Disclaimer

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The views expressed in the report do not necessarily reflect the views of the ADRC. The boundaries and names shown and the designations used on the maps in the report also do not imply official endorsement or acceptance by the ADRC.
Scope of Presentation

I. General Information of the Philippines

II. The Philippine Disaster Risk Profile

III. Paradigm Shift in the Philippine DRRM System

IV. Four DRRM Thematic Areas

V. Challenges
I. GENERAL INFORMATION

Location: Southeast Asia situated in the Western Pacific Ocean bordered by the Pacific Ocean to the east, the West Philippine Sea to the west, and the Celebes Sea to the south.

Population: 100,981,437 (as of August 1, 2015) based on the 2015 Census of Population (POPCEN 2015)

Land Area: 299,764 sq. kms. (approximately) with 7,109 islands, 18 administrative regions and 3 major island groups (i.e. Luzon, Visayas and Mindanao)

Capital City: Metro Manila

Climate: Tropical Maritime Climate (usually hot and humid) with 2 major seasons: wet and dry seasons
II. THE PHILIPPINE DISASTER RISK PROFILE

Pacific Ring of Fire

Photo credit: wikipedia.org

THE PHILIPPINE DISASTER RISK REDUCTION AND MANAGEMENT SYSTEM
Seismicity of the Philippines

Distribution of Active Faults and Trenches in the Philippines

Pacific Typhoon Belt

Reference: DOST PHIVOLCS

Photo credit: Google Images

THE PHILIPPINE DISASTER RISK REDUCTION AND MANAGEMENT SYSTEM
Philippines: “Exporter” of Typhoons

Tracks of Tropical Cyclones in the Western North Pacific Period from 1948 to 2010.

Reference: Japan Meteorological Agency (n.d.) as cited by Godillano (2014)

THE PHILIPPINE DISASTER RISK REDUCTION AND MANAGEMENT SYSTEM

PAGASA's Tropical Cyclone Intensity Scale

<table>
<thead>
<tr>
<th>Category</th>
<th>Sustained winds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Super Typhoon</td>
<td>≥119 knots, ≥220 km/h</td>
</tr>
<tr>
<td>Typhoon</td>
<td>64–119 knots, 118–220 km/h</td>
</tr>
<tr>
<td>Severe Tropical Storm</td>
<td>48–63 knots, 89–117 km/h</td>
</tr>
<tr>
<td>Tropical Storm</td>
<td>34–47 knots, 62–88 km/h</td>
</tr>
<tr>
<td>Tropical Depression</td>
<td>≤33 knots, ≤61 km/h</td>
</tr>
</tbody>
</table>

Reference: DOST PAGASA
Climate Change

Photo credit: Google Images

THE PHILIPPINE DISASTER RISK REDUCTION AND MANAGEMENT SYSTEM

Natural Hazards

✓ Typhoons
✓ Floods
✓ Storm Surges
✓ Earthquakes
✓ Tsunamis
✓ Volcanic eruptions
✓ Landslides
✓ Drought

Photo credit: Google Images

THE PHILIPPINE DISASTER RISK REDUCTION AND MANAGEMENT SYSTEM
Mt. Pinatubo Eruption, 1991

Photo-credit: theguardian.com

Guinsaugon Landslide, 2006

Photo-credit: nbcnews.com
Tropical Storm “Ondoy,” 2009

7.2 M Earthquake in Bohol, 2013
Human - Induced Hazards

- Fire
- Maritime accidents
- Aircraft crash
- Land accidents
- Industrial accidents
- Pollution
- Civil disturbance
- Terrorism
- Armed conflict
Wowowee Stampede: 2008

Photo credit: streetsandscandals.net

Quirino Grandstand Hostage Taking: 2010

Photo credit: rappler.com
Zamboanga Crisis: 2013

Effects of Disasters

- Human toll: dead, injured and missing
- Communities displaced
- Lost sources of livelihoods
- Environmental damages
- Infrastructure damages
- Economic losses
- Hampered delivery of services

Photo credit: philstar.com

Photo credit: Google Images

THE PHILIPPINE DISASTER RISK REDUCTION AND MANAGEMENT SYSTEM
World Risk Index Report 2015

9th in 2009
6th in 2010
3rd in 2011
3rd in 2012
3rd in 2013
2nd in 2014
3rd in 2015

Study by: UN University Institute for Environment and Human Security
Reference: http://www.worldriskreport.org/

THE PHILIPPINE DISASTER RISK REDUCTION AND MANAGEMENT SYSTEM

III. PARADIGM SHIFT IN THE PHILIPPINE DRRM SYSTEM
Disaster Risk Reduction and Management (DRRM)

the systematic process of using:
- administrative directives,
- organizations and operational skills and capacities

To implement strategies, policies and improved coping capacities

In order to lessen the adverse impacts of hazards and the possibility of disaster.

THE PHILIPPINE DISASTER RISK REDUCTION AND MANAGEMENT SYSTEM

Republic Act 10121 (27 May 2010)

AN ACT STRENGTHENING THE PHILIPPINE DISASTER RISK REDUCTION AND MANAGEMENT SYSTEM, PROVIDING FOR THE NATIONAL DISASTER RISK REDUCTION AND MANAGEMENT FRAMEWORK AND INSTITUTIONALIZING THE NATIONAL DISASTER RISK REDUCTION AND MANAGEMENT PLAN, APPROPRIATING FUNDS THEREFOR AND FOR OTHER PURPOSES
Republic Act 10121
(27 May 2010)

An act:

- Strengthening the **Philippine DRRM system**, 
- Providing for the **National DRRM framework** and 
- Institutionalizing the **National DRRM plan**, 

appropriating funds therefor and for other purposes.

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**THE PHILIPPINE DISASTER RISK REDUCTION AND MANAGEMENT SYSTEM**

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**THEN**
- TOP-DOWN CENTRALIZED DISASTER MANAGEMENT
- DISASTERS AS FUNCTION OF PHYSICAL HAZARDS
- FOCUS ON DISASTER RESPONSE

**NOW**
- BOTTOM-UP PARTICIPATORY DISASTER RISK REDUCTION AND MANAGEMENT
- DISASTERS AS REFLECTION OF PEOPLE’S VULNERABILITY
- INTEGRATED APPROACH TO REDUCE DISASTER RISK

**REACTIVE**

**PROACTIVE**
NDCC to NDRRMC

NATIONAL DISASTER COORDINATING COUNCIL

NATIONAL DISASTER RISK REDUCTION AND MANAGEMENT COUNCIL

THE PHILIPPINE DISASTER RISK REDUCTION AND MANAGEMENT SYSTEM

NDRRMC

Empowered with the following DRRM powers and functions:
✓ policy-making
✓ coordination
✓ integration
✓ supervision
✓ monitoring
✓ evaluation

Reference: Sec 6, RA 10121
NDCC: 19 Members

Chairman: Secretary, DND
Members:
- Secretary, DILG
- Secretary, DPWH
- Secretary, DOH
- Secretary, DSWD
- Secretary, DA
- Secretary, DepEd
- Secretary, DOF
- Secretary, DOLE
- Secretary, DTI
- Secretary, DOTC
- Secretary, DOST
- Secretary, DBM
- Secretary, DOJ
- Secretary, DENR
- Director, PIA
- Sec-Gen - PNRC
- Chief of Staff, AFP
- A, OCD: Exec Officer/Member

NDRRMC: 44 Members

Chairperson: Secretary, DND
Vice-Chairpersons:
- Sec, DOST - Prevention & Mitigation
- Sec, DILG - Preparedness
- Sec, DSWM - Disaster Response
- DG, NEDA - Rehab & Recovery
Exec Dir: OCD Administrator

Members: 39
- 14 Depts: DOH, DENR, DA, DepEd, DOE, DOF, DTI, DOTC, DBM, DPWH, DFA, DOLE & DOT
- 12 Gov't agencies: OES OPAPP, CHED, AFP, PNP, OPS, NAPC, PCW, HUDCC, CCC, PHILHEALTH & OCD
- 2 Gov Financial Inst (GSIS & SSS)
- 1 Quasi-government agency (PRC)
- 5 LGU Leagues
- 4 Civil Society Organizations
- 1 Private Sector Organization

Chairperson
Secretary of National Defense

Vice Chairperson
Sec. DOST
Disaster Prev. & Mitigation

Vice Chairperson
Sec. DILG
Disaster Preparedness

Vice Chairperson
Sec. DSWD
Disaster Response

Vice Chairperson
Sec. NEDA
Disaster Rehab & Recovery

14 Line Departments
11 Other Gov't Agencies
2 Gov't Financial Inst.
1 Quasi-Gov't Agency
4 Leagues & 1 Union of LGUs
4 Civil Society Orgs.
1 Private Org.
OCD, Administrator Exec. Dir. NDRRMC
Office of Civil Defense

- Executive Arm and Secretariat of the NDRRMC
- Primary mission: administer a comprehensive national civil defense and disaster risk reduction and management program...

Reference: Sec 7, RA 10121

THE PHILIPPINE DISASTER RISK REDUCTION AND MANAGEMENT SYSTEM

“We ORCHESTRATE Disaster Management Activities with Utmost COMMITMENT in order to DELIVER what is Best for the Country and our People”

Photo credit: clipartfreefor.com
NDRRM Operations Center

- 24/7 facility for monitoring and coordination
- Disseminates situation reports, alerts and communications
- Facilitates effective management of the consequences of disasters

THE PHILIPPINE DISASTER RISK REDUCTION AND MANAGEMENT SYSTEM

DRRM Network

- National Disaster Risk Reduction and Management Council
- 18 Regional Disaster Risk Reduction and Management Councils
- 81 Provincial Disaster Risk Reduction and Management Councils
- 145 City Disaster Risk Reduction and Management Councils
- 1,489 Municipal Disaster Risk Reduction and Management Councils
- 42,029 Barangay Disaster Risk Reduction and Management Committees

Reference: Philippine Statistics Authority
Coordination during Emergencies

<table>
<thead>
<tr>
<th>Barangay DRRM Committee</th>
<th>1 Barangay affected</th>
</tr>
</thead>
<tbody>
<tr>
<td>City/Municipal DRRMC</td>
<td>2 or more Barangays affected</td>
</tr>
<tr>
<td>Provincial DRRMC</td>
<td>2 or more Cities/Municipalities affected</td>
</tr>
<tr>
<td>Regional DRRMC</td>
<td>2 or more Provinces affected</td>
</tr>
<tr>
<td>NDRRMC</td>
<td>2 or more Regions affected</td>
</tr>
</tbody>
</table>

Reference: Section 15, RA 10121

Local DRRM Offices

- To be established in every Province, City and Municipality, and Barangay
- Sets the direction, development, implementation and coordination of DRRM programs in their areas

Reference: Section 12, RA 10121 (2010)
Photo-Credit: OCD CARAGA
NDRRM Framework
(16 June 2011)

Safer, adaptive and resilient Filipino communities toward sustainable development

RISK FACTORS
Hazard Exposures Vulnerabilities Capacities

Mainstreaming DRR and CCA in Planning and implementation

NDRRM Plan
(7 February 2012)

4 Priority Areas with 4 Long Term Goals

14 Objectives

24 Outcomes

56 Outputs

93 Activities

NATIONAL DISASTER RISK REDUCTION and MANAGEMENT PLAN
2011-2028
IV. FOUR DRRM THEMATIC AREAS

4 DRRM Thematic Areas

DISASTER PREPAREDNESS
Establish and strengthen capacities of communities to anticipate, cope and recover from the negative impacts of emergency occurrences and disasters.

DISASTER RESPONSE
Provide life preservation and meet the basic subsistence needs of affected population based on acceptable standards during or immediately after a disaster.

DISASTER PREVENTION AND MITIGATION
Avoid hazards and mitigate their potential impacts by reducing vulnerabilities and exposure and enhancing capacities of communities.

DISASTER REHABILITATION AND RECOVERY
Restore and improve utilities, livelihood & living conditions & organizational capacities of affected communities, & reduced disaster risks in accordance with the “building back better” principle.
Disaster Prevention and Mitigation

- Early warning systems
- Flood forecasting and monitoring
- Hazard and risk mappings
- Structural and non-structural interventions

Vice Chairperson: [DOST]

Photo credit: Google Images

Disaster Preparedness

- Contingency planning
- Prepositioning and stock-piling
- Capacitating and organizing responders
- Training, drills and exercises
- Pre-Disaster Risk Assessment

Vice Chairperson: [DILG]

Photo credit: Google Images
Disaster Response

• Rapid Damage Assessment and Needs Analysis (RDANA)
• Issuance of advisories and situation reports
• Activation of Response Clusters and Incident Command System
• Mobilization of responders
• Humanitarian assistance (e.g., relief distribution)
• Provision of financial assistance
• Management of evacuation centers

Vice Chairperson:

Disaster Rehabilitation and Recovery

• Post-disaster Needs Assessment (PDANA)
• Enhancement of policies and plans
• Reconstruction using “Build Back Better” approach
• Resettlement
• Provision of new sources of livelihood

Vice Chairperson:
V. CHALLENGES

Challenges

- Cooperation and buy-in of our stakeholders
- Correct the notion that DRRM is only a government concern
- Consider DRRM as a way of life
- National and local officials to prioritize DRRM
- Continuous development, review and improvement of existing DRRM policies, plans and programs in view of the “new normal”

Photo credit: Google Images
Field of Research

“Factors contributing to the high resiliency and adaptive capacity of Japan to natural hazards”

SALAMATKAAYO! (Arigato Gozaimasu)