

The Philippine Disaster Management System

by:

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**Office of Civil Defense 3-Regional Disaster Coordinating 3
Council
(OCD-NDCC)**



National Disaster Coordinating Council

Scope of Presentation

- ❑ General Information on the Philippines
- ❑ RP Disaster Profile
- ❑ State of DRRM in the Philippines
- ❑ Current DRR Initiatives
 - SNAP
 - DRRM Act of 2010
 - Climate Change Act of 2009
- ❑ Challenges/Task



Introduction



The Philippines is an archipelagic nation located in Southeast Asia, comprising 7,107 islands, spanning 1,850 kms from north to south.

- **Total land area** – 299,764 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

Large mountainous terrain, narrow coastal plains and interior valleys and plains make up the country's topography.



- Three major island groups:
 - Luzon - largest island group with 141,000 sq. kms.
 - Mindanao - second with 102,000 sq. kms.
 - 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 – 94.01 million
estimated as of July 2009
growth rate 1.96

Filipino – official language

90% of the population are
Christians

80% are Roman Catholics

The Philippines is a newly
industrialized country, with
an economy anchored on
agriculture but with
substantial contributions
from **manufacturing, mining,
remittances from overseas
Filipinos, and service
industries such as tourism,
and business process
outsourcing.**



imagesPHILIPPINES



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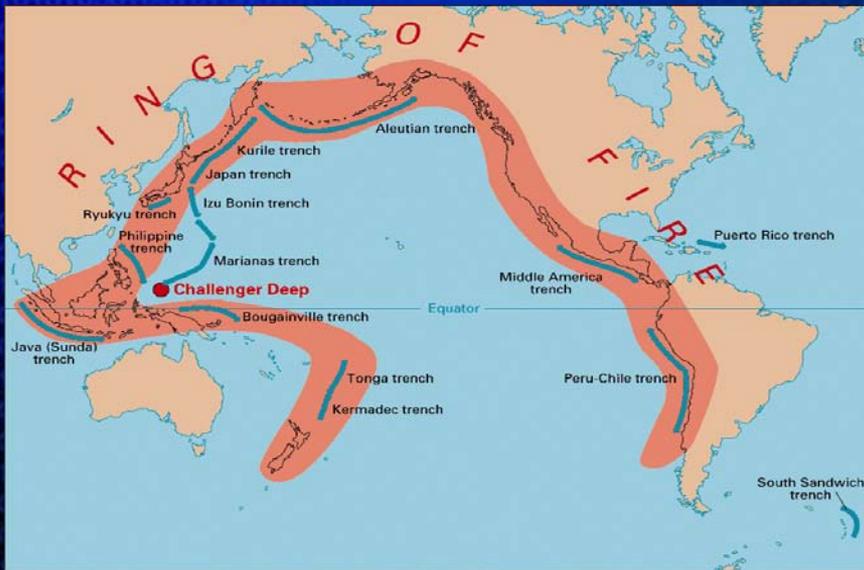


RP DISASTER PROFILE



National Disaster Coordinating Council

Natural Hazards: A Major Challenge to RP's Development Gains

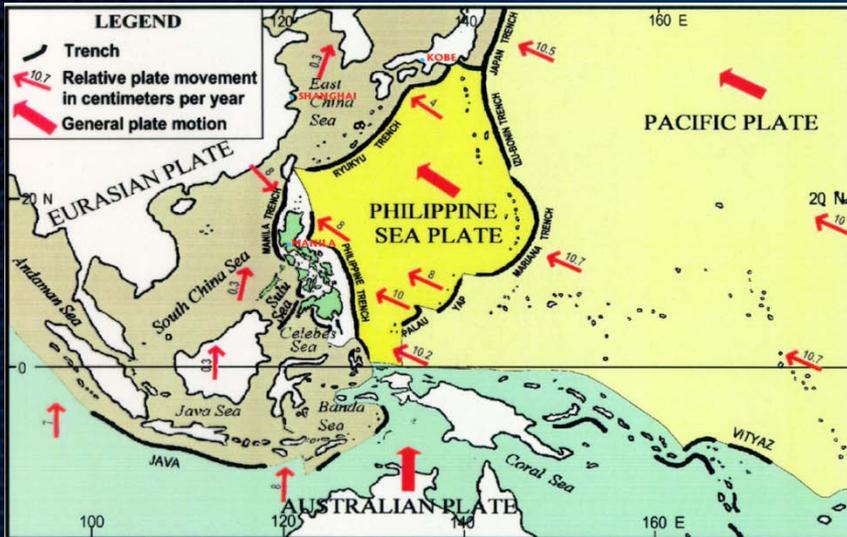


- Situated along two major tectonic plates of the world – the EURASIAN and PACIFIC Plates

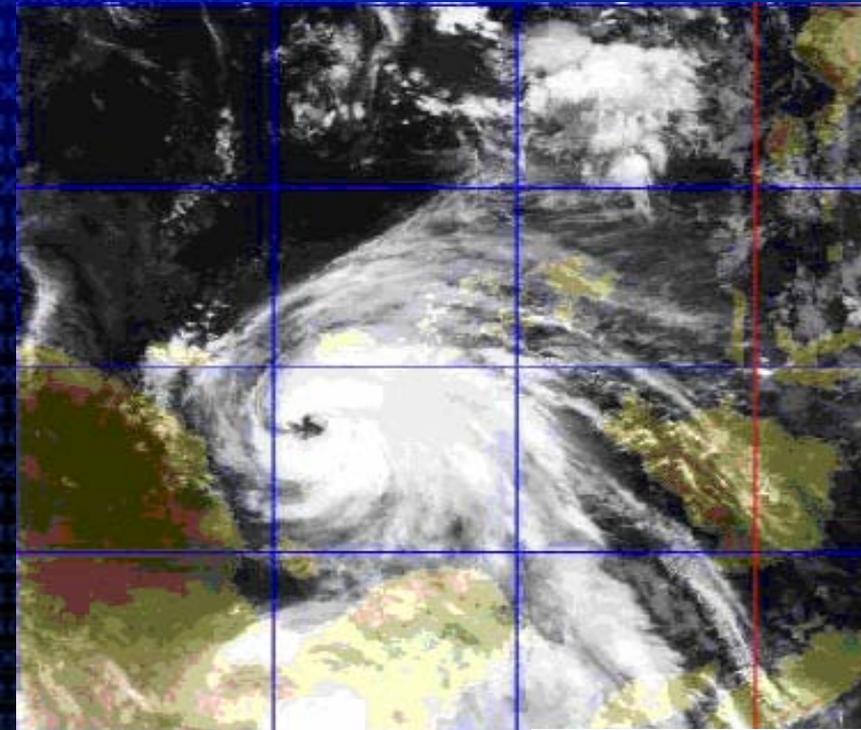
- average of 20 quakes per day
- 100 to 200 earthquakes felt every year
- 90 destructive earthquakes for the past 400 years

- 300 volcanoes, 22 as active

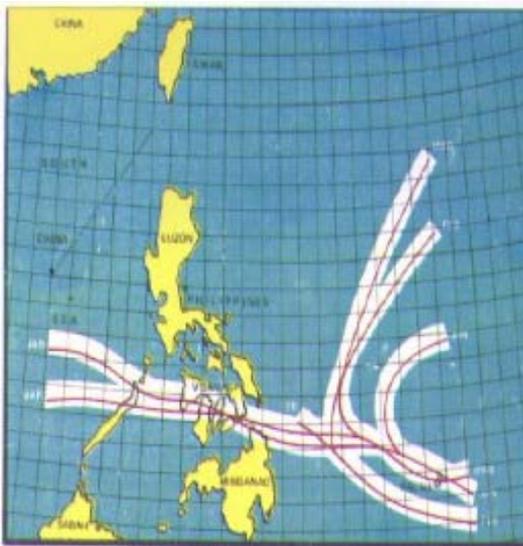
- 36,289 kms. of coastline vulnerable to tsunami



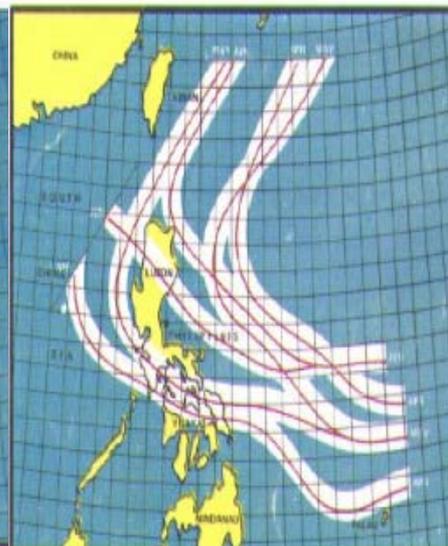
Natural Hazards Setting in the Philippines



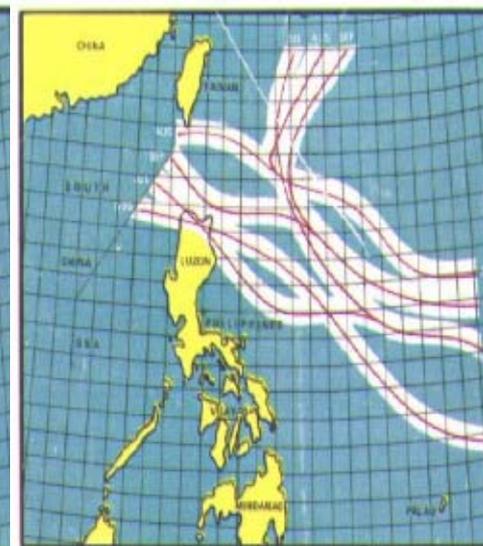
- It is located along the typhoon belt on the North Pacific Basin in the Pacific where 75 percent of typhoons originate:
 - average 20 to 30 typhoons per year, 5 to 7 of which can be destructive
 - eastern seaboard is highly exposed to typhoons with wind speeds of 200 kilometers per hour
 - 25 percent of typhoons of such high wind speeds in the world occur in the Philippine Area of Responsibility



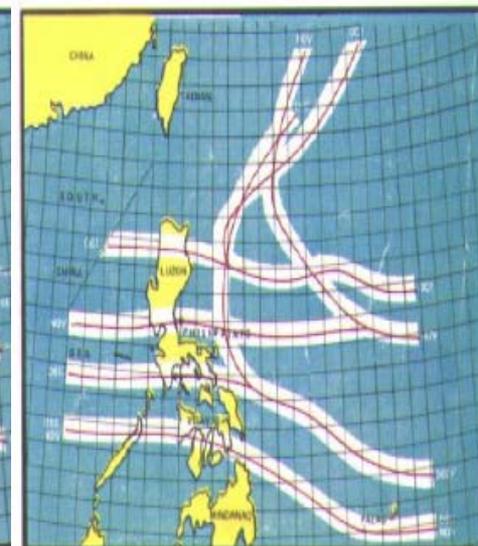
FIRST QUARTER (JAN., FEB., MAR.)



SECOND QUARTER (APR. MAY, JUNE)

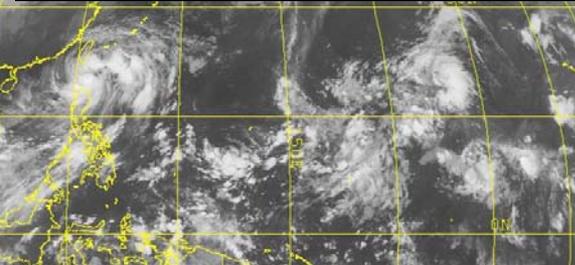


THIRD QUARTER (JULY, AUG., SEPT.)



FOURTH QUARTER (OCT. NOV., DEC.)

Natural Hazards: A Major Challenge to RP's Development Gains

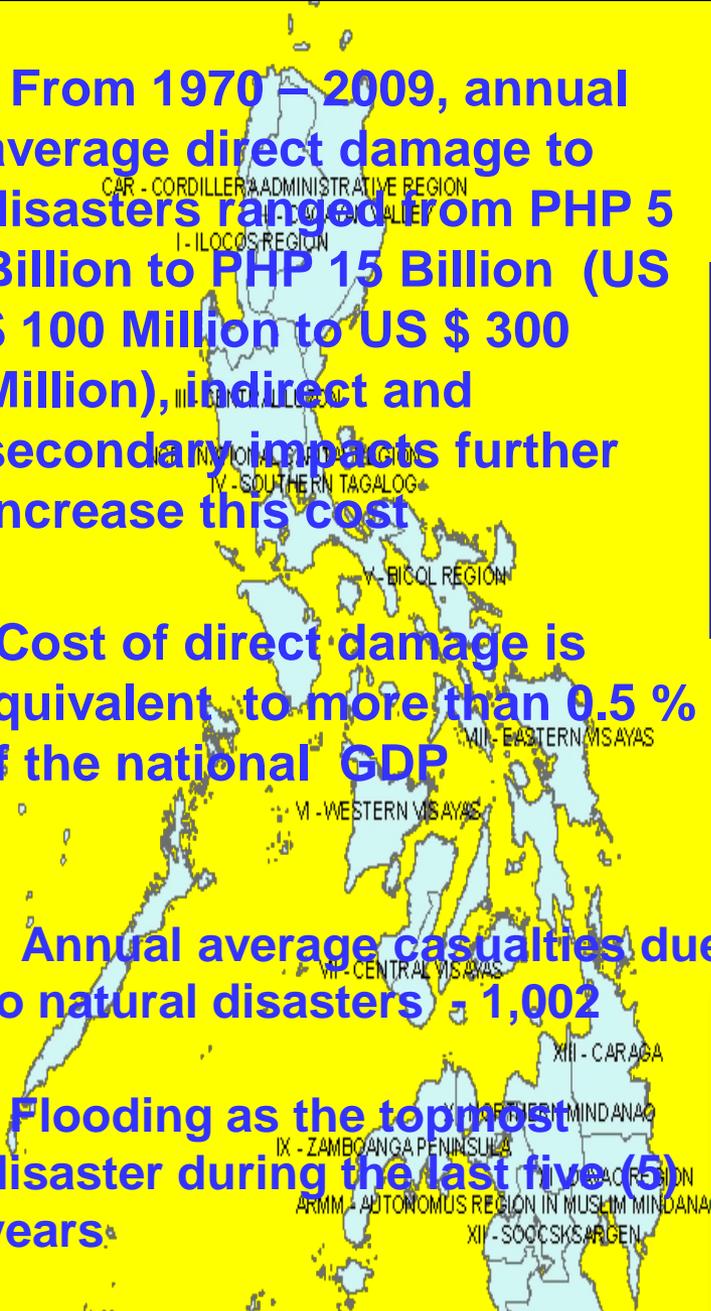


• From 1970 – 2009, annual average direct damage to disasters ranged from PHP 5 Billion to PHP 15 Billion (US \$ 100 Million to US \$ 300 Million), indirect and secondary impacts further increase this cost

• 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 Impact

(Last Quarter Storms of 2009: TS 'Ondoy', TY 'Pepeng' & TY 'Santi')

- **Areas Affected:** Twelve (12) Regions in Central, Northern and Southern Luzon
- **Casualties:**
Dead – 956 persons Missing – 84 Injured – 736
- **Severely Affected Population:**
9.3 M out of the 43.2 M population in affected regions
- **Total Estimated Damage & Losses**
 - 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



Council



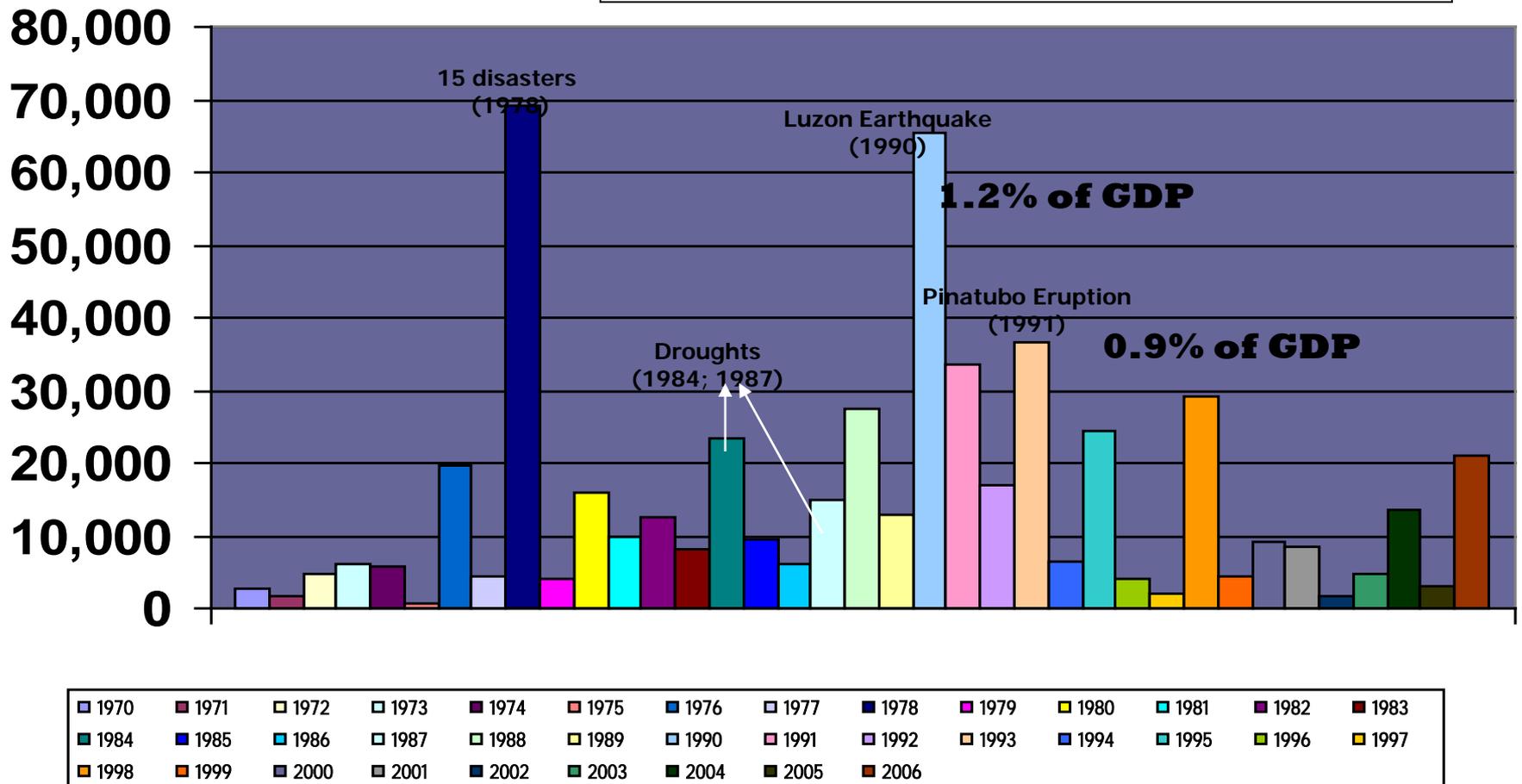


National Disaster Coordinating Council

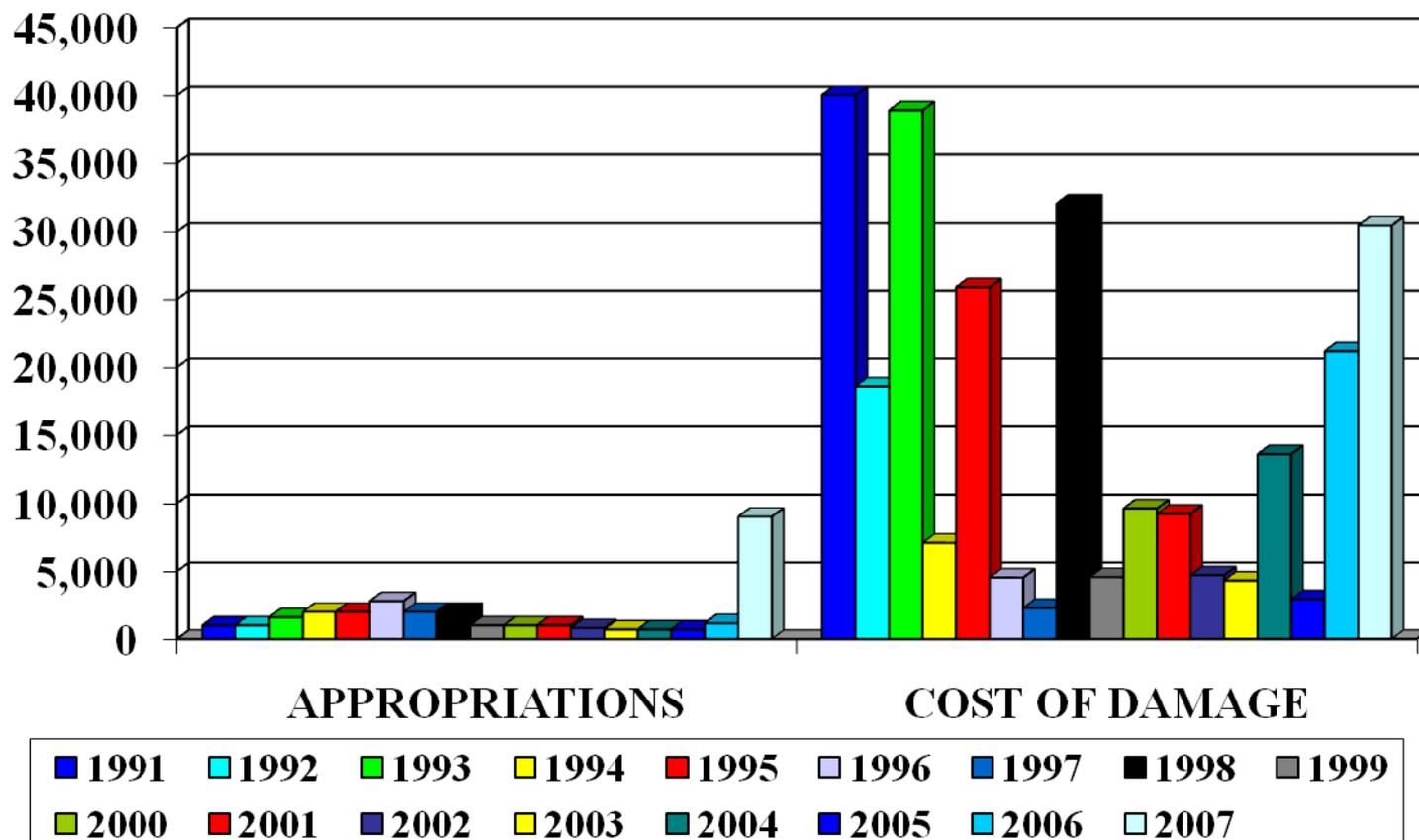
Estimated Damage of Disasters in RP (In M P @ 2000 Prices)

On the average, annual **direct damage** is P15 B

For typhoons, average of 0.5% of GDP every year



CALAMITY FUND APPROPRIATIONS VS. COST OF DIRECT DAMAGE (1991-2007)*



* January to June 2007. Appropriations include 8 billion CARE fund



Philippines Disaster Risk Reduction and Management Framework

OCD-NDCC



National Disaster Coordinating Council



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



OFFICE OF CIVIL DEFENSE



The OCD serves as the operating arm and secretariat of the NDCC.

... has the primary task of coordinating the activities and functions of various government agencies and instrumentalities, private institutions and civic organizations for the protection and preservation of life and property during emergencies...

- LOI NO.19, S-1972



National Disaster Coordinating Council

OFFICE OF CIVIL DEFENSE

Vision

A service-oriented organization

A prepared nation

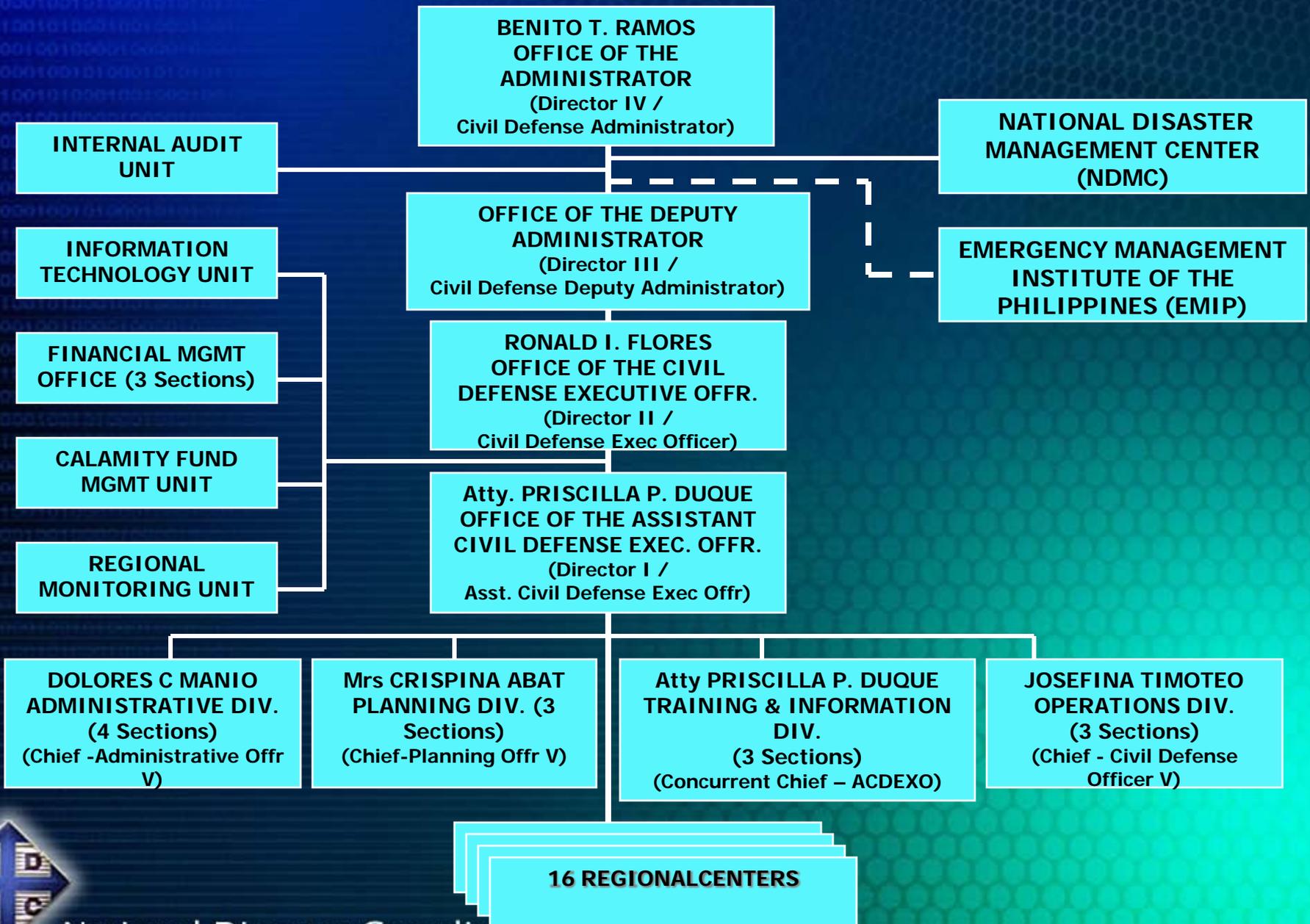
A safe population



Mission

To administer a comprehensive national civil defense and civil assistance program by providing leadership in the continuous development of measures to reduce risk to communities and manage the consequence of disasters.

EXISTING ORGANIZATIONAL STRUCTURE



The NDCC OPCEN (Operation Center)

- Center for coordination of all pre- and post-disaster operational activities
- Central command and control facility
- It does not normally control field assets and leaves tactical decisions to local disaster coordinating councils (DCCs)

Core functions

- Alert and monitoring
- Multi-agency operational coordination
- Response resource mobilization
- Information management, and
- Program coordination for operations capability upgrade



National Disaster Coordinating Council



PD 1566

JUNE 11, 1978

(Strengthening the Philippine
Disaster Control Capability and
Establishing the National Program on
Community Disaster Preparedness)

NDCC's LEGAL BASIS



National Disaster Coordinating Council

PD No. 1566, Section 1

DECLARATION OF POLICIES

- RESPONSIBILITY FOR LEADERSHIP RESTS ON LOCAL CHIEF EXECUTIVES
- SELF RELIANCE, SELF HELP AND MUTUAL ASSISTANCE
(EACH POLITICAL AND ADMINISTRATIVE SUBDIVISION OF THE COUNTRY SHALL UTILIZE ALL AVAILABLE RESOURCES IN THE AREA BEFORE ASKING FOR ASSISTANCE FROM NEIGHBORING ENTITIES OR HIGHER AUTHORITY.)
- PRIMARY RESPONSIBILITY RESTS ON THE GOVERNMENT AGENCIES IN THE AFFECTED AREAS IN COORDINATION WITH THE PEOPLE THEMSELVES
- ALL GOVERNMENT DEPARTMENTS, BUREAUS, AGENCIES, AND INSTRUMENTALITIES TO HAVE DOCUMENTED DM PLANS
- NATIONAL GOVERNMENT EXISTS TO SUPPORT THE LOCAL GOVERNMENTS



Secretary, National Defense - Chairman

Secretary, Interior & Local Gov't- Member
Secretary, Public Works- Member
Secretary, Transportation & Communication - Member
Secretary, Social Welfare & Development - Member
Secretary, Agriculture - Member
Secretary, Education - Member
Secretary, Finance - Member
Secretary, Labor & Employment - Member
Secretary, Trade & Industry - Member
Secretary, Health - Member
Secretary, Science & Technology - Member
Secretary, Budget - Member
Secretary, Justice - Member
Secretary, Natural Resources – Member
Secretary, Foreign Affairs - Member
Director, Phil. Information Agency - Member
Sec-Gen, Phil National Red Cross - Member
Chief of Staff, AFP - Member

**Administrator, Office of Civil Defense –
Member & Executive Officer**

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National

NATIONAL DISASTER COORDINATING COUNCIL

- **HIGHEST POLICY MAKING, COORDINATING AND SUPERVISING BODY AT THE NATIONAL LEVEL FOR DISASTER MANAGEMENT IN THE COUNTRY**
- **ADVISES THE PRESIDENT ON THE STATUS OF NATIONAL DISASTER PREPAREDNESS & MANAGEMENT PLANS**
- **RECOMMENDS TO THE PRESIDENT THE DECLARATION OF STATE OF CALAMITY AND RELEASE OF NATIONAL CALAMITY FUND AS NEEDED**



DCC ORGANIZATIONAL NETWORK



NATIONAL DISASTER COORDINATING COUNCIL

16 REGIONAL DISASTER COORDINATING COUNCILS

80 PROVINCIAL DISASTER COORDINATING COUNCILS

117 CITY DISASTER COORDINATING COUNCILS

1,496 MUNICIPAL DISASTER COORDINATING COUNCILS

41,945 BARANGAY DISASTER COORDINATING COUNCILS

International Frameworks that support and catalyze the strengthening of DRM



National Disaster Coordinating Council

UN General Assembly Resolution 42/169 **dated 11 Dec 1987**

- **1990 – International Decade for Natural Disaster Reduction**
 - **Sec 7 “Calls upon Governments to participate ... for concerted international action for reduction of natural disasters...hazards, assessing the particular requirements of their respective countries...”**



World Conference on Disaster Reduction Kobe, Japan, January 2005

- **Hyogo Framework for Action 2005-2015
“Building the Resilience of Nations and
Communities to Disasters**
 - **Priorities for Action**
 1. **Ensure that disaster risk reduction is a national and local priority with strong institutional basis for implementation**
 2. **Identify, assess and monitor disaster risks and enhance early warning**
 3. **Use knowledge, innovation and education to build a culture of safety and resilience at all levels**
 4. **Reduce underlying risk factors**
 5. **Strengthen disaster preparedness for effective response at all levels.**



NDCC Paradigm Shift

EMERGENCY MANAGEMENT



DISASTER RISK MANAGEMENT

Reactive



Proactive

*Disaster Preparedness
and Response*

*Disaster Risk Reduction
Disaster Risk Management (DRM)*

*Emergency Specialists
Hazard Scientists*

*Risks Specialists
Economic Managers
Development Planners*



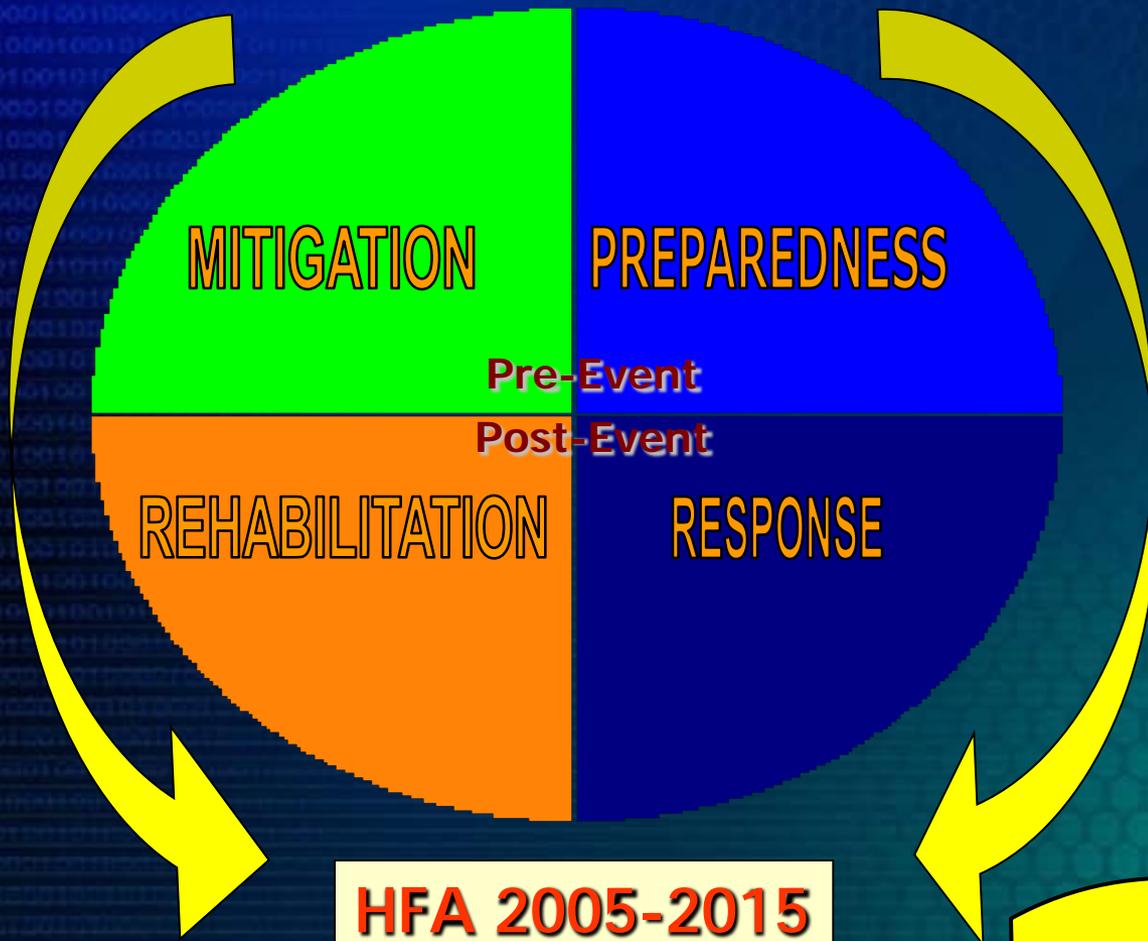
**“ DRR, poverty alleviation and sustainable development are
inextricably linked”**
National Disaster Coordinating Council

***NDCC
COMPREHENSIVE
DISASTER
MANAGEMENT
FRAMEWORK***



National Disaster Coordinating Council

DISASTER RISK MANAGEMENT



HFA 2005-2015

UNMDG

**Defense for
Development
Agenda**

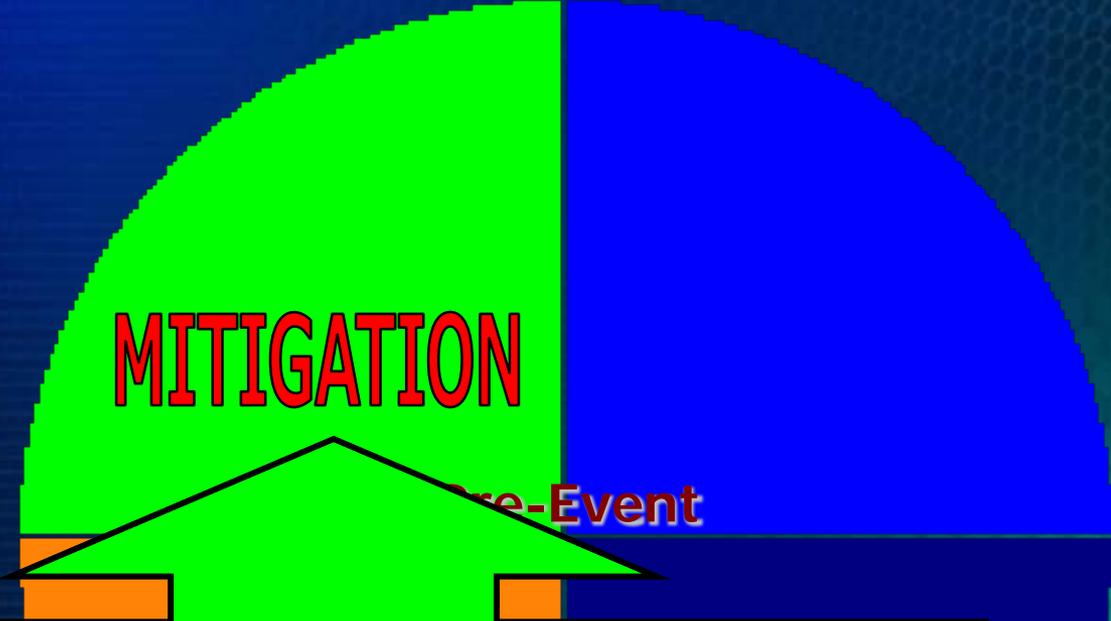
MTPDP

**...building the resilience of
communities to disasters...**



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DISASTER RISK MANAGEMENT



MITIGATION

Pre-Event

- **READY Project (UNDP/AusAID/ADB) – 27 Provinces**
- **Prioritization of Mapping (GOP) – 16 Provinces**
- **Mainstreaming Disaster Risk Reduction**
 - Infrastructure : DPWH/ADPC
 - Education Sector : DepEd/ADPC/ECHO
 - Land-use & Physical Planning : NEDA/UNDP/ECHO
 - Local Governance : DILG/GTZ/ECHO
- **Climate Change Adaptation**
 - DENR/FASPO/WB (GEF)
 - NEDA/DENR/UNDP/MDG-F
- **Flood Mitigation Master Plan – DENR/DPWH**

DISASTER RISK MANAGEMENT



- National Disaster and Calamities Plan
- NDCC Four- Point Plan of Action
- Keeping RP Bird-Flu Free: NAIPTF / AIPI Network
- Contingency Planning: LGUs/UNHCR
- National WASAR Training – LGUs
- PEER Program (CSSR, MFR, HOPE) – NSET/USAID
- CBRN Response Capacity Building – Canada/USA
- PDRSEA Phase 4 Project– ADPC/UNESCAP/ECHO
- Learning from Good Practices on DRM OXFAM/APSEMO/ECHO
- Strategic Nat'l Action Plan on DRR –UNDP/ISDR/ECHO
- NAPC-VDC Sector Program on DRRM



National

DISASTER RISK MANAGEMENT

- **Mobilize Resources**
 - Local Government Units
 - National Government Agencies (UN Cluster Approach)
 - NGOs/Private Sector/ Civil Society)
 - International (NGOs, Aid Agencies, UN)
- **PMO 36, IHAN, ASEAN ADMER (SASOP)**
- **UN OCHA (UNDAC, Relief Web, CALAMIDAT.ph)**

Post-Event

RESPONSE



DISASTER RISK MANAGEMENT

- Build disaster resilient infrastructure and communities
- Rebuild houses and restore damaged infrastructure
- Address the immediate need for alternative livelihood
- Strengthen disaster risk reduction measures
- Strengthen institutional capacity
- Provide for business continuity

“BUILD BACK BETTER”

Post-Event

REHABILITATION



Passage and Implementation of of RA 10121 known as:

- “An Act Strengthening the Philippine Disaster Risk Reduction (DRR) and Management System Providing for the National Disaster Risk Reduction and Management Framework and Institutionalizing the National DRR and Management Plan, Appropriating Funds Therefor and for Other Purposes” or “Philippine DRR and Management Act of 2010” – passed into Law on May 27, 2010



Major Changes

- **NDCC to NDRRMC, LDCC to LDRRMC, BDCC to BDRRM Committee of Brgy. Devt. Council**
- **Increase of agency- representation/membership from 19 to 38**
- **Establishment of LDRRMO with DRRMOC at all levels (Regional-Provincial/Municipalities/Cities)**
- **Establishment of Training Institutes (Nat'l. to Regional)**
- **OCD to be fully regionalized**
- **OCD Administrator from Director IV to the rank of Department Undersecretary**
- **Funding for OCD- PhP 1B as to the effectivity of the Act**
- **Calamity Fund (CF) is known as National Disaster Risk Reduction and Management Fund (NDRRM Fund)**
- **Local Calamity Fund (LCF) is known as Local Disaster Risk Reduction and Management Fund (LDRRMF)**



NDCC vs NDRRMC

Secretary, National Defense - Chairman

- Secretary, Interior & Local Gov't- Member
- Secretary, Public Works- Member
- Secretary, Transportation & Communication - Member
- Secretary, Social Welfare & Development - Member
- Secretary, Agriculture - Member
- Secretary, Education - Member
- Secretary, Finance - Member
- Secretary, Labor & Employment - Member
- Secretary, Trade & Industry - Member
- Secretary, Health - Member
- Secretary, Science & Technology - Member
- Secretary, Budget - Member
- Secretary, Justice - Member
- Secretary, Natural Resources – Member
- Secretary, Foreign Affairs - Member
- Director, Phil. Information Agency - Member
- Sec-Gen, Phil National Red Cross - Member
- Chief of Staff, AFP - Member

Administrator, Office of Civil Defense – Member & Executive Officer



National Disaster Coordinating Council

Chairperson: Secretary, National Defense

Vice chairpersons:

- Disaster Preparedness-Secretary, DILG
- Disaster Response–Secretary, DSWD
- Disaster Prevention & Mitigation-Secretary, DOST
- Disaster Rehabilitation & Recovery-DG, NEDA

Members:

- Secretary, DOH
- Secretary, DENR
- Secretary, DA
- Secretary, DepEd
- Secretary, DOE
- Secretary, DOF
- Secretary, DTI
- Secretary, DOTC
- Secretary, DBM
- Secretary, DPWH
- Secretary, DFA
- Secretary, DOJ
- Secretary, DOLE
- Secretary, DOT
- The Exec. Secretary, OP
- Secretary, OPAPP
- Chairman, CHED
- Chief of Staff, AFP
- Chief, PNP
- The Press Secretary
- Sec-Gen., Phil. Red Cross (PRC)
- Commissioner, NAPC
- Chairperson, NCRFW
- Chairperson, HUDCC
- Exec. Director, CC Office of the CCC
- President, GSIS
- President, PhilHealth
- President, ULAP
- President, LPP
- President, LCP
- President, LMP
- President, LMB
- Four (4) reps from the CSOs
- One (1) rep from the Private Sector

Administrator, Office of Civil Defense – Member & Executive Director

National Calamity Fund (NCF) and Local Calamity Fund (LCF)

- Under GAA, both Funds are being used to support disaster risk management and risk reduction activities;
- NCF is being used for DRR for mitigation, prevention and preparedness activities. It is also utilized for relief, recovery, reconstruction and other work or services in connection with natural or human-induced calamities which may occur during the budget year or those that occurred in the past 2 years from the budget year. For 2010, allocated CF is Php 2B (30% is allocated as QRF);
- LCF is the local government units allocated 5% fund from their annual revenue. The LCF is primarily used also for DRM-related activities specifically for post-disaster activities.



EO 888*: Adopting the Strategic National Action Plan (SNAP) on DRR 2009-2019 & Institutionalizing DRR

No.	Program/Project	Agency of Primary Responsibility
1	Governance and Peace/Disaster Risk Management (DRM) Act	OCD
2	Multi-stakeholder Dialogues on Disaster Risk Reduction (DRR)	OCD
3	Institutionalization of Disaster Management Office (DMO)	DILG
4	Enhancing Capacity Development for Local Disaster Coordinating Councils (LDCCs)	DILG
5	Mainstreaming DRR into the Peace Process	DND-AFP and OPPAP
6	Mainstreaming DRR in Various Government Plans and Programs	NEDA
7	Public-Private Partnership (PPP)	OCD
8	Resource Mobilization	DBM
9	Information and Database Generation	DENR-NAMRIA



Strategic National Action Plan (SNAP)

No.	Program/Project	Agency of Primary Responsibility
10	Knowledge Management	DOST
11	Supporting DRR: Mainstreaming through Sectoral Approach	OCD
12	Preparedness for Effective Disaster Response	OCD
13	Information, Education and Communication (IEC) Campaign	PIA
14	Institutional and Technical Capacity Building	OCD
15	Education and Research	DepEd, CHED, DOST
16	Forecasting and Early Warning	DOST
17	Risk Evaluation	DILG
18	Development of Tools for Assessment and Monitoring of DRR Measures	NEDA



Challenges

- Disasters remain a major challenge to achieve a disaster-resilient and safer community by 2015
- Natural hazards abound: typhoon, flood, landslide, drought, volcanic eruption earthquake, tsunami, etc.
- Climate change remains a potential risk to the country
- Poverty, a vulnerability condition, prevails
- Fast growing population, increasing population densities, urbanization, environmental degradation and pollution increase disaster risks



Tasks at Hand

- **Drafting of the IRR of RA 10121 (ongoing)**
- **Implementation of the Strategic National Action Plan (SNAP) in view of the approval of Executive Order 888**
- **Observance of National Disaster Consciousness Month (July) highlighted by the “Gawad KALASAG”**
- **Preparations for the onset of the rainy season**
- **Continuing implementation of current programs and projects**



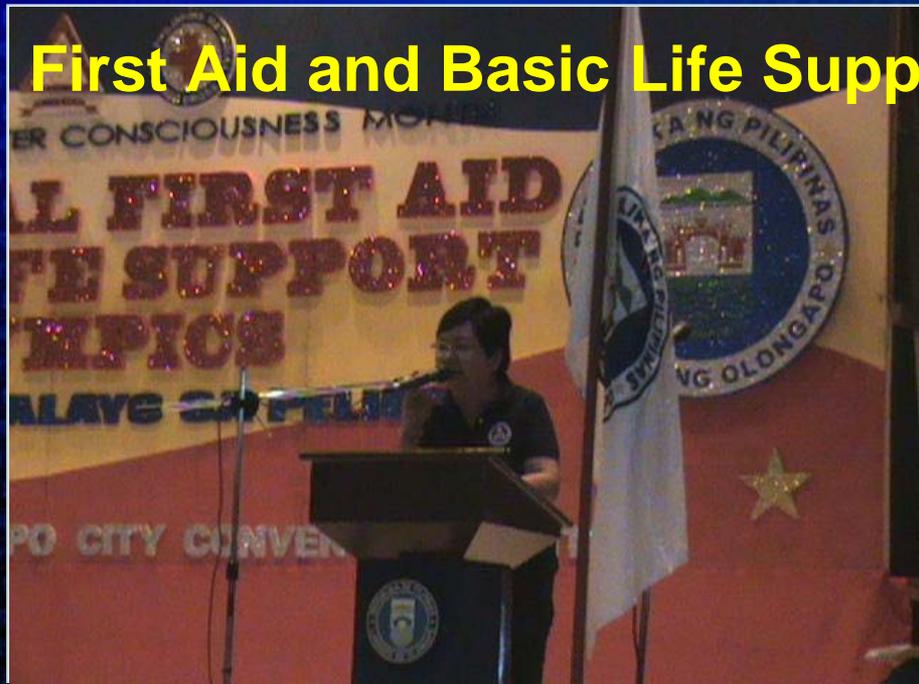
Conduct of Training & Seminars



National Disaster Consciousness Month July 1, 2010 – kick-off Ceremony



First Aid and Basic Life Support Olympics



National Disaster Consciousness Month First Aid and Basic Life Support Olympics



National Disaster Consciousness Month First Aid and Basic Life Support Olympics



Earthquake Drill





Organizational Performance Indicator Framework

Societal Goal

NATIONAL SECURITY TO UPHOLD SOVEREIGNTY AND TERRITORIAL INTEGRITY, SUPPORT SOCIO-ECONOMIC DEVELOPMENT AND POLITICAL STABILITY

Sectoral Goal

PEACEFUL, SECURE AND STABLE INTERNAL AND EXTERNAL ENVIRONMENT

Organizational Outcome

Partnership in the Asia-Pacific Region

Lives Protected and Property Preserved in times of war and other national emergencies

Disaster Resilient Communities and Socio-Economic Development

Major Final Output

Disaster Risk Reduction Management

Programs/
Activities/
Projects

Risk Identification and Hazards Vulnerability Assessment

Civil Protection and Preparedness

Coordination of Disaster Response Operations and Rehabilitation Initiatives



National Disaster Coordinating Council

Maraming Salamat

Thank you



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