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System: NDRRMC's Policies, Plans, and Programs

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Scope of Presentation

General Information on the Philippines

Philippine Disaster Profile



The Philippine Disaster Management System: An Overview



Current
Disaster Risk
Reduction
Strategies and
Initiatives



Introduction



The Philippines is an archipelagic nation located in Southeast Asia, comprising 7,107 islands, spanning 1,840 kms from north to south.

- Total land area 300,000 sq. kms.
- Coastlines 36,000 kilometers, the longest coastlines in the world
- Bounded by three large bodies of water:

on the west and north - by the South China Sea on the east - by the Pacific

Ocean

on the south - by the Celebes Sea and the coastal waters of Borneo

Topography



Three major island groups:

Luzon - largest island group with 141,000 sq. kms.

Mindanao - second with 102,000 sq.

Visayas - third with 57,000 sq. kms.

- Luzon is the most mountainous with extensive valleys and plains running through its interiors
- Three major mountain ranges in the area: the Sierra Madre, the Central Cordillera and the Caraballo Mountains
- The southern portion of the island has a dominantly volcanic topography with ridges and valleys of gentle slope and generally accordant drainage
- Active volcanoes such as Mt Pinatubo, Mayon Volcano and Mt Bulusan are found in this group of islands

Topography

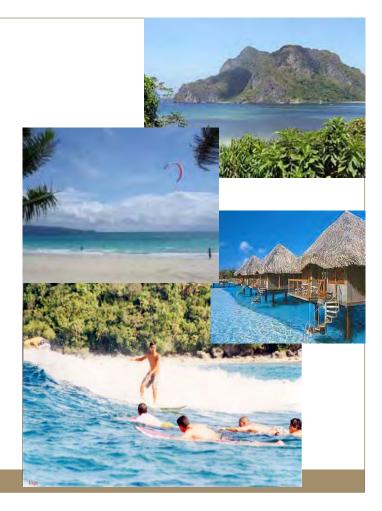
- Visayas Island located in the central Philippines, has a severe dissection of topography due to its exposure to typhoons from Pacific and torrential rains
- characterized by mountains and hills (where peaks reach 900m), river basins, floodplains, plateaus and valleys
- Mindanao has diverse structural elements and different forms of physiographic development including fault block mountains, volcanic peaks, uplifted plateaus, low flat basins, a notable fault zone which also cuts through Luzon and Visayas, fissure low masses, and incised valleys and canyons.
- Major mountain ranges: the Eastern or Pacific Cordillera, the Bukidnon-Davao Range





Climate

- Tropical marine climate (has high temperature and warm air currents flow over its land masses)
- Dominated by two major seasons: wet and dry seasons
- The summer (southwest)
 monsoon brings heavy rains to
 most of the archipelago from
 June to November
- The winter (northeast) monsoon brings cooler and drier air from December to May
- Mean annual temperature is 26.6°C
- 28.3°C during summer months



Climate

- 25.5°C during rainy months
- Rainfall is the most important climatic element in the Philippines.
- Rainfall distribution throughout the country varies from one region to another, depending upon the direction of the moisture-bearing winds and the location of the mountain systems.
- Mean annual rainfall varies from 965 to 4,064 millimeters annually







Mabuhay!



Population - **90** million as of 2010

Filipino – official language

90% of the population are Catholics

Agriculture is the primary source of livelihood in the country.







Disaster Risk Profile



The proneness of the Philippine archipelago to hazards is defined by its location and natural attributes as it is situated in the Pacific Ring of Fire where two major tectonic plates (Philippine Sea and Eurasian) meet. This explains the occurrence of earthquakes and tsunamis as well as the existence of around 300 volcanoes of which 22 are classified as active because their eruptions have been found in historical records. The Philippines is also located along the typhoon belt in the Western North Pacific Basin in the Pacific where 66 percent of tropical cyclones enter or originate. On the average, the country faces 20 tropical cyclones a year, of which 5 to 7 can be rather destructive.

Disaster Risk Profile







Other threats that warrant attention are complex emergencies that are primarily human-induced, often associated with armed conflict. Issues related to internally displaced persons (IDPs) are part of dealing with such threats. The country has also been preparing for regional and emerging risks such as avian influenza, weapons of mass destruction, and climate change.



- From 1970 2009, annual average direct damage to disasters ranged from PHP 5 Billion to PHP15 Billion (US \$100 Million to US \$300 Million), indirect and secondary impacts further increase this cost
- Cost of direct damage is equivalent to more than 0.5 % of the national GDP
- Annual average casualties due to natural disasters - 1,002
- Flooding as the topmost disaster during the last five (5) years

Disaster Situation in the Philippines

From 1970 to 2009

290 Destructive Typhoons

out of the 783 tropical cyclones

Major Flooding

in 1991 (Ormoc City Tragedy)

5 Major Landslides:

- 1999 (Cherry Hills Tragedy)
- 2000 (Payatas Tragedy)
- 2004 & 2006 (Southern Leyte)
- 2004 (Quezon)

2 Major Volcanic Eruptions:

- 1991 (Mt Pinatubo)
- 1993 (Mt Mayon)

2 Major El Nino Phenomenon:

- **1998**
- **2009**

9 Major Earthquakes:

- 1968 (Casiguran, Aurora)
- 1973 (Ragay Gulf)
- 1976 (Moro Gulf)
- 1990 (Luzon, Bohol, & Panay)
- 1994 (Mindoro Oriental)
- 1999 (Metro Manila & Region I)
- 2002 (South Cotabato)
- 2003 (Masbate)

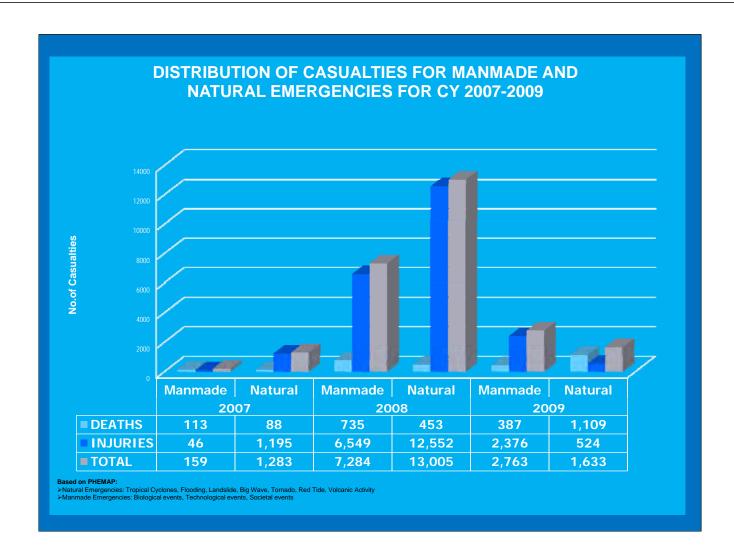
Effects of Typhoons Reming and Milenyo in 2006 and Typhoons Ondoy and Pepeng in 2009

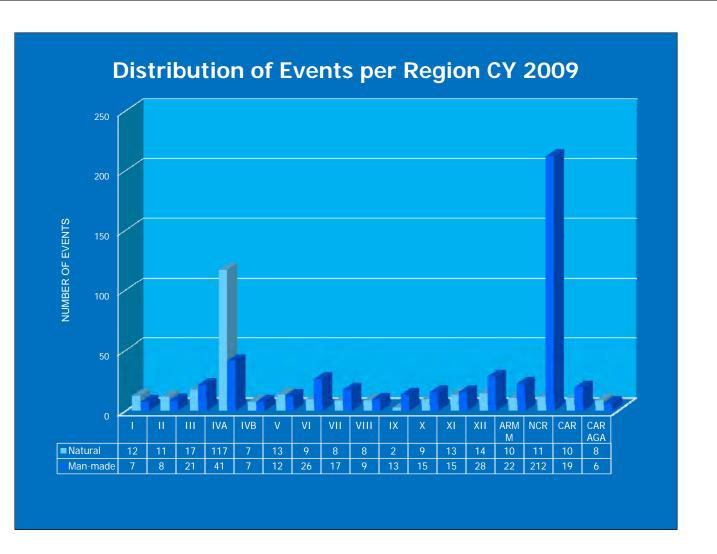
DATES	DISASTERS/AREAS AFFECTED	CASUALTIES			AFFECTED		D AMAGED HOUSES		DAMAGED PROPERTIES (Billions)			TOTAL COST	
		DEAD	INJ	MIS	FAMILIES	PERSONS	TOTALLY	PART	AGRI	INFRA	PVT	OF DAMAGES	
<u>2006</u>		947	3,020	810	1,549,173	7,675,537	346,517	744,697	5.905	6.151		P 12.056 B	
	TY Milenyo (Xangsane) Regions NCR, CAR, III, IV-A, IV-B, V, VI, VII & VIII Typhoon Reming (Durian)	213	680	48	841,207	4,139,195	118,081	385,096	3,989	2.638		P 6.607	
	Regions III, IV-A, IV-B and V	734	2,380	762	707,986	3,536,342	228,436	359,601	1,936	3.513		P 5.449	
2009		878	736	\$	1,990,428	9,547,061	36,137	207,574	27.164	11.038		P 38.262 B	
Sept2427	Tropical Storm Ondoy (Ketsana) Regions I, II, III, IV-A , IV-B, V, VI, IX, ARMM, CAR and NCR	386	529	37	993,227	4,901,234	30,082	154,922	6.669	4.299		P 10.968	
Sep 30-Oct 10	Typhoon Pepeng (Parma) Regions II, III, IV-A, IV-B, V, VI, CAR snd NCR	492	207	47	997,201	4,645,827	6,055	52,662	20.495	6.799		P 27.294	
GRAND TOTAL		1,825	3,756	894	3,539,601	17,222,598	382,654	952,271	33.069	17.249		P 50.318 B	

17 Feb 2006 Southern Leyte Landslide	154	30	968	3,811	18,450	357	0.023	0.032	P	0.115 B

- •Total Estimated Damage & Losses (Typhoons Ondoy, Pepeng and Santi 2009)
- P 206 Billion or USD 4.38 Billion (equivalent to about 2.7 $\!\%$ of GDP)
- More than 90% of the damage and losses were suffered by the private sector
- Biggest damage: Housing P25.5B; Businesses- P22.4B; Transport- P6.5
- Largest Losses: Business- P88.9B; Agriculture- P47.5B; Housing P8.9B



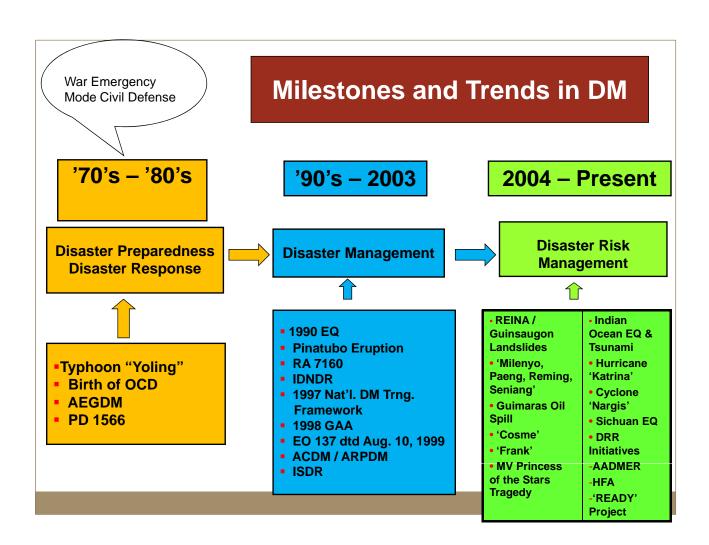








The Philippine
Disaster Risk Reduction and
Management Framework





Philippine Disaster Management System

□ Primarily anchored on Presidential Decree 1566

PD 1566

- ☐ Focus is disaster preparedness and response
- ☐ Disasters traditionally viewed as one-off events responded to by governments and relief agencies
- □ Social and economic implications and causes of disaster events are complex
- Disasters can reverse hard-won development gains, illustrating the relationships between poverty reduction, environmental degradation and vulnerability to disasters
- □ Engagement of other players is not pronounced
- □ No strong institutional basis, especially at the LGU level

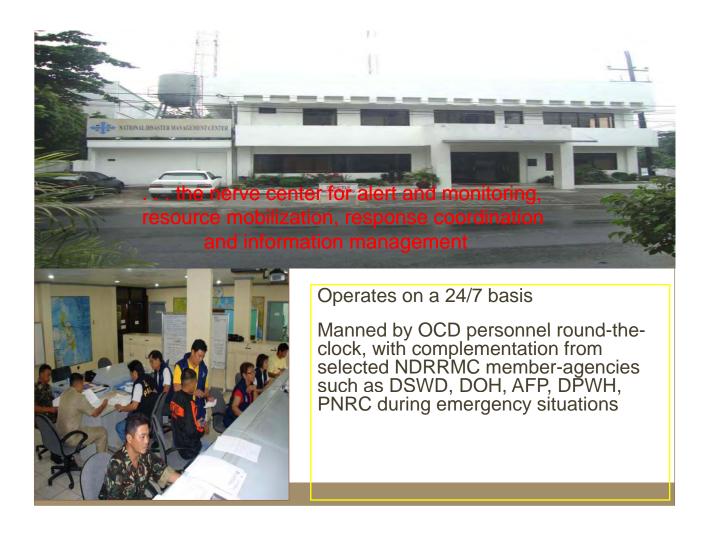
"Strengthening the Philippine Disaster Control and Capability & Establishing the National Program on Community Disaster Preparedness" **PD 1566**

- The exercise of leadership responsibilities is expected from the local government executives (Governors, Mayors, Barangay Captains).
- The main role of national government is to provide support to the local government units.
- Both planning and actual operations are to be carried out "...
 in an inter-agency, multi-sectoral basis to optimize
 the utilization of resources."
- Every agency of government is directed to prepare its disaster preparedness plan.



- Disaster Management, specifically disaster preparedness and emergency operations is to be pursued with a heavy emphasis on "self- reliance", "self-help" and "mutual assistance."
- Maximum utilization of resources at every politicoadministrative level is enjoined before assistance is sought from higher levels.
- Primary responsibility for Disaster Management is placed upon agencies of the government.







Core Functions

- Alert and Monitoring
- Multi-agency Operational Coordination
- Response Resource Mobilization
- Information Management, and
- Program Coordination for Operations Capability

Upgrade

Hyogo Framework for Action Priorities



Make Disaster Risk Reduction a Priority

Ensure that disaster risk reduction is a national and a local priority with a strong institutional basis for implementation

2 Know the Risks and Take Action

Identify, assess, and monitor disaster risks - and enhance early warning

3 Build Understanding and Awareness

Use knowledge, innovation, and education to build a culture of safety and resilience at all levels

4 Reduce Risk

Reduce the underlying risk factors

5 Be Prepared and Ready to Act

Strengthen disaster preparedness for effective response at all levels

NDCC's Disaster Response Strategy: Cluster Approach

UN Cluster Approach was adopted by the NDCC as a coordination tool to ensure a more coherent and effective delivery of humanitarian assistance by mobilizing groups of agencies, organizations and NGOs to respond in a strategic manner across all key sectors or areas of activity

Cluster	GoP Lead	UN-IASC Lead
Food and Non-Food Items	DSWD	WFP
Camp Management	DSWD	IOM
Shelter and Livelihood	DSWD	IFRC
WASH, Health, Nutrition, & Psychosocial Services	DOH	UNICEF, WHO
Logistics and Emergency Telecommunications	OCD	WFP
Education	DepEd	UNICEF
Agriculture	DA	FAO
Early Recovery	OCD	UNDP

ASEAN Agreement on Disaster Management and Emergency Response



- AADMER was signed by ASEAN Foreign Ministers in July 2005.
- The Agreement contains provisions on disaster risk reduction, monitoring and early warning, prevention and mitigation, preparedness and response, rehabilitation, technical cooperation and research, mechanisms for coordination and establishment of an ASEAN Coordination Center for Humanitarian Assistance on disaster management (AHA Center).
- AADMER is a regional legally-binding agreement that binds the ASEAN
 Member States together to promote regional cooperation and collaboration in
 reducing disaster losses and intensifying joint emergency response to disasters
 in the region.
- On 14 September 2009, the Philippines was the last of the ten ASEAN Member States to have ratified the AADMER. The AADMER entered into force on 24 December 2009.

Towards Policy Reform: Disaster Risk Reduction & Management Act

- Strengthening the institutional set-up/paradigm shift from reactive to proactive approach to disaster risk management
- Facilitating active engagement, strengthening local capabilities and competencies, and enhancing resilience through bottomup approach
- Providing more efficient funding mechanisms
- Pertinent provisions on the declaration of state of calamity, remedial measures and penalties
- Congruence with universal declarations and principles on disaster risk reduction and humanitarian assistance

Planning Instruments

1983

National Calamities and Disaster Preparedness Plan

2003

Local Disaster Coordinating Councils' Contingency Plans

2005

Four-Point Plan of Action on Disaster Preparedness

2009

Strategic National Action Plan on Disaster Risk Reduction

Four-Point Plan of Action on Disaster Preparedness

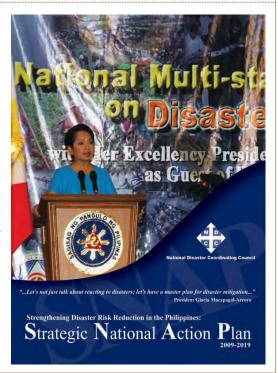
- 1. Upgrade Forecasting Capability of PAGASA and PHIVOLCS
 - Improve equipment and staff development
 - Establish linkages and networking with foreign forecasting institutions covering the Pacific Rim and South China Sea
 - Install rainfall and water level gauges
- 2. Intensify Public Information Campaign on Preparedness
 - Conduct of Nationwide Synchronized Building Emergency Evacuation Plan (B.E.E.P.)
 Drills, Tsunami and Earthquake Drills
 - Airing of "Safe Ka Ba?" Disaster Management School-on-Air
 - Production and distribution of flyers on related hazards
- ${f 3.}$ Enhance Capabilities for LCEs and their DCCs in identified vulnerable areas
 - Orient LCES on Disaster Risk Management and the Use of LCF
 - Conduct of Contingency Planning Workshops
 - Train local responders on MFR, CSSR, and WASAR
- 4. Strengthen Mechanisms for Government and Private Sector Partnership

"Strengthening Disaster Risk Reduction in the Philippines: Strategic National Action Plan (SNAP) 2009-2019"



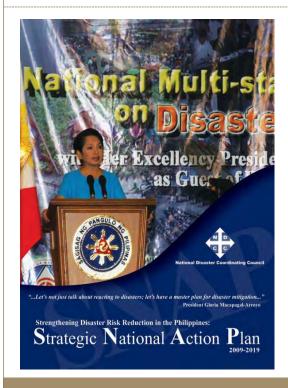
Priority Programs and Projects

- 1. Governance: Disaster Risk Management Act
- Multi-stakeholder Dialogues on Disaster Risk Reduction
- 3. Institutionalization of Disaster Management Office
- 4. Enhancing Capacity Development for Local Disaster Coordinating Councils
- 5. Mainstreaming DRR into the Peace Process
- **6.** Mainstreaming DRR in Various Government Plans and Programs
- 7. Public-Private Partnership
- 8. Resource Mobilization
- 9. Information and Database Generation



"Strengthening Disaster Risk Reduction in the Philippines: Strategic National Action Plan (SNAP) 2009-2019"





Priority Programs and Projects

- 10. Knowledge Management
- 11. Supporting DRR Mainstreaming through Sectoral Approach
- 12. Preparedness for Effective Disaster Response
- 13. Information, Education and Communication (IEC) Campaign
- 14. Institutional and Technical Capacity Building
- 15. Education and Research
- 16. Forecasting and Early Warning
- 17. Risk Evaluation
- **18.** Development of Tools for Assessment and Monitoring of DRR Measures



Program for Enhancement of Emergency Response

PEER

- The PEER is a regional training program initiated by USAID/OFDA and managed by National Society for Earthquake (NSET)
- Purpose: To strengthen and institutionalize capacities in emergency and disaster response in the five participating Asian countries: Bangladesh, India, Indonesia, Nepal, and the Philippines.
- PEER curriculum includes fours interrelated courses:
 - Medical First Responder (MFR)
 - Collapsed Structure Search and Rescue (CSSR)
 - Hospital Preparedness for Emergencies (HOPE)
 - Training for Instructor (TFI)

Hazards Mapping and Assessment for Effective Community-based Disaster Risk Management Project



- READY Project is funded by AusAID with technical assistance of UNDP
- Funding Support: US\$ 1.9 Million
- Implementing Partner: Office of Civil Defense
- Responsible Partners: PHIVOLCS, PAGASA, MGB, and NAMRIA
- Target Areas: 27 Provinces
- Project Components
 - 1. Hazards Mapping and Assessment
 - 2. Community-based Disaster Preparedness
 - 3. Mainstreaming Disaster Risk Reduction into Local Planning Processes
- Status of Implementation: Completed mapping and IEC activities in 11 provinces. However, a total of 18 provinces were already covered in varying stages of project execution.

Evolution of Disaster Management Framework

- Traditionally, disasters were viewed as one-off events and responded to by governments and relief agencies
- The social and economic implications and causes of disaster events were not well appreciated
- This view engendered a disaster management framework that was focused on DISASTER RESPONSE



The Philippine Disaster Risk Reduction and Management (DRRM) Act of 2010

Strengthening the Philippine Disaster Risk Reduction and Management Framework and Institutionalizing the National Disaster Risk Reduction and Management Plan, Appropriating Funds Therefore and For Other Purposes

Strengthening the Philippine Disaster Risk Reduction and Management Framework and Institutionalizing the National Disaster Risk Reduction and Management Plan, Appropriating Funds Therefor and For Other Purposes



• **Status:** Approved in the bicameral conference on 27 January 2010 & ratified by the Philippine Congress on 1 February 2010.

Salient Features:

- Proactive, comprehensive, integrated, community-based, multisector approach in DRM
- Respect to people's rights to life and property; adherence / adoption of universal norms, principles and standards of humanitarian assistance
- Development, promotion and implementation of the National Disaster Risk Reduction and Management Plan (NDRRMP)
- Mainstreaming of DRR and Climate Change Adaptation in development, peace and conflict resolution process

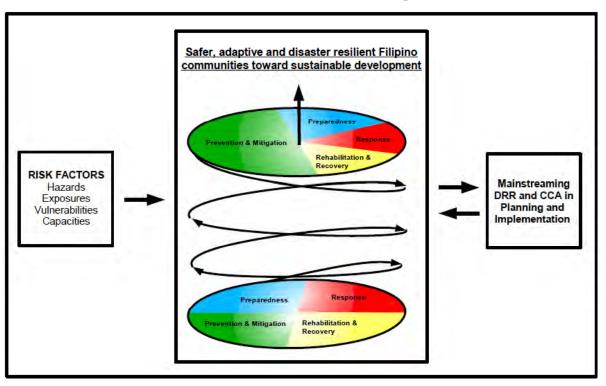
Strengthening the Philippine Disaster Risk Reduction and Management Framework and Institutionalizing the National Disaster Risk Reduction and Management Plan, Appropriating Funds Therefor and For Other Purposes



Salient Features:

- Present DCCs shall be renamed as N/R/L DRRMCs;
 BDCCs shall be known as Barangay Disaster Risk
 Reduction and Management Committee (BDRRMC) under the Barangay Development Council
- Enhanced OCD functions (i.e. monitoring and evaluation) and organizational structure
- Establishment of permanent Local Disaster Risk Reduction and Management Offices
- Local DRRM Fund not less than 5% of the estimated revenue from the regular sources shall be used to support DRM activities; 30% of which shall be allocated as Quick Response Fund

National Disaster Risk Reduction and Management Framework



Principles of the NDRRMF

- Address the underlying causes of vulnerability
- A national responsibility within and towards a sustainable development approach
- Need for community empowerment and shared responsibilities
- Good responsive goverenance
- Mutually reinforcing partnerships
- Strong and responsive political will, commitment and leadership
- Best done through local and customized adoption and adaptation

Diagram Explation

- OBecause the country is challenged by increasing disaster and climate risks caused by dynamic combinations of natural and human-induced hazards, exposure, and people's vulnerabilities and capacities...
- OThere is an urgent need for the country to work together through multi-stakeholder partnerships and robust institutional mechanisms and processes so that Filipinos will be able to live in safer, adaptive and disaster resilient communities on the path to developing sustainably.

This DRRM framework indicates the paradigm shift towards a proactive and preventive approach to disaster management.

It emphasizes that resources invested in disaster prevention, mitigation, preparedness and climate change adaptation will be more effective towards attaining the goal of adaptive, disaster resilient communities and sustainable development.

The Framework shows that mitigating the potential impacts of existing disaster and climate risks, preventing hazards and small emergencies from becoming disasters, and being prepared for disasters, will substantially reduce loss of life and damage to social, economic and environmental assets

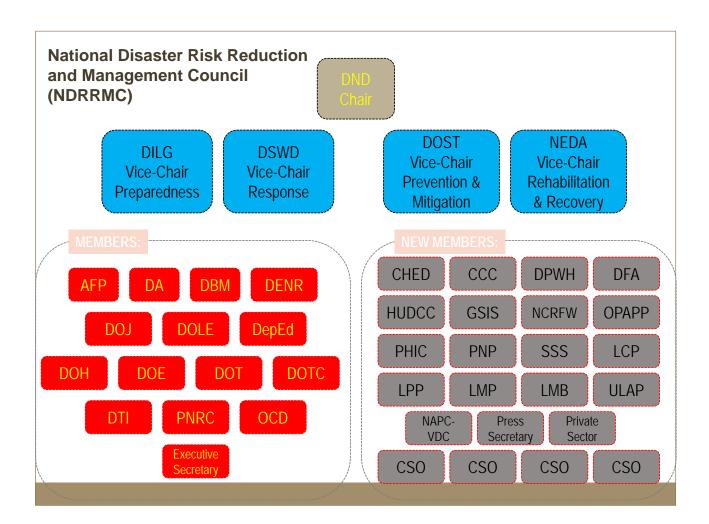
It also highlights the need for effective and coordinated humanitarian assistance and disaster response to save lives and protect the more vulnerable groups during and immediately after a disaster.

Mainstreaming DRR is a means towards

- (a) refocusing the development goals, objectives and targets to be able to adequately respond to disaster risks; and
- (b) identifying and implementing appropriate interventions to address the impacts of disaster risks.

Mainstreaming DRR is an important step towards avoiding huge losses from disasters.

These processes will synergize efforts and create rippling positive changes toward addressing the underlying causes of vulnerabilities and mainstreaming DRRM in national and local policy-making, planning, investment programming and in the policy/plan implementation.



DRRM Aspects

- **O** Prevention and Mitigation
- **O** Preparedness
- **O** Response
- O Rehabilitation and Recovery

These aspects coincide with the 4 vice chairpersons of the NDRRMC and represent the key components of disaster risk reduction and management.

They are not phases and can happen at different stages or even alongside each other.

They mutually reinforce each other

Prevention and Mitigation

- With DOST as lead
- Through this aspect, we want to avoid hazards and mitigate their potential impacts by reducing vulnerabilities and exposure and enhancing capacities of communities
- Key Result Areas
 - 1. Mainstreamed and integrated DRR & CCA in national, sectoral, regional and local development, policies, plans and budget.
 - 2. DRRM/CCA sensitive environmental management.
 - 3. Increased disaster resiliency of infrastructure systems.
 - 4. Community based and scientific DRR/CCA assessment, mapping, analysis and monitoring.
 - 5. Risk transfer mechanisms

Preparedness

O With DILG as lead

O Through this, we want to establish and strengthen capacities of communities to anticipate, cope and recover from the negative impacts of emergency occurrences & disasters

Key Result Areas

- Community Awareness and understanding of the Risk Factors
- Contingency Planning at the local level (to include Incident Command System, Early Warning Systems, Pre-emptive evacuation, stockpiling and equipping)
- 3. Local drills and simulation exercises
- 4. National disaster response planning

Response

- With DSWD as lead
- Through this, we aim to provide life preservation and meet the basic subsistence needs of affected population based on acceptable standards during or immediately after a disaster
- Key Result Areas
 - 1. DANA as a generic activity (NDRRMC DANA methodology was adopted from ADPC)
 - 2. Relief Operations
 - 3. Search, Rescue, Retrieval
 - 4. Dissemination/Information sharing of disaster-related information
 - 5. WATSAN and Health
 - 6. Development/provision of temporary shelter
 - 7. Psycho social support
 - 8. Early Recovery Mechanism
 - 9. Management of Dead and Missing
 - 10. Evacuation Management
 - 11. Social Protection Intervention
 - 12. Civil and uniformed services coordination

Rehabilitation and Recovery

O With NEDA as lead

O Through this, we aim to restore and improve facilities, livelihood and living conditions and organizational capacities of affected communities, and reduced disaster risks in accordance with the "building back better" principle

Key Result Areas

- Livelihood
- 2. Shelter
- 3. Infrastructure

RA 10121 states that...

The National Disaster Risk Reduction and Management Framework (NDRRMF) shall be

- **☐** Comprehensive
- □ All-hazards
- Multi- sectoral inter-agency and
- □ Community-based approach to DRRM

It will be reviewed every 5 years, or as necessary to ensure relevance

Challenges Ahead

- Moving from isolated actions and pilot projects to comprehensive programmes of action...translating the SNAP into action
- Intensifying disaster risk reduction work at the local level by enhancing capacity development and operational readiness of local government units
- Promotion of climate change adaptation and disaster risk reduction linkages
- Sustaining effective DRR programs and good practices

"DRR, poverty alleviation and sustainable development are inextricably linked"



Thank you...



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Management Center

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