster-related goods and services incurred by the government (national, local and government-owned corporations)

- **Private Expenditure**
  - refers to disaster-related goods and services incurred by households, financial and non-financial corporations, and non-governmental organizations

- Identify expenditure items related to disaster risk reduction using the National Expenditure Program of government of the Department of Budget and Management (unaudited) and later by the Commission on Audit (audited).
- Delineate between the current expenditures and capital formation.
- Identify the total value of overseas development assistance from foreign donors by NEDA as proxy indicators for disaster expenditures by government.
- The total budget of the disaster management are included in its entirely.

- Identify households and corporations affected by disasters using reports from the Office of Civil Defense (OCD) of the disaster management agency;
- Expenditure on repairs of dwellings damaged or destroyed including construction of new houses using as indicators and value from the national accounts data on construction for investments;
- Current expenditures using disaster kits for households purchases of disaster supplies and materials as reported under the list provided by households from the community based monitoring system & reports from OCD on number of affected households.
Methodologies
Classification of DRRE

**By Thematic Areas**

- **Disaster Prevention and Mitigation**
  avoid hazards and mitigate potential impacts.

- **Disaster Preparedness**
  establish and strengthen capacities

- **Disaster Response**
  provide life prevention and meet basic need of the affected population

- **Disaster Rehabilitation and Recovery**
  restore and improve facilities, livelihood and living conditions

**By Current Expenditures**

**By Fixed Capital Formation (Investment)**
IV. Preliminary Results

The DRRE continued to increase from 2015 to 2019; In 2019, DRRE contributed 1.02 % to Gross Domestic Product (GDP)
Public DRRE and Private DRR Expenditure (Average, 2015-2019)

The public sector incurred most of disaster-related expenditures at 78%; only 22% is borned by the private sector.

The private sector’s share increased compared to last five years’ average, which is almost 27%.
The biggest share of DRRE at 47.3% was used for prevention and mitigation; followed by disaster recovery at 30.7%; and disaster management at 22.0%.
The share of current DRRE to total DRRE is **14.8 percent** in 2019; highest share was in 2016 at **35.5 percent**.
The share of GFCF DRRE to total DRRE is 85.2 percent in 2019.
V. Conclusions

To be able to strengthen the generation of DRRE for its regular compilation, the Philippines has yet to advance on:

• Standard concepts, definitions, classifications, methodologies, etc;

• Regular reporting and addressing data gaps and time lags;

• Technical capability of compilers and producers of DRRM statistics as well as the users of DRRM statistics for policies; and

• Engagements with development partners for technical assistance to address data problems and strengthen technical capacity.
Thank you!