

Disclaimer

This report was compiled by an ADRC visiting researcher (VR) from ADRC member countries.

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.



THE PHILIPPINE DRRM

DISASTER RISK REDUCTION AND MANAGEMENT

SYSTEM

A Country Report

Presented by

Ms. Lorene Sia-Catedral

Civil Defense Officer III, Office of Civil Defense-
Department of National Defense (OCD-DND) Caraga Regional Office
during the 2016 ADRC Visiting Researcher Program
Kobe, Hyogo, Japan

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



Republic of the Philippines



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

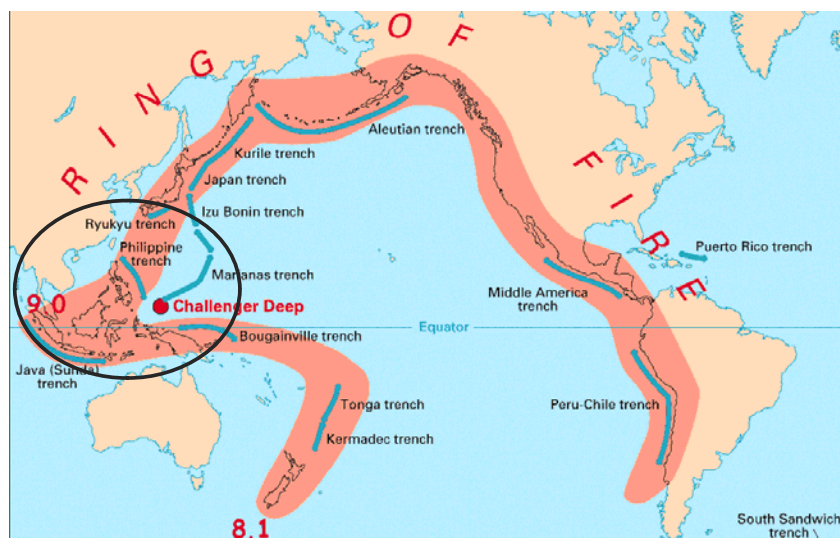
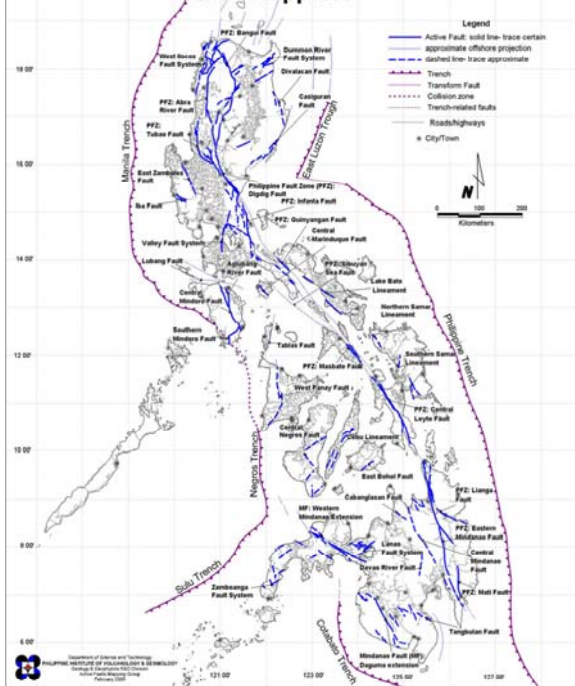


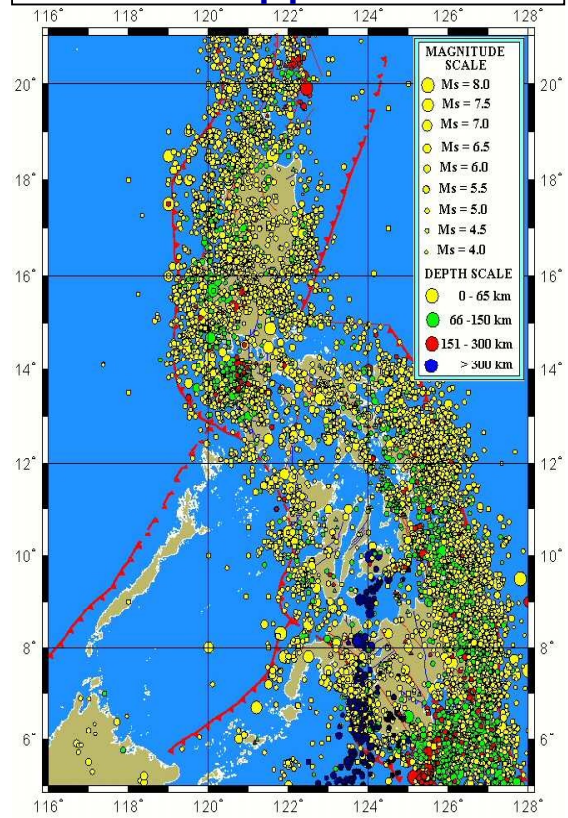
Photo credit: wikipedia.org



Distribution of Active Faults and Trenches in the Philippines



Seismicity of the Philippines



Reference: DOST PHIVOLCS

Pacific Typhoon Belt

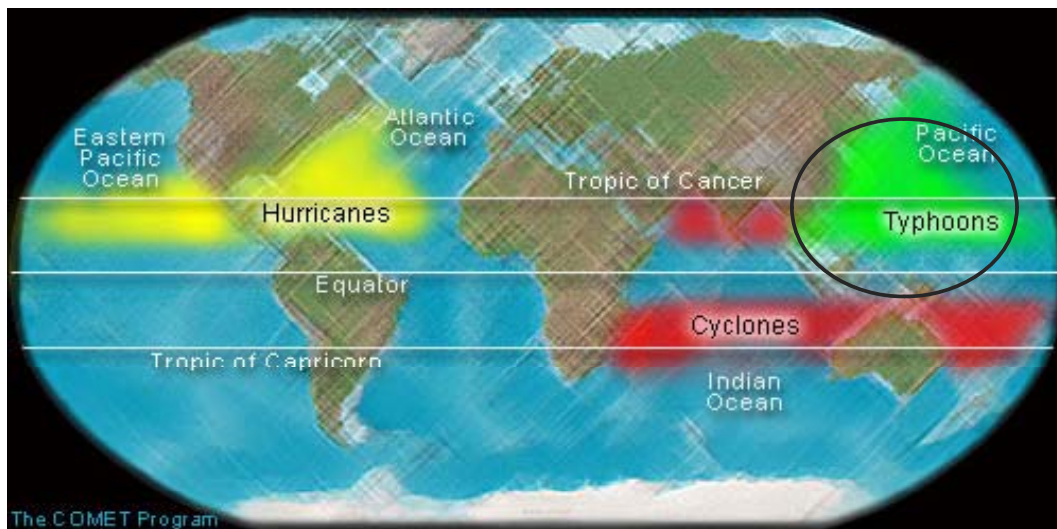
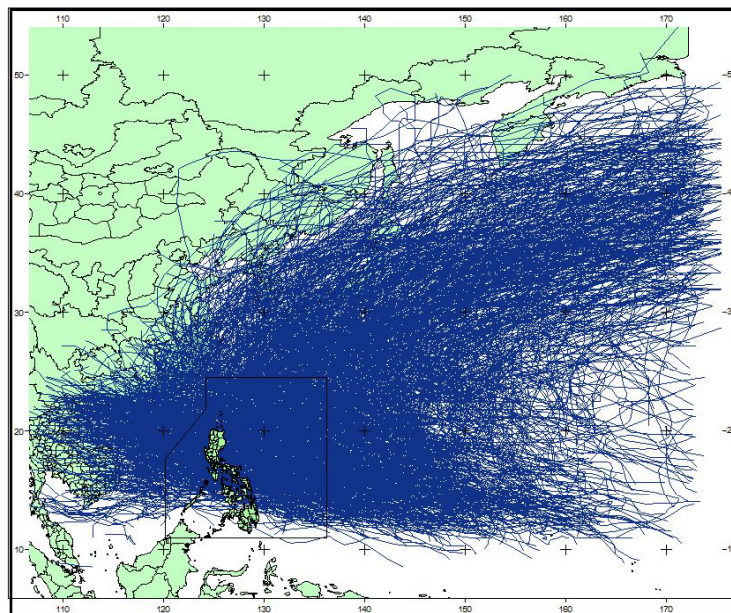


Photo credit: Google Images

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

Category	Sustained winds
Super Typhoon	≥119 knots ≥220 km/h
Typhoon	64–119 knots 118–220 km/h
Severe Tropical Storm	48–63 knots 89–117 km/h
Tropical Storm	34–47 knots 62–88 km/h
Tropical Depression	≤33 knots ≤61 km/h

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



Photo-credit: typhoonondoy.org

7.2 M Earthquake in Bohol, 2013



Photo-credit: newsinfo.inquirer.net

Typhoon "Yolanda," 2013



Photo-credit: rappler.com

Human – Induced Hazards



- ✓ Fire
- ✓ Maritime accidents
- ✓ Aircraft crash
- ✓ Land accidents
- ✓ Industrial accidents
- ✓ Pollution
- ✓ Civil disturbance
- ✓ Terrorism
- ✓ Armed conflict

Photo credit: Google Images

Wowowee Stampede: 2008



Photo credit: streetsandscandals.net

Quirino Grandstand Hostage Taking: 2010



Photo credit: rappler.com

Zamboanga Crisis: 2013



Photo-credit: philstar.com

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: Google Images



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

WeltRisikoIndex		
Rang	Land	Risiko (%)
1.	Vanuatu	36,72
2.	Tonga	28,45
3.	Philippinen	27,98
4.	Guatemala	20,10
5.	Salomonen	19,29
6.	Bangladesch	19,26
7.	Costa Rica	17,17
8.	Kambodscha	16,82
9.	Papua-Neuguinea	16,82
10.	El Salvador	16,80
11.	Timor-Leste	16,23
12.	Brunei Darussalam	16,15
13.	Mauritius	14,66
14.	Nicaragua	14,63
15.	Guinea-Bissau	13,78

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)

S. No. 3086
H. No. 6985

Republic of the Philippines
Congress of the Philippines
Metro Manila

Fourteenth Congress

Third Regular Session

Begun and held in Metro Manila, on Monday, the twenty-seventh day of July, two thousand nine.

REPUBLIC ACT NO. 10121

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



NATIONAL DISASTER RISK
REDUCTION MANAGEMENT COUNCIL



PHILIPPINE
DISASTER RISK REDUCTION
MANAGEMENT ACT OF 2010

and IMPLEMENTING
RULES and REGULATION



THE PHILIPPINE DISASTER RISK REDUCTION
AND MANAGEMENT SYSTEM



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.

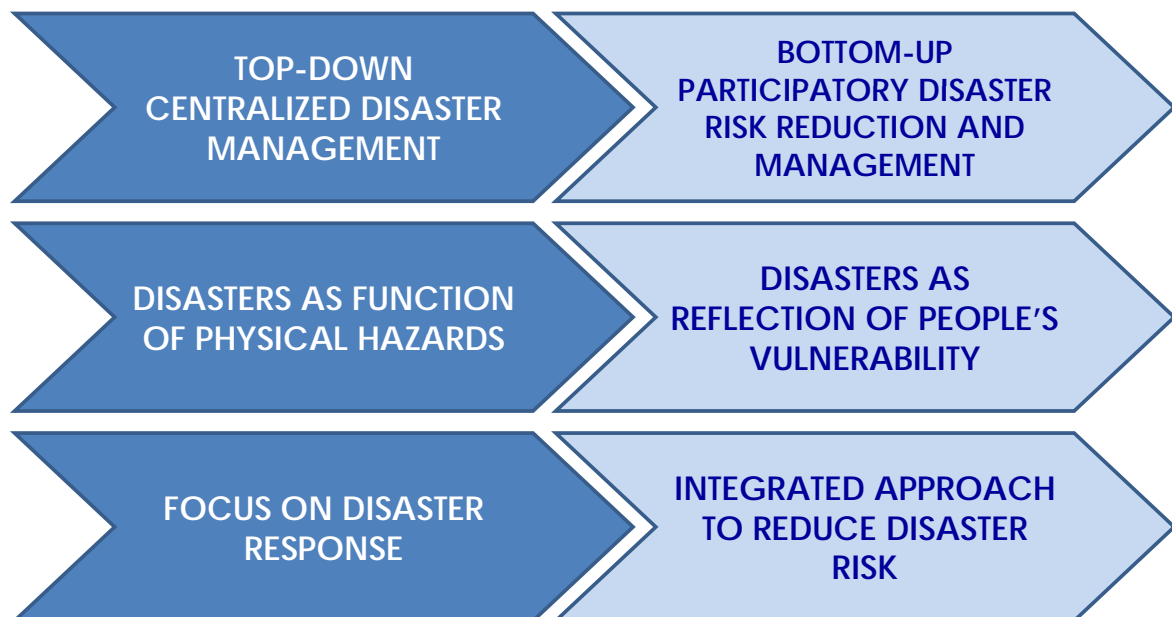


THE PHILIPPINE DISASTER RISK REDUCTION
AND MANAGEMENT SYSTEM



THEN

NOW



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



THE PHILIPPINE DISASTER RISK REDUCTION
AND MANAGEMENT SYSTEM



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 - PNR
 Chief of Staff, AFP
 A,OCD: Exec Offr/Member

NDRRMC: 44 Members

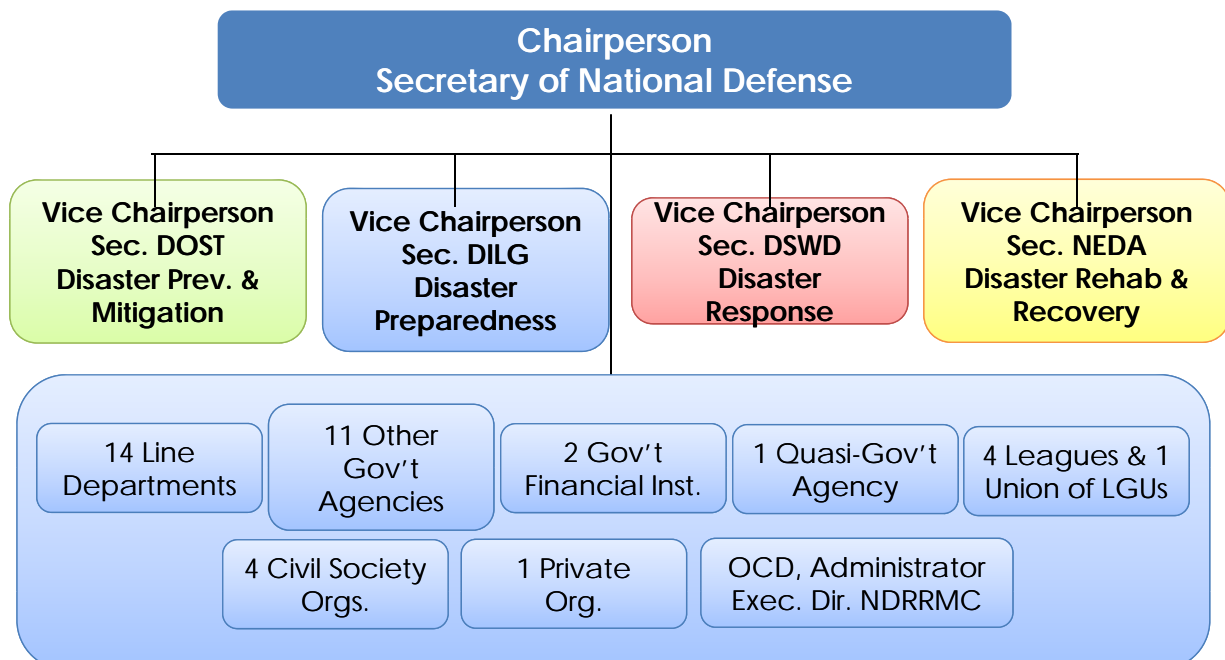
Chairperson: Secretary, DND

Vice-Chairpersons:

Sec, DOST – Prevention & Mitigation
 Sec, DILG –Preparedness
 Sec, DSWD – 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, DOJ, 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



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



THE PHILIPPINE DISASTER RISK REDUCTION
AND MANAGEMENT SYSTEM



Coordination during Emergencies

Barangay DRRM Committee	1 Barangay affected
City/Municipal DRRMC	2 or more Barangays affected
Provincial DRRMC	2 or more Cities/Municipalities affected
Regional DRRMC	2 or more Provinces affected
NDRRMC	2 or more Regions affected

Reference: Section 15, RA 10121



THE PHILIPPINE DISASTER RISK REDUCTION AND MANAGEMENT SYSTEM



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



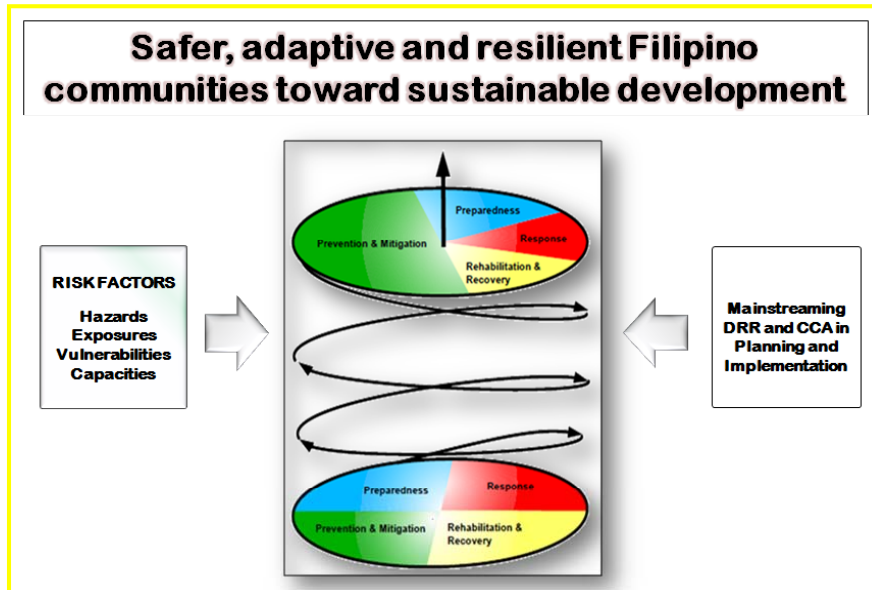
Reference: Section 12, RA 10121 (2010)
Photo-Credit: OCD CARAGA



THE PHILIPPINE DISASTER RISK REDUCTION AND MANAGEMENT SYSTEM



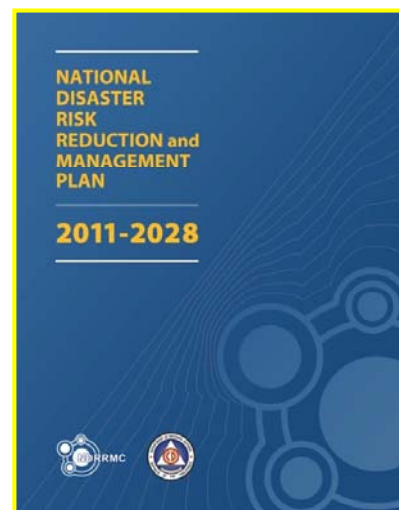
NDRRM Framework (16 June 2011)



THE PHILIPPINE DISASTER RISK REDUCTION
AND MANAGEMENT SYSTEM



NDRRM Plan (7 February 2012)



THE PHILIPPINE DISASTER RISK REDUCTION
AND MANAGEMENT SYSTEM



IV. FOUR DRRM THEMATIC AREAS

4 DRRM Thematic Areas



Disaster Prevention and Mitigation

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

Vice Chairperson:  DOST

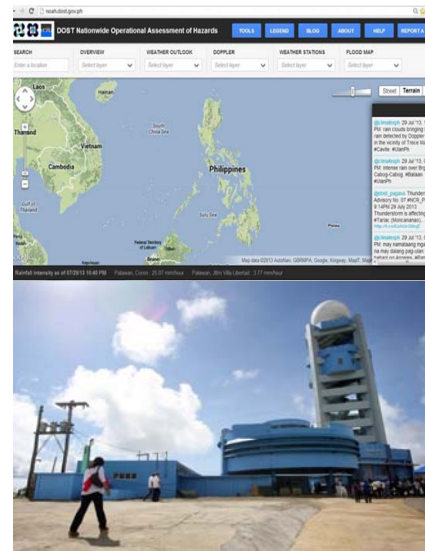


Photo credit: Google Images



THE PHILIPPINE DISASTER RISK REDUCTION AND MANAGEMENT SYSTEM



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



THE PHILIPPINE DISASTER RISK REDUCTION AND MANAGEMENT SYSTEM



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 (eg relief distribution)
- Provision of financial assistance
- Management of evacuation centers

Vice Chairperson:



DSWD

Photo credit: Google Images



THE PHILIPPINE DISASTER RISK REDUCTION
AND MANAGEMENT SYSTEM



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



NEDA



Photo credit: Google Images

Vice Chairperson:



THE PHILIPPINE DISASTER RISK REDUCTION
AND MANAGEMENT SYSTEM



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"



THE PHILIPPINE DISASTER RISK REDUCTION
AND MANAGEMENT SYSTEM



SALAMAT KAAYO!
(Arigato Gozaimasu)