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

PARTICIPATED:

2017

UNDRR Intergovermental 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)

2019

Established TWG on Disaster Statistics under the Interagency Committee on Environment Statistics



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

PILOT COUNTRY

project of Development of DRSF by UNESCAP; (Philippines, Fiji, Bangladesh and Indonesia)

2018

Philippine, host Expert Group on Disaster (Asia-Pacific (country sharing of experiences)

ESCAP Country Training on Disaster Statistics

DRRE - Expanded coverage To cover Corporations and Households

Participating in the UNESCAP
TWG on Disaster-related Statistics;

Training on Disaster Statistics;

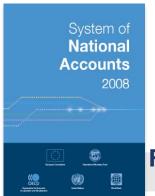
UNECE Forum, Geneva

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 costbenefit economic point of view





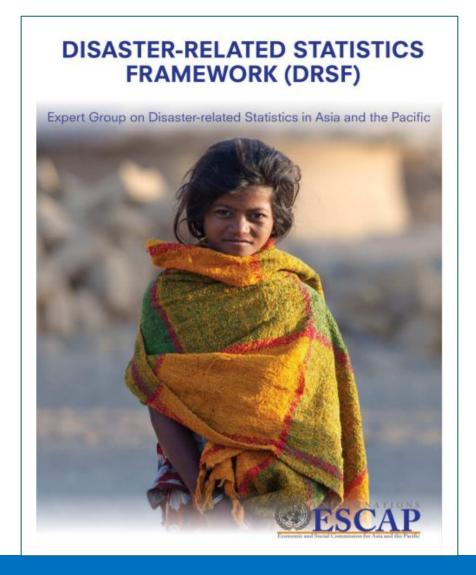
Framework for the Development of **Environment Statistics (FDES)**

Sendai Framework for Disaster Risk Reduction 2015 - 2030



Paris Agreement on **Climate Change**

II. Framework, Data, Data Sources and Methodologies



Disaster Related Statistics Framework)

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.

Exposure

- Population/density GDP per capita
- Land cover/area Household income

Vulnerability

- Age structure Poverty
- Disable - Gender
- Slums - Median income

Hazard Data

- **Elevation maps** Meteorological
- % of soil Past hazards types
- Slope & river flows
- **Precipatation index**
- Geographical (landslides)

Coping Capacity

- Preparedness (household level)
- Early Warning Systems
- Expenditures on DRR
- Investments on DRR

Before Disaster

Risk Assessment

During Disaster

DISASTER

OCCURRENCE

Disaster Occurrence

- 7. Beneficiaries on Total Expenditures

Human Impact

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

Evaluations. Relocation. **People Receiving Aids**

Dwellings

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

Reconstruction and Recovery

After Disaster

Disaster Impact

DISASTER-RELATED STATISTICS FRAMEWORK (DRSF)

System of **National Accounts** 2008

Statistics

DRSF







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
- 8. Beneficiaries on Total Transfers Received

Linking with the **System of National** Accounts

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)



Department of Budget and Management

National expenditure program by department



Overseas development assistance – from foreign donors (proxy indicator)



Office of the Civil Defense

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

DRRE

Methodologies Scope and Classification

By Public and Private

Public Expenditure

refers to disaster-related goods and services incurred by the government (national, local and governmentowned 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.



- 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

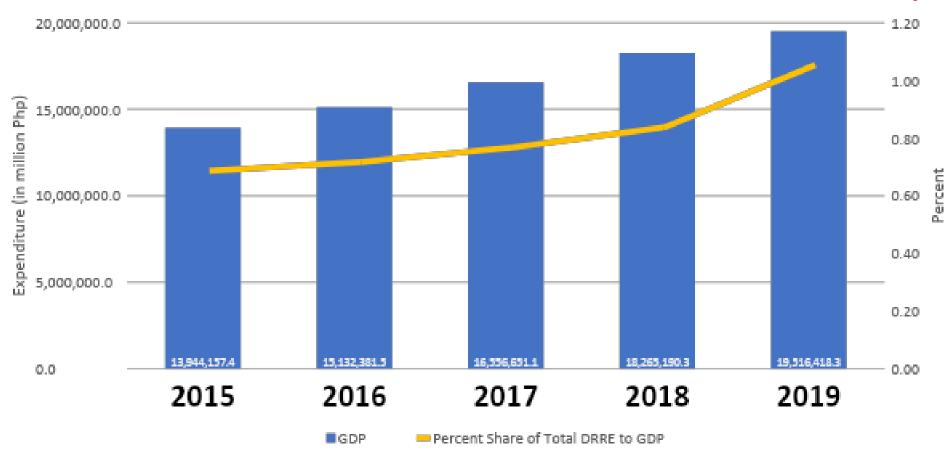
- Disaster Prevention and Mitigation avoid hazards and mitigate potential impacts.
- Disaster Preparedness establish and strengthen capacities
- Disaster Response
 provide life prevention and meet basic need of the affected population
- Disaster Rehabilitation and Recovery restore and improve facilities, livelihood and living conditions

By Current Expenditures

By Fixed Capital Formation (Investment)

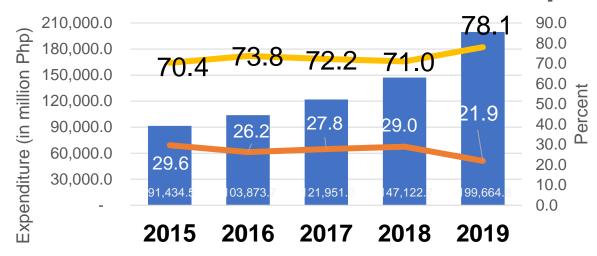
IV. Preliminary Results

The DRRE continued to increase from 2015 to 2019; In 2019, DRRE contributed 1.02 % to Gross Domestic Product (GDP)



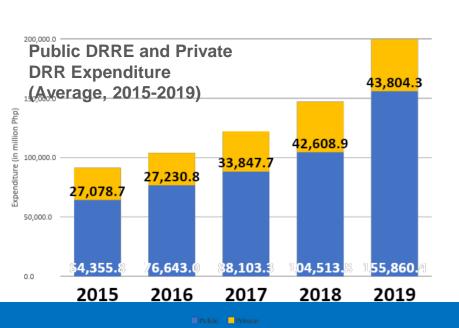
Share of Total DRR Expenditure to GDP (in Percent)

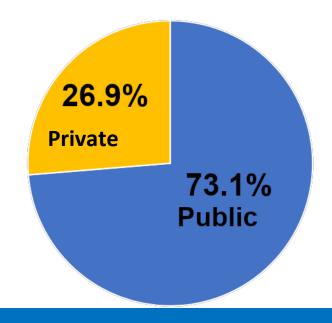
Public DRRE and Private DRR Expenditure



The public sector incurred most of disasterrelated expenditures at 78%; only 22% is borned by the private sector

■Total DRRE



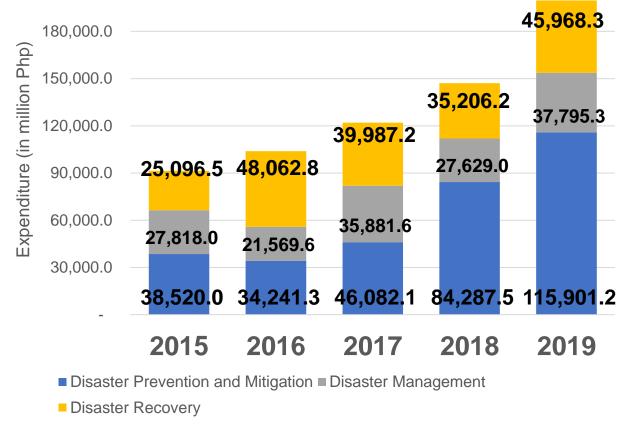


The private sector's share increased compared to last five years' average, which is almost 27%

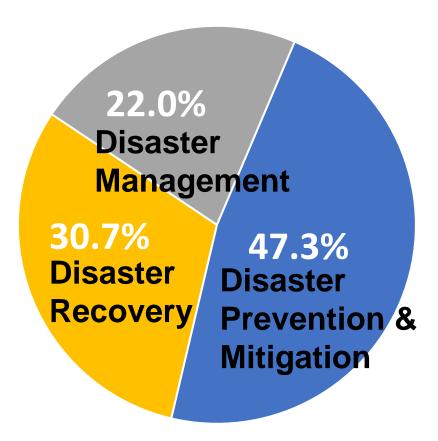
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DRR Expenditure by Thematic Area

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 %.

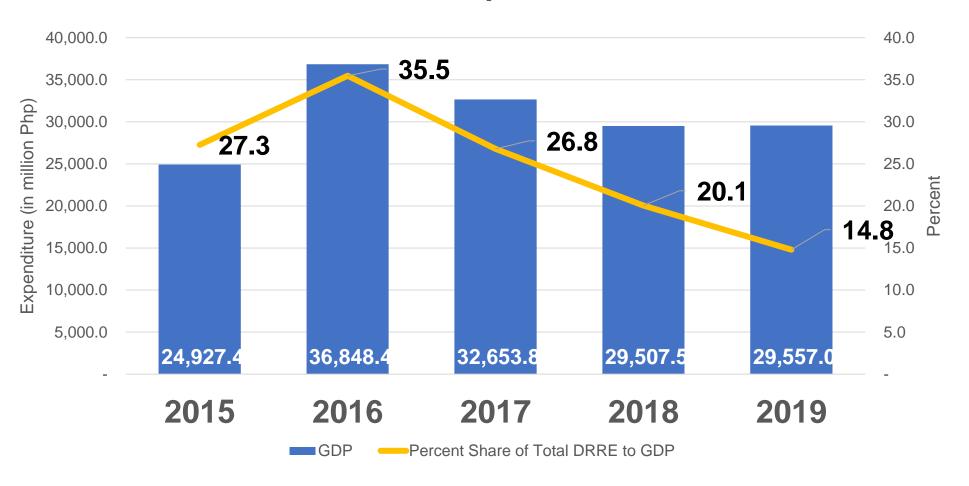


Total DRR Expenditure by Thematic Area, 2015 to 2019



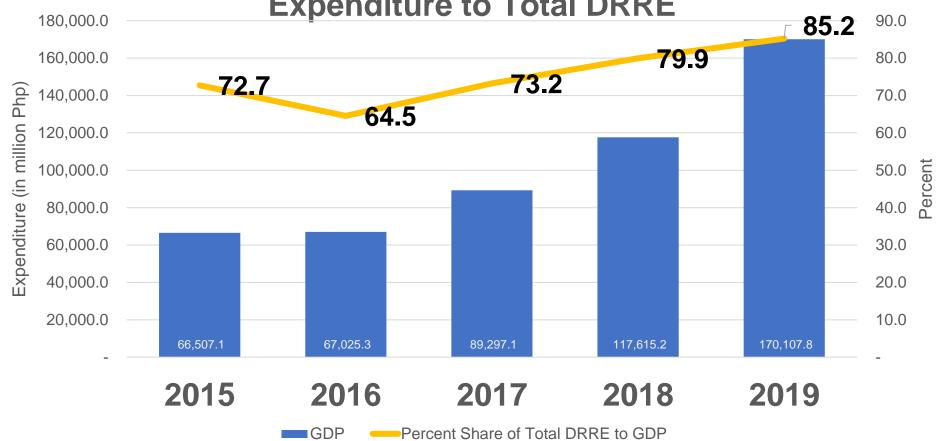
Average Percent Share of DRR Expenditure by Thematic Area to Total DRR Expenditure,

Share of Current DRR Expenditure to Total DRRE



The share of current DRRE to total DRRE is 14.8 percent in 2019; highest share was in 2016 at 35.5 percent

Share of Gross Fixed Capital Formation (GFCF) DRR Expenditure to Total DRRE



The share of GFCF **DRRE** to total DRRE is 85.2 percent in 2019

Figure 1: Share of Total DRR Expenditure to GDP, 2015 to 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!

