

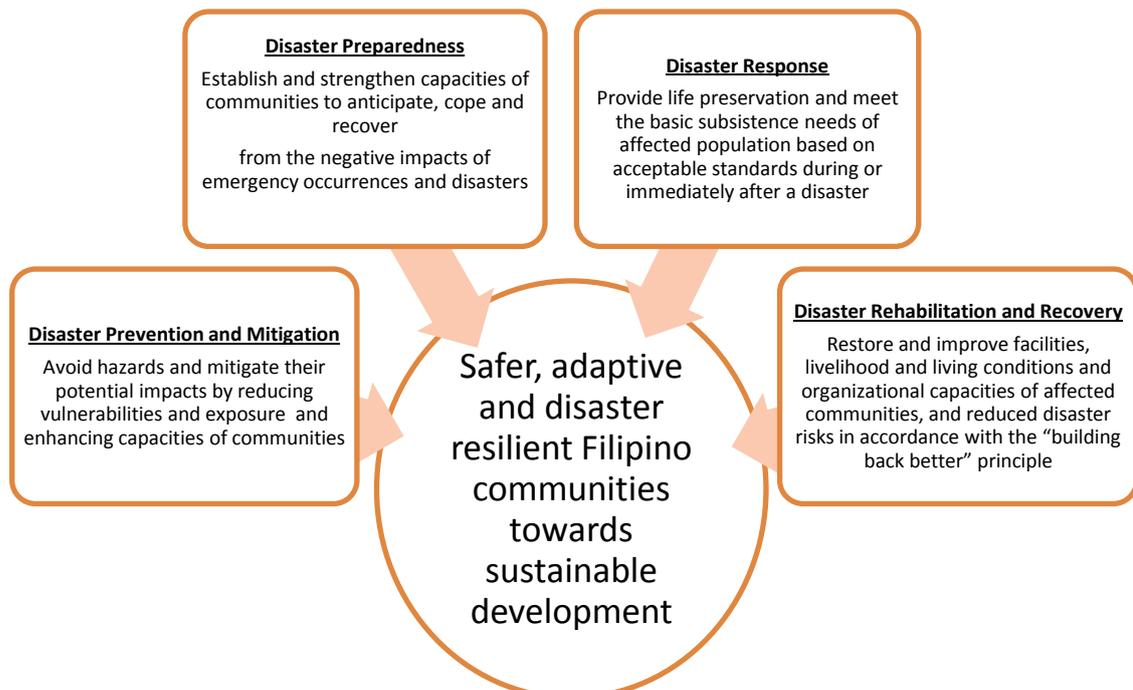
National Disaster Risk Reduction and  
Management Plan (NDRRMP)  
2011-2028

## EXECUTIVE SUMMARY

The National Disaster Risk Reduction and Management Plan (NDRRMP) fulfills the requirement of RA No. 10121 of 2010, which provides the legal basis for policies, plans and programs to deal with disasters. The NDRRMP covers four thematic areas, namely, (1) Disaster Prevention and Mitigation; (2) Disaster Preparedness; (3) Disaster Response; and (4) Disaster Rehabilitation and Recovery, which correspond to the structure of the National Disaster Risk Reduction and Management Council (NDRRMC). By law, the Office of Civil Defense formulates and implements the NDRRMP and ensures that the physical framework, social, economic and environmental plans of communities, cities, municipalities and provinces are consistent with such plan.

The NDRRMP is consistent with the National Disaster Risk Reduction and Management Framework (NDRRMF), which serves as “the principal guide to disaster risk reduction and management (DRRM) efforts to the country...” The Framework envisions a country of **“safer, adaptive and disaster-resilient Filipino communities toward sustainable development.”** It conveys a paradigm shift from reactive to proactive DRRM wherein men and women have increased their awareness and understanding of DRRM, with the end in view of increasing people’s resilience and decreasing their vulnerabilities.

**National Disaster Risk Reduction and Management Plan 2011-2028.** The NDRRMP sets down the expected outcomes, outputs, key activities, indicators, lead agencies, implementing partners and timelines under each of the four distinct yet mutually reinforcing thematic areas. The goals of each thematic area lead to the attainment of the country’s overall DRRM vision, as graphically shown below.



The NDRRMP goals are to be achieved by 2028 through 14 objectives, 24 outcomes, 56 outputs, and 93 activities. The 24 outcomes, with their respective overall responsible agencies, are summarized below.

### Thematic Area 1: Disaster Prevention and Mitigation

Overall responsible agency: Department of Science and Technology (DOST)

Outcome	Lead agency(ies)
1. DRRM and CCA mainstreamed and integrated in national, sectoral, regional and local development policies, plans and budget	Office of Civil Defense (OCD)
2. DRRM and CCA-sensitive environmental management	Department of Environment and Natural Resources (DENR)
3. Increased resiliency of infrastructure systems	Department of Public Works and Highways (DPWH)
4. Enhanced and effective community-based scientific DRRM and CCA assessment, mapping, analysis and monitoring	OCD
5. Communities access to effective and applicable disaster risk financing and insurance	Department of Finance (DOF)
6. End-to-end monitoring (monitoring and response), forecasting and early warning systems are established and/or improved	Department of Science and Technology (DOST)

### Thematic Area 2: Disaster Preparedness

Overall responsible agency: Department of Interior and Local Government (DILG)

Outcome	Lead agency(ies)
7. Increased level of awareness and enhanced capacity of the community to the threats and impacts of all hazards	Philippine Information Agency (PIA)
8. Communities are equipped with necessary skills and capability to cope with the impacts of disasters	Department of Interior and Local Government (to coordinate) and OCD (to implement)
9. Increased DRRM and CCA capacity of Local DRRM Councils, Offices and Operation Centers at all levels	DILG
10. Developed and implemented comprehensive national and local preparedness and response policies, plans, and systems	DILG and OCD
11. Strengthened partnership and coordination among all key players and stakeholders	DILG

### Thematic Area 3: Disaster Response

Overall responsible agency: Department of Social Welfare and Development (DSWD)

Outcome	Lead agency(ies)
12. Well-established disaster response operations	Department of Social Welfare and Development (DSWD)
13. Adequate and prompt assessment of needs and damages at all levels	Disaster Risk Reduction and Management Councils (DRRMCs), OCD and DSWD
14. Integrated and coordinated Search, Rescue and Retrieval (SRR) capacity	Department of National Defense (DND), DILG, Department of Health (DOH)
15. Safe and timely evacuation of affected communities	Local government units (LGUs)
16. Temporary shelter needs adequately addressed	DSWD
17. Basic social services provided to affected population (whether inside or outside evacuation centers)	DOH
18. Psychosocial needs of directly and indirectly affected population addressed	DOH
19. Coordinated, integrated system for early recovery implemented	DSWD

### Thematic Area 4: Disaster Rehabilitation and Recovery

Overall responsible agency: National Economic and Development Authority (NEDA)

Outcome	Lead agency(ies)
20. Damages, losses and needs assessed	OCD
21. Economic activities restored, and if possible strengthened or expanded	Agency to be determined based on the affected sectors
22. Houses rebuilt or repaired to be more resilient to hazard events; safer sites for housing	National Housing Authority (NHA)
23. Disaster and climate change-resilient infrastructure constructed/reconstructed	DPWH
24. A psychologically sound, safe and secure citizenry that is protected from the effects of disasters is able to restore to normal functioning after each disaster	DOH and DSWD

The NDRRMP is a road map on how DRRM shall contribute to gender-responsive and rights-based sustainable development. Highlights include:

- The need for institutionalizing DRRM policies, structures, coordination mechanisms and programs with continuing budget appropriation on DRR from national down to local levels. Thus, several activities will strengthen the capacity of the personnel of national government and the local government units (LGUs) and partner stakeholders, build the disaster resilience of communities and institutionalize arrangements and measures for reducing disaster risks, including climate risks.

- The importance of mainstreaming DRRM and CCA in the development processes such as policy formulation, socio-economic development planning, budgeting and governance, particularly in the area of environment, agriculture, water, energy, health, education, poverty reduction, land-use and urban planning and public infrastructure and housing, among others. This is achieved through activities such as development of common tools to analyze the various hazards and vulnerability factors which put communities and people in harms way.
- Competency and science-based capacity building activities alongside the nurturing of continuous learning through knowledge development and management of good DRRM practices on the ground.
- The inclusion of human-induced disasters that result in internally displaced persons, public anxiety, loss of lives, destruction of property and sometimes socio-political stability. Encompassing conflict resolution approaches, the plan seeks to mainstream DRRM into the peace process.

The NDRRMP is guided by good governance principles within the context of poverty alleviation and environmental protection. It is about partnerships towards effective delivery of services to the citizenry, i.e. working together through complementation of resources. Thus, harnessing and mobilizing the participation of civil society organizations (CSOs), the private sector and volunteers in the government's DRRM programs and projects is part and parcel of the plan. Efforts were made to align the NDRRMP with national plans such as the Philippine Development Plan, National Climate Change Action Plan, and National Security Policy such that DRRM activities are integrated with budget allocation by relevant government line agencies. Specific DRRM-related activities are undertaken using timelines that will help national leaders and local chief executives to ensure completion within their terms.

**Timelines.** In general, the set of activities are divided into three timelines: Short term, 2011 – 2013; Medium term, 2014 – 2016; and Long term, 2017 – 2028. In the medium-term, NDRRMP shall have contributed to meeting the commitments under the Millennium Development Goals and Hyogo Framework for Action. The activities identified under the short and medium terms coincide with and complement the targets made under the Philippine Development Plan 2011-2016. The long term activities and projects are expected to be completed at the same time as that of the National Climate Change Action Plan to reinforce the convergence of these two plans.

For Thematic Areas 3 and 4, operational timelines are indicated in the plan. The use of operational timelines is deemed useful at the local level during actual operations in response, rehabilitation and recovery. If the activities last beyond six years for rehabilitation and recovery, the duration is considered long term. In the area of Disaster Response, the maximum timeline is “beyond three months.”

**NDRRMP Priority Projects.** To fast track the implementation of the NDRRMP, priority projects and demonstration sites identified are identified. The purpose is to either replicate good DRRM practices or implement projects in areas which need them most. All priority projects are to be implemented within the immediate or short term period from 2011 to 2013. The priority projects of the NDRRMP are:

1. Development of the following Plans:
  - Joint workplan for DRRM and CCA
  - Local DRRM plans
  - National Disaster Response Plan (to include a system for Search, Rescue and Retrieval SRR; scenario-based preparedness and response plans)
  - Risk financing
2. Development of IEC and advocacy materials on RA 10121, DRRM and CCA
3. Development of guidelines on
  - Communications and information protocol before, during and after disasters
  - Creation of DRRM teams
  - Criteria/standards for local flood early warning systems
  - Evacuation
  - Infrastructure redesign and/or modifications
  - Manual of operations of disaster operations centers
4. Development of tools on
  - DRRM and CCA mainstreaming in the national and local-level planning
  - Damage and Needs Assessment (DANA) and Post-DANA
  - Psychosocial concerns
5. Establishment of
  - DRRM Training Institutes
  - Local flood early warning systems (through integrated and sustainable management river basins and water sheds – like the Cagayan River Basin (CRB) in Region 2
  - End-to-End Early Warning Systems in Provinces of Bulacan, Leyte, Albay, Municipalities of Kitcharao and Santiago, Agusan del Norte and Butuan City
6. Establishment of local DRRM Councils and Offices and their operations centers, as prescribed by RA 10121
7. Conduct of inventory of existing DRRM and CCA resources and services
8. Development and implementation of DRRM and CCA activities using 5% of government agency's allocation from the annual national budget or General Appropriations Act (GAA);
9. Hazard and risk mapping in the most high-risk areas in the country (e.g., community-based DRRM and CCA risk mapping in the municipalities of Kitcharao and Santiago in Agusan del Norte and Butuan City)
10. Institutional capability program on DRRM and CCA for decision makers, public sector employees, and key stakeholders
11. Mainstreaming DRRM and CCA (e.g., Esperanza Municipality in Agusan del Sur in CARAGA and in San Francisco Municipality in Camotes Island)
12. PDNA capacity building for national government agencies, regional line agencies, and local offices.
13. Review, amend and/or revise the following:
  - Building Code and integrate DRRM and CCA
  - Executive Order No. 72 s. 1993, which provides for the preparation and implementation of the CLUPs of local government units
  - Implementing Rules and Regulations of RA No. 10121
  - Various environmental policies (i.e., EO No. 26, etc) to integrate DRRM and CCA

**Implementation of the NDRRMP.** At the national level, implementation of the NDRRMP shall take place through the integration of DRRM into relevant national plans such as the Philippine Development Plan (PDP) as well through the development and implementation of respective action plans of government agencies for their respective activities as indicated in the NDRRMP.

As explicitly stated under Republic Act 10121, the NDRRMC has the overall responsibility of approving the NDRRMP and ensuring that it is consistent with the NDRRMF. It also has the main responsibility of coordination, integration, supervision and monitoring the development and enforcement by agencies and organizations of the various laws, plans, programs, guidelines, codes, or technical standards required by this Act; managing and mobilizing resources for DRRM, including the National DRRM Fund; monitoring and providing the necessary guidelines and procedures on the Local DRRM Fund (LDRRMF) releases as well as the utilization, accounting, and auditing thereof. Within the NDRRMC, four committees will be established to deal with the four thematic areas set forth in the NDRRMP and the NDRRMF. Following RA 10121, the overall lead or focal agency for each of the four priority areas are the vice-chairpersons of the NDRRMC, namely:

- Vice-Chairperson for Disaster Prevention and Mitigation: Department of Science and Technology (DOST)
- Vice-Chairperson for Disaster Preparedness: Department of Interior and Local Government (DILG)
- Vice-Chairperson for Disaster Response: Department of Social Welfare and Development (DSWD)
- Vice-Chairperson for Rehabilitation and Recovery: National Economic and Development Authority (NEDA)

In addition, the Office of Civil Defense has the main responsibility of ensuring the implementation and monitoring of the NDRRMP. Specifically, it is tasked to conduct periodic assessment and performance monitoring of member-agencies of the NDRRMC and the RDRRMCs as indicated in the NDRRMP. It is also responsible for ascertaining that the physical framework, social, economic and environmental plans of communities, cities, municipalities and provinces are consistent with the NDRRMP. OCD is also tasked to make sure that all DRR programs, projects and activities requiring regional and international support shall be in accordance with duly established national policies and aligned with international agreements. At the regional and local levels, the OCD needs to review and evaluate the Local DRRM Plans (LDRRMPs) to facilitate the integration of DRR measures into the local Comprehensive Development Plan (CDP) and the Comprehensive Land Use Plan (CLUP).

Agency leads and implementing partner organizations and/or groups are identified in the NDRRMP to ensure the effective implementation of the NDRRMP. Lead agencies and implementing partners shall work together to identify specific programs and projects and pin down specific budgets to effect better DRRM investments and synergy between government programs.

The NDRRMP also outlines the roles of the national government, the NDRRMC, OCD, the Regional Disaster Risk Reduction and Management Council (RDRRMC), the Local Disaster Risk Reduction and Management Offices (LDRRMOs), and the Provincial, City, Municipal Disaster Risk Reduction and Management Councils (P/C/MDRRMC or Local DRRMCs),

An important link in the national-local chain are the Regional Disaster Risk Reduction and Management Councils (RDRRMCs) and the Local DRRMCs. The RDRRMC shall take the overall lead in ensuring that DRRM-sensitive regional development plans contribute to and are aligned with the NDRRMP. Local DRRM Plans (LDRRMPs) which OCD is tasked to evaluate, shall ensure that DRR measures are incorporated into the Comprehensive Development Plan (CDP) and the Comprehensive Land Use Plan (CLUP) of the local government units. The LDRRMPs shall be developed by the Local DRRM Offices (LDRRMOs) at the provincial, city and municipal levels and the

Barangay Development Councils. These offices shall play a critical role in attaining community resilience against disasters.

**Resource Mobilization.** At the national and local levels, the following sources can be tapped to fund the various DRRM programs and projects:

1. General Appropriations Act (GAA) – through the existing budgets of the national line and government agencies
2. National Disaster Risk Reduction and Management Fund (NDRRMF)
3. Local Disaster Risk Reduction and Management Fund (LDRRMF)
4. Priority Development Assistance Fund (PDAF)
5. Donor Funds
6. Adaptation and Risk Financing
7. Disaster Management Assistance Fund (DMAF).

Aside from the fund sources, the NDRRMF will also tap into the non-monetary resources available which can help attain the targets identified in this plan, namely:

1. Community-based good practices for replication and scaling up
2. Indigenous practices on DRRM
3. Public-Private-Partnerships
4. DRR and CCA networks of key stakeholders.

**Monitoring and Evaluation.** Results-based programming shall be used in ensuring that implementation is on time and learning from experiences is built into the DRRM system. The OCD shall develop a standard monitoring and evaluation template together with the Technical Management Group. The stepwise monitoring and evaluation process includes the LGU, regional and national levels. To monitor and evaluate, the indicators will be used against targets and activities identified in each of the four thematic areas of the NDRRMF with the aid of the identified means of verification. Annual reporting is done by the NDRRMF through the OCD to the Office of the President, Senate and House of Representatives, within the quarter of the succeeding year. The HFA Monitor online tool will also be used by the NDRRMF as a working format to undertake national multi-stakeholder consultation processes as progress is reviewed and challenges are systematically identified.

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## Acronyms and Abbreviations

AADMER	ASEAN Agreement on Disaster Management and Emergency Response
AFP	Armed Forces of the Philippines
AFPRESCOM	Armed Forces of the Philippines Reserve Command
ASEAN	Association of Southeast Asian Nations
ASEP	Association of Structural Engineers of the Philippines
ATO	Air Transportation Office
BFP	Bureau of Fire Protection
BRP	
BSP	Bangko Sentral ng Pilipinas
CCA	Climate Change Adaptation
CCC	Climate Change Commission
CDP	Comprehensive Development Plan
CDRRMC	City Disaster Risk Reduction and Management Council
CHED	Commission on Higher Education
CLUP	Comprehensive Land Use Plan
CSC	Civil Service Commission
CSO	Civil society organization
DA	Department of Agriculture
DANA	Damage and needs assessment
DAR	Department of Agrarian Reform
DENR	Department of Environment and Natural Resources
DepEd	Department of Education
DILG	Department of Interior and Local Government
DMAF	Disaster Management Assistance Fund
DOE	Department of Energy
DOF	Department of Finance
DOH	Department of Health
DOJ	Department of Justice
DOLE	Department of Labor and Employment
DOST	Department of Science and Technology
DOTC	Department of Transportation and Communications
DPWH	Department of Public Works and Highways
DRRM	Disaster Risk Reduction and Management
DRRMC	Disaster Risk Reduction and Management Council
DSWD	Department of Social Welfare and Development
DTI	Department of Trade and Industry
EC	Evacuation center
ENSO	El Nino Southern Oscillation
EO	Executive Order
EWS	Early Warning System
FFI	

GAA	General Appropriations Act
GDP	Gross Domestic Product
HFA	Hyogo Framework for Action
HUDCC	Housing and Urban Development Coordinating Council
HLURB	Housing and Land Use Regulatory Board
ICS	Incident Command System
IDPs	Internally displaced persons
IEC	Information, education and communication
LDRRMF	Local Disaster Risk Reduction and Management Fund
LDRRMO	Local Disaster Risk Reduction and Management Office
LGA	Local Government Academy
LGU	Local Government Unit
LWUA	Local Water Utilities Administration
MC	Memorandum Circular
MDRRMC	Municipal Disaster Risk Reduction and Management Council
MGB	Mines and Geosciences Bureau
MINDA	Mindanao Development Authority
MMDA	Metropolitan Manila Development Authority
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
NAMRIA	National Mapping and Resource Information Authority
NBI	National Bureau of Investigation
NCCAP	National Climate Change Action Plan
NDRRMC	National Disaster Risk Reduction and Management Council
NDRRMF	National Disaster Risk Reduction and Management Fund
NEDA	National Economic and Development Authority
NFA	National Food Authority
NGO	Non-governmental organization
NHA	National Housing Authority
NSP	National Security Policy
NTC	National Telecommunications Commission
OCD	Office of Civil Defense
OP	Office of the President
OPAPP	Office of the Presidential Adviser on the Peace Process
PAGASA	Philippine Atmospheric, Geophysical and Astronomical Services Administration
PAR	Philippine Area of Responsibility
PCG	Philippine Coast Guard
PDNA	Post-disaster Needs Assessment
PDAF	Priority Development Assistance Fund
PDP	Philippine Development Plan
PDPFP	Provincial Development and Physical Framework Plan
PDRRMC	Provincial Disaster Risk Reduction and Management Council
PFI	Private finance initiative

PHIVOLCS	Philippine Institute on Volcanology and Seismology
PIA	Philippine Information Agency
PICE	Philippine Institute of Civil Engineers
PLUC	Provincial Land Use Committee
PNP	Philippine National Polices
PNRI	Philippine Nuclear Research Institute
POI	Program of instruction
PPP	Public-Private Partnership
PRC	Philippine Red Cross
RA	Republic Act
RDRRMC	Regional Disaster Risk Reduction and Management Council
SAR	Search and Rescue
SOP	Standard Operating Procedures
SRR	Search, Rescue and Retrieval
TESDA	Technical Education and Skills Development Authority
ULAP	Union of Local Authorities of the Philippines
UNISDR	United Nations International Strategy for Disaster Reduction

## **I. The Philippines' Risk Profile and State of DRRM**

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Throughout the recorded history of the Philippines, disasters in various parts of the country have been reported. Unmistakably, floods and storms have been the most frequently occurring hazards. This confirms the high level of exposure to hazards due to its geography. Its geology explains the prevalence of earthquake, tsunami and landslide. The frequency, intensity and variability of hydrometeorological hazards also have heightened the compelling need for the nation to adopt disaster risk reduction and management (DRRM) and climate change adaptation (CCA). Increases in levels of vulnerability especially in areas affected by internal disputes need attention in order to reducing losses to human lives, property, crops, information, natural resources and other assets in all parts of the country.

Tropical storms or typhoons accompanied by heavy rain and/or strong winds that may result in floods, landslides and storm surge are the most prevalent types of hydro-meteorological hazards in the country. (Please refer to Map 1: Annual Extreme Rainfall and Map 2: Thunderstorm Frequency) Between 1997 and 2007, eighty-four (84) tropical storms that entered the Philippine Area of Responsibility (PAR) have resulted in 13,155 dead, more than 51 million affected families, and economic losses to agriculture, infrastructure and private properties of P158.242billion. Some of the most devastating floods and landslides are triggered by these typhoons that happened also within this period. High economic costs have been incurred from a single occurrence of the periodic event, El Nino Southern Oscillation (ENSO) in just a single occurrence.

Man's activities in the upper watersheds caused forest denudation thus aggravating flood risks. The pace of deforestation since the 1930s accelerated in the 1950s and 1960s, before falling slightly in the 1980s. Even now, the effects of loose soil and reduced forest cover from past forestry activities are manifested in frequent landslides and floods. Recent rainfall events show that the annual monsoon season in the country has brought severe flooding in most areas.

The Philippines is situated along a highly seismic area lying along the Pacific Ring of Fire where two major tectonic plates (Philippine Sea and Eurasian) meet and is highly-prone to earthquakes and volcanic eruptions. This explains the occurrence of earthquakes and tsunamis and the existence of around 300 volcanoes of which 22 are active (Please refer to Map 3: Active Faults and Trenches, Map 4: Tsunami Prone Areas and Map 5: Liquefaction Susceptibility). It experiences an average of five earthquakes a day. While earthquake disasters occur less frequently than typhoons and flooding, the impact to affected built-up communities can be massive and devastating. Earthquake-induced disasters were few in numbers and in terms of casualties. (Please refer to Map 6: Earthquake-triggered landslide susceptibility.)

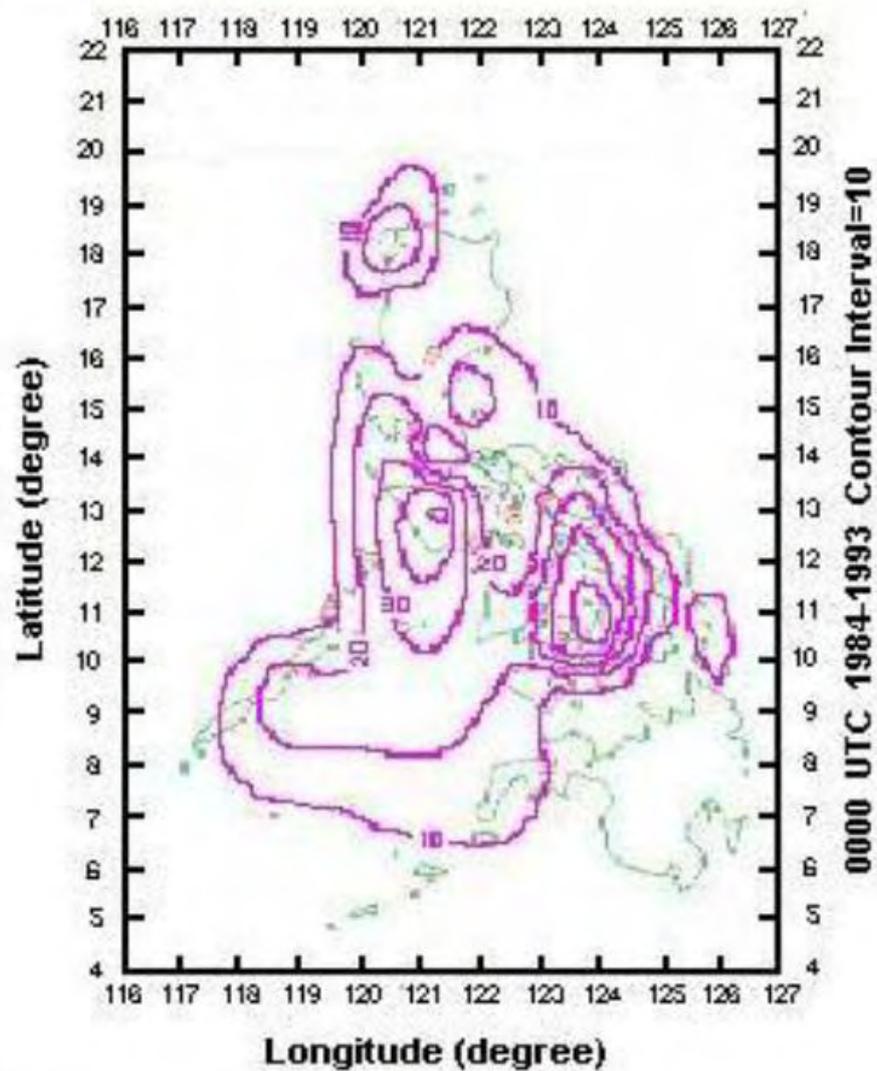
Within the ten-year period, five destructive earthquakes were recorded and human casualty included 15 deaths and 119 persons injured. Damage to the economy was estimated to reach P0.207 billion. The 1990 Luzon Earthquake, the Moro Gulf Tsunami and the collapse of the Ruby Tower were the most devastating earthquake disasters in the Philippines.

It is reported that based on NDRRMC data, , annual direct damages caused by disasters is roughly 0.5% of the GDP equivalent to PhP20 billion per year during the period 1990-2006. In 2009 however, damage and losses from tropical storms Ondoy and Pepeng were about 2.7% of the country's GDP.



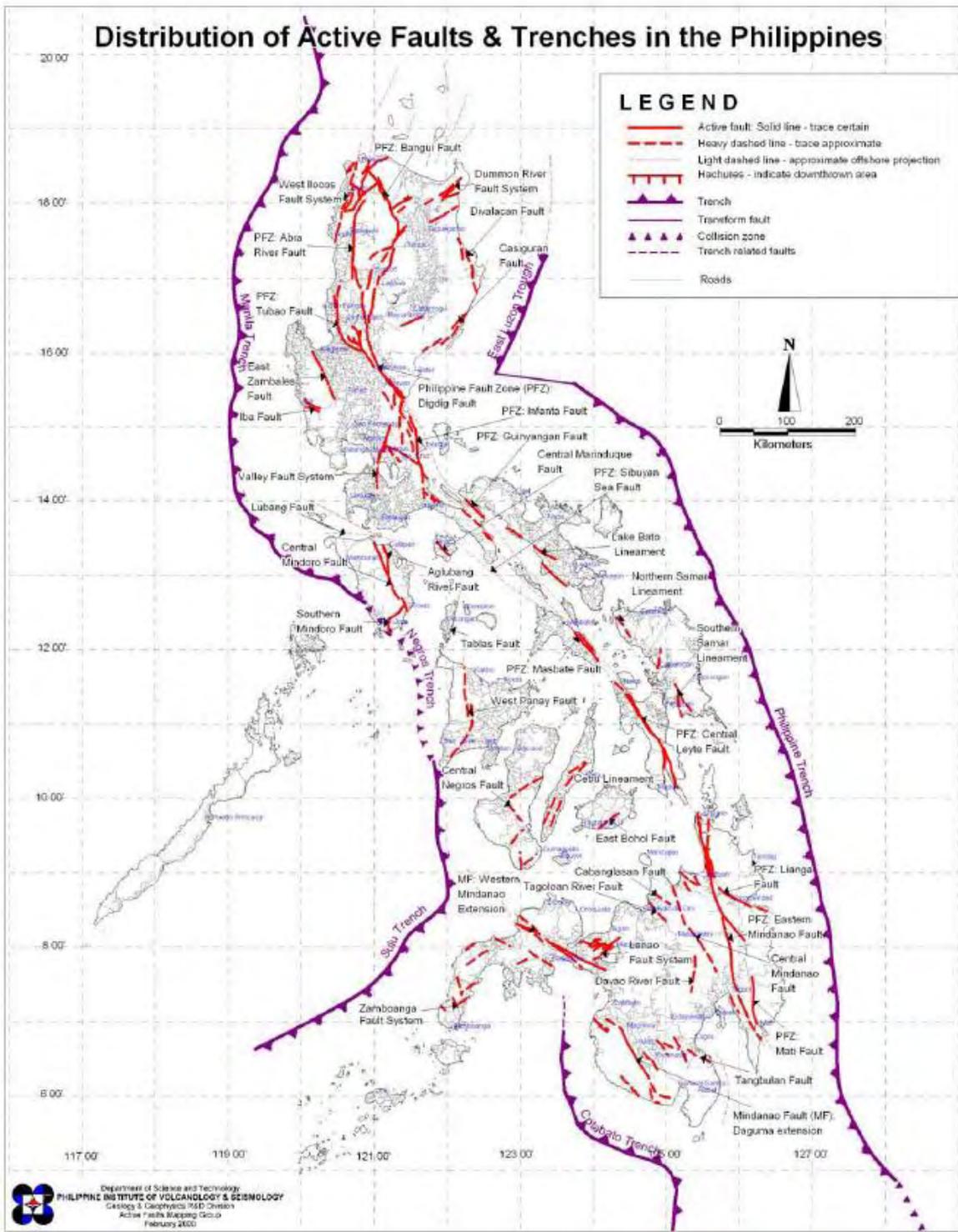
Map 1: Annual Extreme Rainfall

Source: PAGASA Website, <http://pagasa.dost.gov.ph>

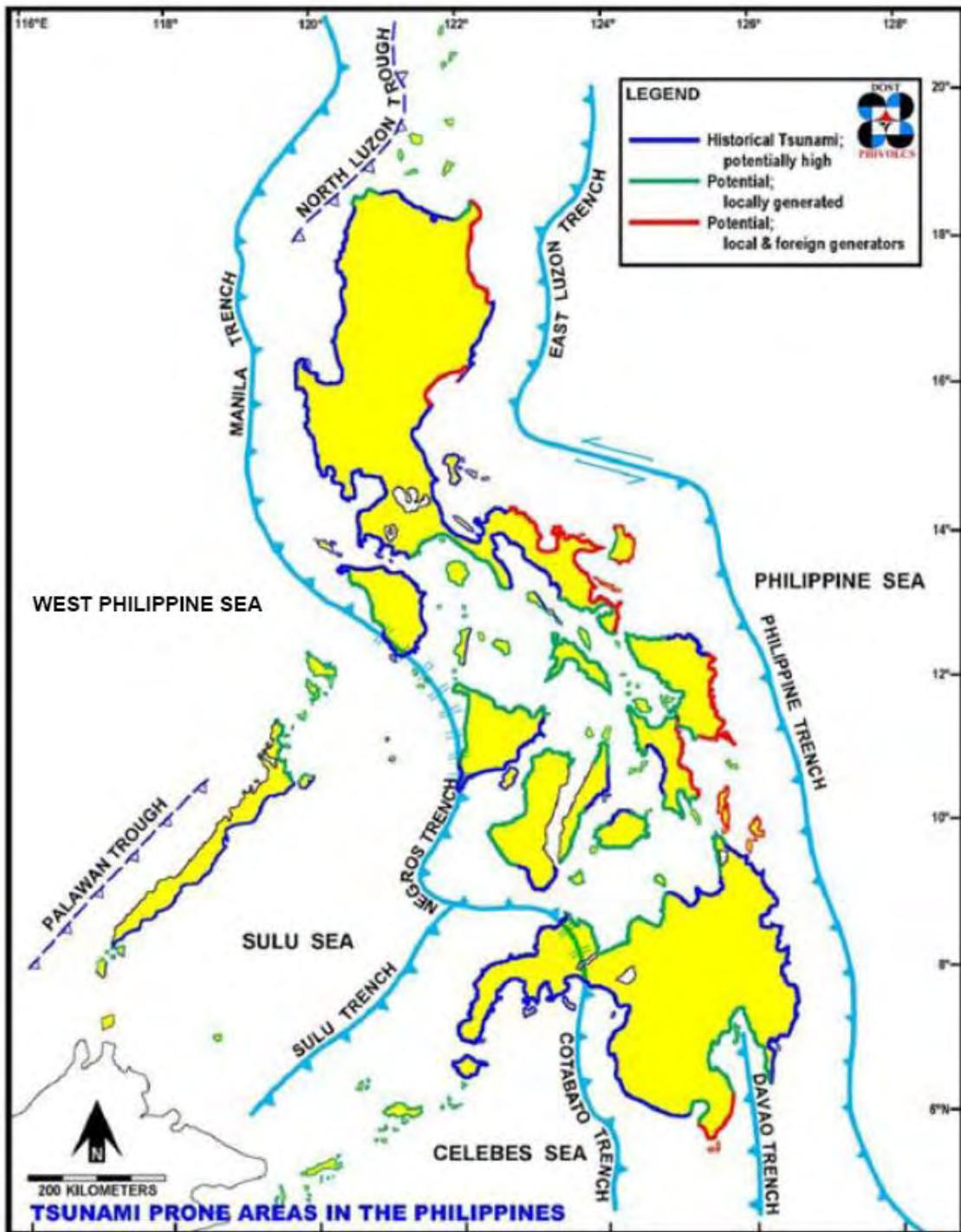


Map 2: Thunderstorm Frequency

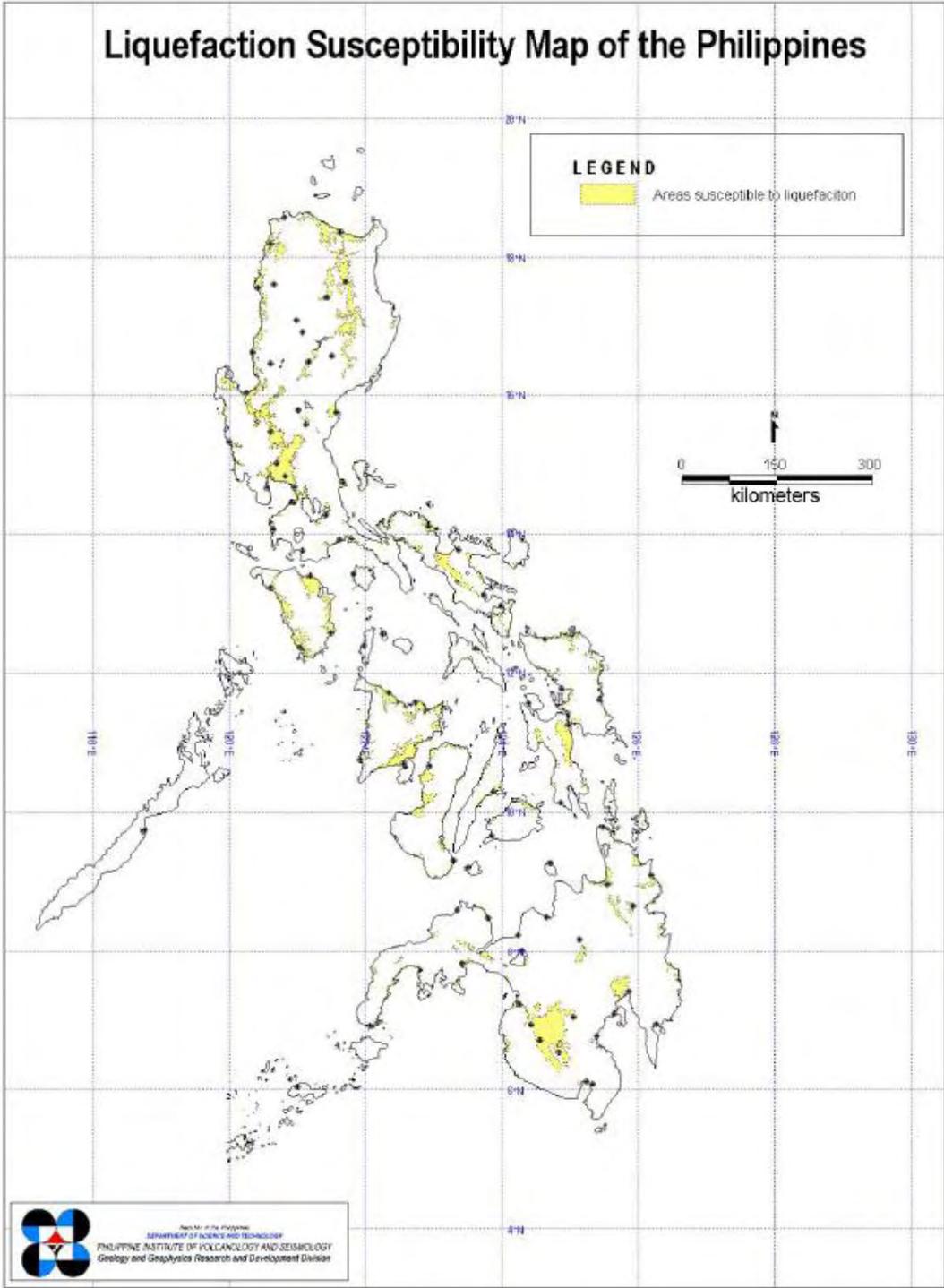
Source: PAGASA Website, <http://pagasa.dost.gov.ph>



Map 3: Active Faults and Trenches

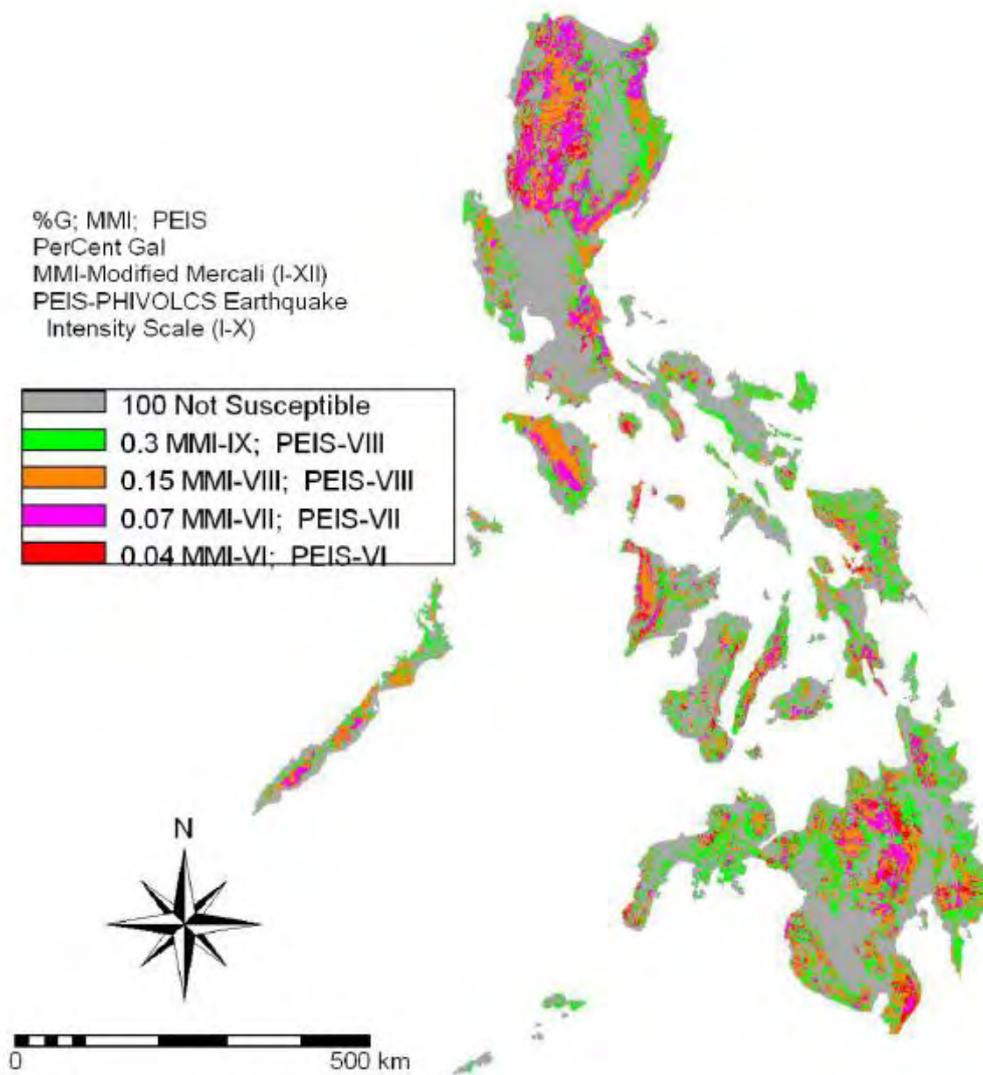


Map 4: Tsunami Prone Areas



Map 5: Liquefaction Susceptibility Map

## Earthquake-triggered Landslide Susceptibility Map Based on Critical Acceleration Values and Earthquake Intensities



Map 6: Earthquake-triggered Landslide Susceptibility Map

Hazards become disasters when vulnerable conditions exist among people, resources and other elements are exposed to risk, and capacity/measures to cope with consequences are insufficient. People who live in poverty and adverse socio-economic conditions are highly vulnerable to disasters. This explains why some parts of the country are more prone to specific hazards than others; some parts are exposed to more hazards than others. In an analysis of natural disaster hotspots by the Hazard Management Unit of the World Bank in 2005, the Philippines is among the countries where large percentages of population reside in disaster prone areas. In the 2011 World

Risk Report published by United Nations University and the Institute of Environment and Human Security, looking into the four components of risk (exposure, susceptibility, coping and adaptive capacities), the Philippines is the third most disaster risk country worldwide.

Aside from natural hazards, the country also experiences human-induced disasters brought about or influenced by political and socio-economic factors, among others. Violence continues to plague the country, with most of the fighting occurring in the South. Many are forced to evacuate during times of conflict. Intense fighting between government forces and the Moro Islamic Liberation Front during the first half of year 2009 resulted in the displacement of hundreds of thousands of civilians. Armed fighting in the South continue to threaten the security of civilian communities. Thousands of internally displaced persons (IDPs) remain in the custody of their relatives or temporarily harbored in safe places. The state of Mindanao hinges upon a lasting peace settlement mechanism, so that IDPs are protected from collateral damage of every armed conflict. Such disasters consequently cause public anxiety, lost of lives, destruction of properties and sometimes socio-political stability.

### **Progress in DRRM**

Because of the country's susceptibility to natural and human-induced disasters, efforts have been made for the past several years to build people's capacities and resilience to disasters, especially since the Philippine Government joined 167 other nations at the World Conference on Disaster Reduction held in Kobe, Japan in a global commitment to implement the Hyogo Framework for Action (HFA), the international framework for building the resilience of nations and communities to disasters and reducing vulnerabilities and risks to hazards. The Philippines also ratified the ASEAN Agreement on Disaster Management and Emergency Response (AADMER), which entered into force in December 2009. The AADMER supports and is aligned with the HFA. This regional policy framework has been translated into a concrete Work Programme for 2010 to 2015. The Philippines, through the Office of Civil Defense as the national focal point for AADMER, is identified as lead shepherd country for many AADMER programs and projects.

On June 21, 2010, through Executive Order No. 888, the Strategic National Action Plan (SNAP) on Disaster Risk Reduction (DRR) 2009-2019 was adopted. The SNAP is the country's DRR road map, indicating the vision and strategic objectives for the next 10 years.

Based on both the HFA progress reports and rapid review of the SNAP, the following are the country's achievements in DRRM classified according to the following four thematic areas:

#### **Disaster Prevention and Mitigation**

- Conduct of several risk assessments
- Development and establishment of several early warning systems
- Development of tools on risk assessment
- Increasing involvement of communities and LGUs in disaster risk management
- Mainstreaming of DRRM into the national planning systems
- National institutional and legal frameworks in DRR
- Presence of functional multi-sectoral platform

- Resource allocation

#### **Disaster Preparedness**

- Conduct of DRR researches
- Conduct of multi-stakeholders dialogues
- Conduct of various capacity building activities
- Development and regular review of contingency plans
- Development of IEC materials
- Development of information and database generation
- Development of school curricula to include DRR
- Existence of procedures on disaster communication

#### **Disaster Response**

- Established insitutional mechanisms for disaster response operations
- Improved skills in search, rescue and retrieval operations

#### **Disaster Rehabilitation and Recovery**

- Mainstreaming of DRR in social, economic, and human settlements development plans
- Conduct of post disaster assessments
- Integration of DRR into post-disaster recovery and rehabilitation processes
- Incorporating DRR elements in planning and management of human settlements.

Due to lack of resources, most of priority projects of the SNAP have not yet been fully realized. There was also no institutionalized mechanism to monitor the progress of SNAP's implementation, hence a formal review after its adoption could not be done. (Refer to Annex A for details on the progress on the implementation of the HFA and SNAP and Annex B for how the National Disaster Risk Reduction and Management Plan or NDRRMP and HFA are aligned to one another.)

### **Gaps and Lessons Learned**

Disaster risk reduction has gained a lot of attention and momentum in the country for the past several years. Numerous projects and activities have been undertaken by various organizations and stakeholders. However, the follow through that is needed so that gains are sustained or scaled up have been challenging. Threats remain to confront stakeholders in adopting good practices and learning from past experiences. Vulnerability and people's risk to disasters are still on the rise.

#### **Addressing the underlying causes of vulnerability**

At the heart of disaster risk reduction is addressing the underlying causes of people's vulnerabilities – social, economic, physical and environmental. More efforts are needed in identifying hazard-prone areas and factors which contribute to people's exposure to disasters, incorporating risk analysis in development plans, building people's capacities towards sustainable livelihood options, to name a few. Although DRR has been gaining attention in various sectors of the society, more resources and initiatives must be given to disaster risk assessments, mainstreaming DRR into development plans by incorporating DRRM and CCA activities and priority areas to address the underlying causes of people's vulnerabilities, and provision of different sustainable livelihood options for vulnerable sectors of society.

#### **Convergence of DRR and CCA**

Conceptual gaps and differences due to poor understanding of development implications existed among disaster management and humanitarian professionals/workers. Based on experiences from all over the world, the links between disaster risk reduction (DRR) and climate change adaptation (CCA) are now more and more appreciated by the two groups. The convergence is yet to be

articulated in more concrete terms particularly in increasing people's capacity to adapt to the changes and climate-related hazards reduce vulnerability

#### **Mainstreaming of DRR and CCA into development plans**

Because DRRM and CCA are not viewed within a sustainable development framework, the development of relevant programs have been reactive, i.e. done intermittently or only as a quick response to a destructive disaster. Also, programs and projects are not sustained because they are not mainstreamed into the development plans and more importantly, into national and local policies – both of which will secure sustained funding and political support.

#### **Information, capacities and skills on DRRM and CCA**

Even if a number of instructional, education and communication (IEC) materials have already been produced, most of them continue to highlight disaster preparedness and response without due attention to prevention and mitigation. Development of information and campaign materials which will help people understand the linkages between DRRM and CCA and how these two concepts contribute to risk reduction are of utmost importance. Likewise, having institutionalized mechanisms for knowledge development, sharing and management will contribute to the documentation, replication and scaling up of good practices on DRRM and CCA.

#### **Complementing DRRM components**

The DRRM components of disaster preparedness, disaster response, prevention and mitigation, and rehabilitation and recovery are not mutually exclusive. However, conventional institutional and operational set-ups deal with actual operations and planning as separate structures with their respective personnel and stakeholders. There is a need to strengthen partnerships and improve ways of working among key players and stakeholders. To build resilience, post-disaster relief and rehabilitation requires sensitivity to the development processes so that dependence is not encouraged and sustainability is assured.

#### **Building back better**

In the context of post-disaster reconstruction, the "building back better" principle is being promoted. However, current practices have not ensured that better and safer structures are built on safe locations during reconstruction and rehabilitation. Neither have engineering and land use practices been risk sensitive such that mitigation and prevention are addressed. Through the combination of increased knowledge and capacities, DRR mainstreaming into development plans and programs, and building institutional mechanisms through monitoring, evaluation and learning, "building back better" can be achieved. Over time, improvements in the way DRRM and CCA are addressed in infrastructure, utilities, buildings, and housing should be seen.

#### **Building capacities of people and institutions**

Gaps in applying resiliency principles to actual practice exist at different levels of government and among disaster management practitioners and various stakeholders. Roles and responsibilities need to be understood in the context of emergency situations and DRR. Thus, competency-based capacity building programs on DRRM and CCA should be developed and continually conducted in order to be effective and responsive to the needs of communities and institutions. These capacity building activities will help enhance their understanding and skills so that DRRM and CCA principles and concepts can be applied, and concrete actions can be taken towards building resilience.

### **Republic Act 10121 – The Philippine Disaster Risk Reduction and Management Act**

Republic Act 10121, passed in May 2010, acknowledges among other things, the need to *"adopt a disaster risk reduction and management approach that is holistic, comprehensive, integrated, and*

*proactive in lessening the socio-economic and environmental impacts of disasters including climate change, and promote the involvement and participation of all sectors and all stakeholders concerned, at all levels, especially the local community.”* This law replaced PD No. 1566 of 1978 (Strengthening the Philippine Disaster Control, Capability and Establishing the National Program of Community Disaster Prevention), which no longer reflect the social realities of the time and defaults on the developmental context of disasters and climate change.

RA 10121 provides a strong legal and institutional basis for DRRM in the country and gives a boost to the development of policies and plans, implementation of actions and measures pertaining to all aspects of disaster risk reduction and management, including good governance, risk assessment and early warning, knowledge building and awareness raising, reducing underlying risk factors, and preparedness for effective response and early recovery.

## **National Disaster Risk Reduction and Management Framework**

RA 10121 also calls for the need to develop a National Disaster Reduction and Management Framework (NDRRMF) which shall provide for a comprehensive, all hazards, multi-sectoral, inter-agency and community-based approach to DRRM. The NDRRMF shall serve as the principal guide to disaster risk reduction and management efforts to the country and shall be reviewed on a five-year interval, or as may be deemed necessary, in order to ensure relevance.

On June 16, 2011, the NDRRMF was approved by the executive committee of the NDRRMC. The NDRRMF envisions a country of *“safer, adaptive and disaster-resilient Filipino communities toward sustainable development.”* It conveys a paradigm shift from reactive to proactive DRRM with the end in view of increasing people’s resilience and decreasing their vulnerabilities. The aim is to empower communities and develop the “right” mindset and positive behavioral changes towards reducing and managing risks and lessening the effects of disasters. Identifiable with the Framework are terms like “building back better”; building upon lessons learned good practices, research and experiences; addressing the underlying causes of vulnerability; and increasing adaptive capacity or the ability to adjust to the given situation.

*(Note: The official and complete NDRRMF will be appended to the NDRRMP.)*

## **Related National Plans and Policies**

### **Philippine Development Plan 2011-2016**

Disasters are a serious development concern. The NDRRMP is cognizant of the development context of disasters and seeks to leverage on the Philippine Development Plan (PDP) 2011-2016, which is the national development roadmap of the country. The PDP seeks to achieve inclusive growth, create employment opportunities, and reduce poverty. Inclusive growth is translated in terms of higher economic growth of seven to eight percent per year for at least six years, generation of mass employment, and achieving or surpassing the Millennium Development Goals.

The PDP has identified DRRM and CCA as major cross-cutting concerns. To summarize, the PDP’s approaches to DRRM revolve around the following:

- Mainstream DRRM and CCA into existing policies (i.e. land-use, building code, General Appropriations Act or GAA), plans and programs (i.e. researches, school curricula)
- Reduce vulnerability through continued and sustained assessments especially in high-risk areas.

- Integrate DRRM and CCA in all educational levels and in specialized technical training and research programs.
- Raise public awareness of DRR and mitigating the impacts of natural disasters through the formulation and implementation of a communication plan for DRR and CCA.
- Increase resilience of communities through the development of climate change-sensitive technologies and systems and the provision of support services to the most vulnerable communities.
- Strengthen the capacity of communities to respond effectively to climate and other natural and human-induced hazards and disasters.
- Institutionalize DRRM and CCA in various sectors and increase local government and community participation in DRRM and CCA activities
- Push for the practice and use of Integrated Water Resources Management (IWRM) and prioritize the construction of flood management structures in highly vulnerable areas, while applying DRRM and CCA strategies in the planning and design of flood management structures
- Intensify development and utilization of renewable energy and environment-friendly alternative energy resources/technologies.

(Refer to Annex C for more details on the linkages between PDP and NDRRMP.)

### **National Climate Change Action Plan**

The National Climate Change Action Plan (NCCAP) outlines the agenda for climate change adaptation and mitigation for 2011 to 2038. Consistent with the National Framework Strategy on Climate Change, the NCCAP's ultimate goal is to *"build the adaptive capacities of women and men in their communities, increase the resilience of vulnerable sectors and natural ecosystems to climate change and optimize mitigation opportunities towards gender-responsive and rights-based sustainable development."* NCCAP identified seven strategic priorities:

1. Food security
2. Water efficiency
3. Ecosystem and environmental stability
4. Human security
5. Climate-smart industries and services
6. Sustainable energy
7. Knowledge and capacity development

Among these, Ecosystem and Environmental Stability and Human Security directly interphases with DRRM. DRRM and CCA approaches and programmes need to converge especially since climate and weather-related hazards can lead to large-scale disasters if processes and communities are not prepared and risks are not reduced. With climate change and the expected increase in the severity and frequency of extreme weather events, DRRM will not be sufficient. This is because both DRRM and CCA have the same bottomline, i.e. vulnerability reduction to disasters. In the NDRRMP, total convergence between DRRM and CCA will be pursued.

(Annex D provides details on the linkages between NCCAP and NDRRMP.)

### **National Security Policy**

The country continues to be confronted with internal security threats coming from a protracted communist insurgency and a secessionist rebellion in parts of Mindanao as well as the proliferation of private armed groups (PAGs). In addition to natural disasters, human-induced disasters like

terrorist activities, civil disturbances, hijacking and hostage taking incidents negate development efforts. These disasters and crises cause public anxiety, loss of lives, destruction of property, and socio-political instability.

Assuring the betterment of the general situation of safety and security of the population is the National Security Policy (NSP). The NSP provides the overarching framework for the promotion of people's welfare and for the posterity of the nation. The national security policy objectives define the strategy and programs in response to threats to opportunities that would have bearing on the peace and stability of the nation as well as on the well-being of Filipinos. It is anchored on four key elements, namely, governance, delivery of basic services, economic reconstruction, and sustainable development, and security sector reforms.

The NDRRMP will likewise leverage on the objectives of the NSP as the NSP seeks to:

- Ensure the effective delivery of basic services;
- Help protect the country's natural resources and reduce the risks of disasters; and
- Promote economic reconstruction and ensure sustainable development through increased investments in critical infrastructures.

## II. National Disaster Risk Reduction and Management Plan

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The Philippines' National Disaster Risk Reduction and Management Plan (NDRRMP) is a road map on how DRRM shall contribute to gender-responsive and rights-based sustainable development. It shall promote inclusive growth, build the adaptive capacities of communities, increase the resilience of vulnerable sectors, and optimize disaster mitigation opportunities with the end in view of promoting people's welfare and security.

The NDRRMP is thus guided by good governance principles within the context of poverty alleviation and environmental protection. It is about partnerships for effective delivery of services to the citizenry, i.e. working together through complementation of resources. Thus, engaging the participation of civil society organizations (CSOs), the private sector and volunteers in the government's DRRM programs is part and parcel of the plan.

The NDRRMP highlights the need for institutionalizing DRRM policies, structures, coordination mechanisms and programs with continuing budget appropriation on DRR from national down to local levels. Thus, the plan outlines the activities which shall strengthen the capacity of the personnel of national government and the local government units (LGUs) and partner stakeholders, build the disaster resilience of communities and institutionalize arrangements and measures for reducing disaster risks including projected climate risks, and enhancing disaster preparedness and response capabilities at all level.

It also highlights the importance of mainstreaming DRRM and CCA in the development processes such as policy formulation, socioeconomic development planning, budgeting and governance particularly in the area of environment, agriculture, water, energy, health, education, poverty reduction, land-use and urban planning and public infrastructure and housing among others. Mainstreaming also puts to forth the need to develop common tools to analyze the various hazards and vulnerability factors which put our communities and people into harms way.

Competency and science-based capacity building activities are likewise incorporated into the NDRRMP, alongside the nurturing of continuous learning through knowledge development and management of good DRRM practices on the ground.

Lastly, the NDRRMP includes human-induced disasters. Encompassing conflict resolution approaches, the NDRRMP seeks to mainstream DRRM into the peace process. Through efforts done in accordance with NDRRMP, loss of life and damage to property can be minimized and IDPs in conflict zones can return to their normal lives.

The formulation process of the NDRRMP is discussed in Annex E.

### NDRRMP Thematic Areas

The NDRRMP has four distinct yet mutually reinforcing thematic areas, namely:

#### (a) Disaster Prevention and Mitigation

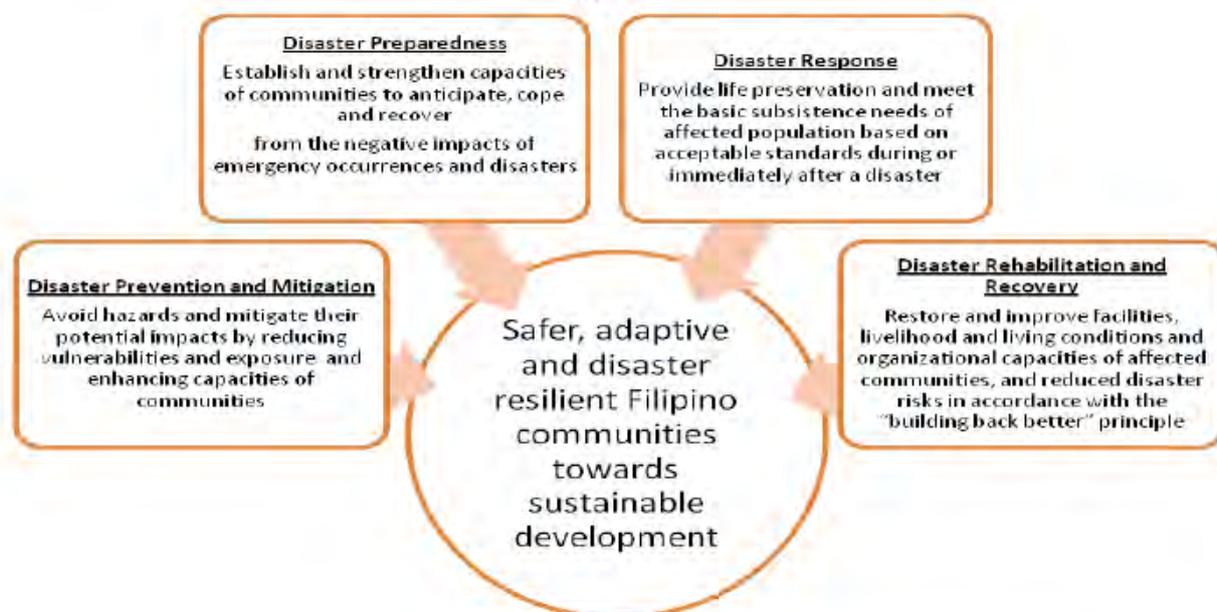
**Disaster Prevention** – the outright avoidance of adverse impacts of hazards and related disasters. It expresses the concept and intention to completely avoid potential adverse impacts through action taken in advance such as construction of dams or embankments that eliminate flood risks, land-use regulations that do not permit any settlement in high-risk zones and seismic engineering designs that ensure the survival and function of a critical building in any likely earthquake.

**Disaster Mitigation** – the lessening or limitation of the adverse impacts of hazards and related disasters. Mitigation measures encompass engineering techniques and hazard-resilient construction as well as improved environmental policies and public awareness.

- (b) **Disaster Preparedness** - the knowledge and capacities developed by governments, professional response and recovery organizations, communities and individuals to effectively anticipate, respond to, and recover from the impacts of likely, imminent or current hazard events or conditions. Preparedness action is carried out within the context of DRRM and aims to build the capacities needed to efficiently manage all types of emergencies and achieve orderly transitions from response to sustained recovery. Preparedness is based on a sound analysis of DRR and good linkages with early warning systems and includes such activities as contingency planning, stockpiling of equipment and supplies, the development of arrangements for coordination, evacuation and public information and associated training and field exercises. These must be supported by formal, institutional, legal and budgetary capacities.
- (c) **Disaster Response** - the provision of emergency services and public assistance during or immediately after a disaster in order to save lives, reduce negative health impacts, ensure public safety and meet the basic subsistence needs of the people affected. Disaster response is predominantly focused on immediate and short-term needs and is sometimes called “disaster relief.”
- (d) **Disaster Rehabilitation and Recovery**  
**Rehabilitation** – measures that ensure the ability of affected communities and/or areas to restore their normal level of functioning by rebuilding livelihood and damaged infrastructure and increasing the communities’ organizational capacity  
**Post Disaster Recovery** – the restoration and improvement where appropriate, of facilities, livelihood and living conditions of disaster-affected communities, including efforts to reduce disaster risk factors, in accordance with the principle of “build back better”

Each priority area has its own goal in support of attaining the country’s overall goal of “*Safer, adaptive and disaster resilient Filipino communities towards sustainable development*” .

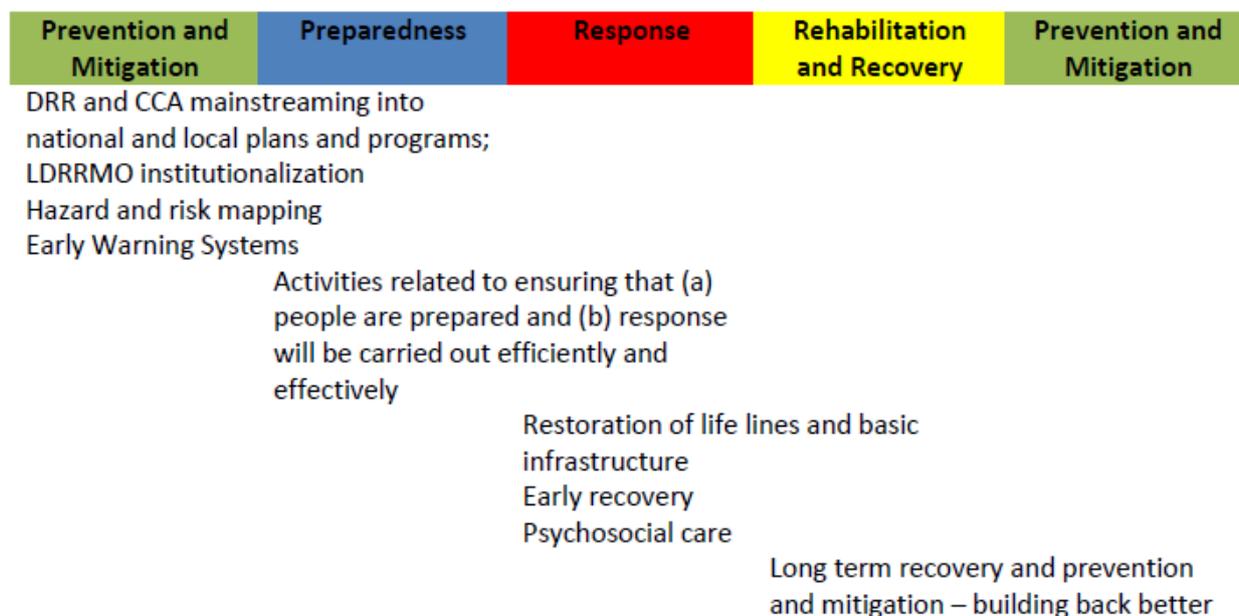
Figure 1.



These thematic areas overlap with no clear distinctions over time. Essentially, they:

- (a) **Mutually reinforce each other and are interoperable.** This means that activities under each of the priorities areas may directly or indirectly affect each other. Thus, it is assumed that the level of preparedness and intensity of response activities conducted are lessened because appropriate prevention and mitigation activities have been put in place.
- (b) **Do not, should not and cannot stand alone.** Activities of a priority area are executed with due attention to their linkages with activities in the remaining three priority areas.
- (c) **Have no clear starting nor ending points between each of the priority areas and overlaps are expected.** With gray spots existing between and among the priority areas, relevant activities shall be smoothly integrated with the pertinent activities within the sphere of working and budget arrangements among partners and lead agency. For purposes of this document, the overlapping activities are classified under specific priority area that best captures the essence seen through the lens of that specific DRRM area and corresponds to the given relevant parameters. Some of these overlaps are indicated below:
- (d) **Are centered on problem-needs and asset-strengths.** With the identification of the different factors which contribute to the vulnerability, the plan focuses on how the root of the problems can be addressed. Likewise, this document acknowledges existing and inherent assets and strengths of the Filipinos nation which will help attain the outcomes set herein.
- (e) **All point to one direction, i.e., reduce people’s vulnerabilities and increase their capacities.** The outcomes, outputs and activities could be focused on a specific priority area but the document should be taken in totality. The parts contribute to a cohesive whole, and thus all efforts through concrete activities when combined would lead to the realization and achievement of the country’s goal of safer, adaptive and more resilient Filipino communities.

Figure 2.



The NDRRMP has four long term goals targetted through the priority areas with corresponding objectives. Objectives are further defined through outcomes and outputs. Activities by which the outcomes and outputs are realized are identified.

Figure 3.



In general, the NDRRMP will be implemented according to the following timelines, with the first two having two years interval while the last one with five years:

Short term	2011 – 2013
Medium term	2014 – 2016
Long term	2017 – 2028

The short and medium term timeframe coincides with elections – national and local in 2013 and presidential, national and local in 2016. This will help national leaders and local chief executives to ensure that within their terms, DRR-mainstreamed national and local plans, specific DRRM-related activities will be completed.

Midway through the implementation or by 2015, the NDRRMP aims to fulfill its obligations and meet its targets in terms of the MDGs and HFA commitments. The activities identified under the short and medium terms also coincide with and complement the targets made under the Philippine Development Plan 2011-2016.

The long term activities and projects are expected to be completed at the same time as that of the National Climate Change Action Plan to reinforce the convergence of these two plans and support the nation’s efforts towards sustainable development.

## Thematic Area 1: Disaster Prevention and Mitigation

OVERALL RESPONSIBLE AGENCY: DOST

Disaster Prevention and Mitigation provides key strategic actions to activities revolving around hazards evaluation and mitigation, vulnerability analyses, identification of hazard-prone areas and mainstreaming DRRM into development plans. It underscores the need for sound and scientific analysis of the different underlying vulnerability factors, risks and exposure to hazards and disasters.

<p><b>Goal:</b>  <i>Avoid hazards and mitigate their potential impacts by reducing vulnerabilities and exposure and enhancing capacities of communities</i></p>
<p><b>Objectives:</b></p> <ol style="list-style-type: none"> <li>1. <i>Reduce vulnerability and exposure of communities to all hazards</i></li> <li>2. <i>Enhance capacities of communities to reduce their own risks and cope with the impacts of all hazards</i></li> </ol>

**Outcome 1. DRRM and CCA mainstreamed and integrated in national, sectoral, regional and local development policies, plans and budget**

- Indicators
- At the national level, 100% utilization of the 5% agency budget dedicated for DRRM and CCA activities
  - At the LGU level, 100% utilization of the 5% LDRRMF for the implementation of DRRM-responsive CLUP and CDP and related activities
  - DRRM and CCA mainstreamed in various plans (CDP and CLUP), laws, policies and/or ordinances enacted
  - Local DRRM Councils and Offices created and functional

Lead Agency

OCD

Implementing Partners

CCC, CSOs, DA, DBM, DENR, DILG, DOST, HLURB, NEDA

Outputs	Activities	Per cent completion		
		Timeline		
		2011-2013	2014-2016	2017-2028
1. Impacts of risks on development programs and projects are well recognized in government plans and budgets	1.1. Inclusion of a provision in the GAA guidelines on the 5% per agency's budget dedicated on DRRM and CCA activities	100%	100%	100%
2. Decisions supported by tools and technologies that facilitate the financial and economically sound mainstreaming of DRRM and CCA	2.1. Develop science-based mainstreaming tools for DRRM and CCA 2.2 Build capacities to effectively mainstream DRRM and CCA in development planning, investment programming, project development and evaluation	30%	60%	100%
3. Enhanced CSO participation in national and local DRRMCs	3.1. Develop selection criteria and accreditation for NGO participation in the DRRM Councils a. National Level b. Local Level	100% 30%	60%	100%
4. Measures to reduce vulnerability and to increase	4.1. Review and amend EO 72 Section 2 to include OCD, DOST and CCC as	100%		

Outputs	Activities	Per cent completion		
		Timeline		
		2011-2013	2014-2016	2017-2028
capacity to cope with disasters are integrated in plans, programs and projects	members of the Provincial Land Use Committee (PLUC) and the Board of Commissioners			
5. Measures identified to ensure that programs and projects do not contribute to further risks	5.1. Assist the PLUC in the review of CLUPs and CDPs of component cities (including database methods for disaster risk assessment and management) through regional ties a. PDPFPs b. CLUP and CDP	100% 30%	60%	100%
6. Decisions supported by tools and technologies that facilitate the financial and economically sound DRRM and CCA mainstreaming	6.1. Apply science and evidenced-based scenarios in mainstreaming DRRM and CCA into plans, policies, programs a. National and Regional Level b. Local Level	70% 30%	100% 60%	100%
7. Local DRRM Councils established	7.1. Convene Local DRRM Councils per RA 10121	100%		
8. Local DRRM Offices established (facility, manpower and budget)	8.1. Institutionalize DRRM offices with permanent plantilla positions for the DRRM officers and budget	30%	60%	100% (2019)

## Outcome 2

### DRRM and CCA-sensitive environmental management

#### Indicators

- At the national level, DRRM and CCA are integral objectives of environment-related policies and plans, including for land use, natural resource management
- NDRRMP and NCCAP alignment

#### Lead Agency

DENR

#### Implementing Partners

CCC, DA, CSOs, HLURB, OCD

Outputs	Activities	Per cent completion		
		Timeline		
		2011-2013	2014-2016	2017-2028
1. Environmental policies with DRRM and CCA lens and component	1.1. Review and integrate DRRM and CCA into various environmental policies, plans, programs and projects (i.e., EO 26 or The National Greening Program)	100%		
2. Joint work-plan of NDRRMC and CCC	2.1. Review DRRM and CCA laws and implementing rules and regulations; and national plans to develop a joint work-plan	30%	60%	100%

**Outcome 3****Increased disaster resilience of infrastructure systems**

## Indicators

- At the national and local levels, social and structural development policies and plans implemented to reduce the vulnerability of populations most at risk
- Number of critical infrastructures assessed
- Number of critical infrastructures retrofitted

## Lead Agency

DPWH

## Implementing Partners

AFP, BFP, CCC, CSOs, DepEd, DILG, DOH, LGU, PNP

eOutputs	Activities	Per cent completion		
		Timeline		
		2011-2013	2014-2016	2017-2028
1. Enhanced disaster mitigation and preparedness strategies for infrastructure systems	1.1. Advocacy for the implementation of the building code and use of green technology 1.2. Conduct inventory, vulnerability and risk assessments for critical facilities and infrastructures 1.3. Develop guidelines on the redesign, retro-fitting or operational modification of infrastructure 1.4. Integrate DRRM and CCA in the building code and local ordinances	All govt. buildings, schools and hospitals and other critical facilities esp. the DRRMC members	Nationwide	

**Outcome 4****Community based and scientific DRRM and CCA assessment, mapping, analysis and monitoring are conducted and/or improved**

## Indicators

- Hazards and risk assessments based on hazard data and vulnerability information are available and include risk assessments for key sectors
- Systems are in place to monitor and disseminate data on key hazards and vulnerabilities
- Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened
- Fully functioning knowledge management center to act as a repository of data, products and information from development partners
- Capacity enhancement for LGUs and communities on vulnerability assessment, analysis and monitoring activities

## Lead Agency

OCD

## Implementing Partners

CCC, CSOs, DepEd, DILG, DOST, DPWH, DSWD, LDRRMO, LGUs, MGB

Outputs	Activities	Per cent completion		
		Timeline		
		2011-2013	2014-2016	2017-2028
1. DRRM and CCA assessment and mapping tools	1.1. Conduct vulnerability assessment on a regular basis (every 1st quarter on election year – per existing DILG policy) and as the need arises			

Outputs	Activities	Per cent completion		
		Timeline		
		2011-2013	2014-2016	2017-2028
	a. National level b. Local level	50% 30%	50% 60%	100%
2. Readily usable and accessible knowledge product as DRRM and CCA planning tools;	2.1. Conduct hazards mapping and assessment at town/city to barangay levels a. National level b. Local level	50% 30%	50% 60%	100%
3. Peace-building, conflict resolution strategies with climate change affecting scarcity of resources which may lead to conflict;	3.1. Conduct of studies on disaster prevention interventions for armed conflict situation and climate change effects	50%	50%	
4. Collection of various DRRM and CCA products for sharing	4.1. Establishment of a knowledge management center within the OCD 4.2. Information dissemination through partnership with various media	100%		
5. Enhanced use of vulnerability and assessment tools by LGUs and communities	5.1. Conduct of capacity building research activities	30%	60%	100%

**Outcome 5**                      **Communities have access to effective and applicable disaster risk financing and insurance**

- Indicators
- Government assets are insured
  - Accessible and available risk financing options for communities

Lead Agency                      DOF

Implementing Partners      BSP, DBM, DTI, FFIs, GFIs, OCD, PFIs, Private /Public insurance institutions

Outputs	Activities	Per cent completion		
		Timeline		
		2011-2013	2014-2016	2017-2028
1. Availability and access to various disaster risk financing and insurance schemes for vulnerable groups and/or communities	1.1. Produce IECs to encourage hazard insurance coverage for government, private infrastructures, and other business establishments 1.2. Update the directory of available financing windows for LGUs 1.3. Promote insurance schemes among production sector, supply sector, local communities and responders	100%		
2. Mechanisms developed for increased risk financing modalities	2.1. Conduct research and develop new modalities for risk financing schemes 2.2. Develop an advocacy and risk communication plan to encourage communities to avail of risk financing options	30%	60%	100%

**Outcome 6**                    **End-to-End monitoring system (monitoring and response), forecasting and early warning are established and/or improved**

Indicators                    • Number of EWS established  
                                       • National and local policies on early warning systems

Lead Agency                    DOST

Implementing Partners    DENR, DILG, DOH, LGUs, OCD, PIA, PRC

Outputs	Activities	Per cent completion		
		Timeline		
		2011-2013	2014-2016	2017-2028
3. Enhanced monitoring, forecasting and hazard warning	3.1. Develop and institutionalize EWS information sharing and communication systems between LGUs, communities and national government 3.2. Criteria development and /or accreditation standard for CBEWS 3.3. Procure equipment and establish facilities for EWS	100%		
	3.4. Develop localized disaster EWS 3.5. Establish community-based EWS for various hazards 3.6. Train and tap LGUs for hazard monitoring	30%	60%	100%

## Thematic Area 2: Disaster Preparedness

OVERALL RESPONSIBLE AGENCY: **DILG**

Disaster Preparedness provides for key strategic actions that give importance to community awareness and understanding, contingency planning; conduct of local drills, and the development of a national disaster response plan. In preparing communities and governments for possible disasters, predetermined needs based on information available are crucial. Risk-related information coming from the Prevention and Mitigation aspect is necessary in order for preparedness activities to be responsive to the needs of the people and situation on the ground. Also, policies, budget and institutional mechanisms established under the Disaster Prevention and Mitigation aspect will be further enhanced through capacity building activities, development of coordination mechanisms, among others. Through these, coordination, complementation and interoperability of work in DRRM operations and essential services will be ensured.

It should be noted that the activities in this thematic area are not linear but cyclical and anticipate improvements over time. Behavioral change created by the Preparedness aspect is eventually measured by how well people respond to disasters. At the frontlines of disaster preparedness are local government units and communities. Overall, the bottom line is having more prepared citizenry and governments.

<b>Goal:</b> <i>Establish and strengthen capacities of communities to anticipate, cope and recover from the negative impacts of emergency occurrences and disasters</i>
<b>Objectives:</b> <ol style="list-style-type: none"> <li>1. <i>Increase the level of awareness of the community to the threats and impacts of all hazards, risks and vulnerabilities</i></li> <li>2. <i>Equip the community with the necessary skills to cope with the negative impacts of a disaster</i></li> <li>3. <i>Increase the capacity of institutions</i></li> <li>4. <i>Develop and implement comprehensive national and local disaster preparedness policies, plans and systems</i></li> <li>5. <i>Strengthen partnership among all key players and stakeholders</i></li> </ol>

**Outcome 7**                      **Increased level of awareness and enhanced capacity of the community to the threats and impacts of all hazards**

Indicators                     

- Number of IEC materials developed
- Number of IEC campaigns conducted
- Target population reached

Lead Agency                      PIA

Implementing Partners      AFP, CHED, CSOs, DepEd, DOH, MGB, NAMRIA, PAGASA, PHIVOLCS, PNP, PNRI, ULAP

Outputs	Activities	Per cent completion		
		Timeline		
		2011-2013	2014-2016	2017-2028
1. A comprehensive national and local DRRM IEC program developed and implemented	1.1. Develop DRRM and CCA IEC and advocacy plan and program			
	a. National level	100%		
	b. Local level	30%	60%	100%

**Outcome 8****Communities are equipped with necessary skills and capability to cope with the impacts of disasters**

## Indicators

- Number of communities trained on disaster preparedness and response
- Number of teams with specialized training trained for response
- Number of DRRM managers and key decision makers trained
- Number of DRRM training institutions established at various levels/areas
- Number of DRRM and CCA materials developed for formal education and training programs

## Lead Agency

DILG (to coordinate) and OCD (to implement)

## Implementing Partners

AFP, BFP, CSOs, DepEd, DOH, DSWD, LGA, LGUs with public safety officers, PCG, PNP, PNRI, PRC

Outputs	Activities	Per cent completion		
		Timeline		
		2011-2013	2014-2016	2017-2028
1. Increased understanding and application of risk reduction measures and better prepared communities	1.1 Formulation of standard programs of instruction (POIs), training modules 1.2. Conduct of trainings and simulation exercises on disaster preparedness and response a. National level b. Local level	100% 30%	60%	100%
2. DRRM is mainstreamed and taken into consideration in decision making	2.2. Customized capacity building activities for disaster risk managers and key decision makers a. National level b. Local level	100% 30%	60%	100%
3. Sustained DRRM education and research through permanent training institutions	3.1. Establishment DRRM Training Institutes to conduct education, training, research and publication programs	50%	50%	
4. Increased awareness of students through DRRM and Climate proofing of educational materials and equipment	4.1. Integrate DRRM and CCA school curricula, textbooks and teachers' guides and manuals 4.2. Conduct of DRRM and CCA education and training for the public and private sectors	30%	60%	100%

**Outcome 9****Increased DRRM and CCA capacity of Local DRRM Councils and Offices at all levels**

## Indicators

- Number of operational and self-reliant local DRRM councils
- Number of fully-functioning local DRRM offices

## Lead Agency

DILG

## Implementing Partners

AFP, BFP, CSOs, DEPED, DOH, DSWD, LGA, LGUs with public safety officers, PCG, PNP, PNRI, PRC

Outputs	Activities	Per cent completion		
		Timeline		
		2011-2013	2014-2016	2017-2028
1. Self-reliant and operational local DRRM councils	1.1. Accreditation of NGOs	100%		
2. Fully-functioning, adequately staffed and financially capable local DRRM Offices	2.1. Develop the local DRRM plan 2.2. Conduct risk assessments, contingency planning, knowledge management and training activities 2.3. Inventory of resources 2.4. Stockpiling and prepositioning of resources 2.5. Establish the DRRM Operations Center	100%		

**Outcome 10**

**Developed and implemented comprehensive national and local preparedness and response policies, plans, and systems**

Indicators

- Number of approved disaster risk preparedness and response plans
- Number of Incident Command Systems (ICS) institutionalized at all levels
- Number of DRRM Preparedness Teams institutionalized
- Number of integrated information system, protocols and procedures established
- Continuity of operations of essential services plan integrated

Lead Agency

DILG and OCD

Implementing Partners

DSWD, DOST, AFP, PNP, DepEd, PRC, Local DRRM Offices, CSOs

Outputs	Activities	Per cent completion		
		Timeline		
		2011-2013	2014-2016	2017-2028
1. Enhanced preparedness and response strategies, including coordination mechanisms and infrastructure	1.1. Develop and/or enhance and simulate scenario-based preparedness and response plans			
	a. National level b. Local level	100% 30%	60%	100%
2. Increased coordination through the incident command systems	2.1. Develop and/or enhance ICS coordination and communication systems 2.2. Develop and/or enhance a standard manual of operations for Operations Centers			
	a. National level b. Local level	100% 30%	60%	100%
3. Better prepared citizenry	3.1. Develop and/or enhance guidelines for emergency response teams			
	a. National level b. Local level	100% 30%	60%	100%

Outputs	Activities	Per cent completion		
		Timeline		
		2011-2013	2014-2016	2017-2028
4. Increased coordination, complementation and interoperability of work in DRRM	4.1. Develop and/or enhance agreed protocols for information gathering and reporting			
	4.2. Develop and/or enhance common and integrated response assessment tools and mechanisms (i.e., SOPs for deployment for and coordination with rapid assessment teams, SRR, evacuation)			
	a. National level b. Local level	100% 30%	60%	100%
5. Integrated operations and essential services ensured	5.1. Conduct an inventory of existing resources and services			
	a. National level	100%		
	b. Local level	30%	60%	100%

**Outcome 11**

Indicators

**Strengthened partnership and coordination among all key players and stakeholders**

- Number of MOUs/MOAs signed with CSOs and the private sector
- Increased participation of CSOs in preparedness activities
- Number of coordination mechanisms formulated
- Partnership mechanisms are included in the contingency plan

Lead Agency

DILG

Implementing Partners

CSOs , Leagues of local governments

Outputs	Activities	Per cent completion		
		Timeline		
		2011-2013	2014-2016	2017-2028
1. Partnership arrangements among stakeholders established	1.1. Creation, maintenance and update of a directory or database of key players and stakeholders			
	1.2. Formulate coordination mechanisms and guidelines for partnership arrangements in the contingency plan			
	a. National level b. Local level	100% 30%	60%	100%

### Thematic Area 3: Disaster Response

OVERALL RESPONSIBLE AGENCY: **DSWD**

Disaster Response provides for key actions that give importance to activities during the actual disaster response operations such as needs assessment, search and rescue, relief operations, and early recovery activities. The activities identified below will be done either before the actual response operations or during the disaster event. For those activities which need to be completed prior to actual response operations, they will be linked to activities earlier identified in the preparedness aspect. However, to ensure that the proper response “lens” is issued in doing the said activities, they have been included in this aspect. Overall, the success and realization of this priority area rely heavily on the completion of the activities under both the prevention and mitigation and preparedness aspects.

This aspect includes Early Recovery which means, under IRR Rule 2 Section 1, the multidimensional process of recovery that begins in a humanitarian setting. It is guided by development principles that seek to build on humanitarian programmes and catalyze sustainable development opportunities. It aims to generate self-sustaining, nationally-owned, resilient processes for post-crisis recovery. Early recovery encompasses the restoration of basic services, livelihoods, governance, security and rule of law, environment and social dimensions, including reintegration and social and emotional rehabilitation of displaced populations.

<p><b>Goal:</b>  <i>Provide life preservation and meet the basic subsistence needs of affected population based on acceptable standards during or immediately after a disaster</i></p>
<p><b>Objectives:</b></p> <ol style="list-style-type: none"> <li>1. <i>Decrease the number of preventable deaths and injuries</i></li> <li>2. <i>Provide basic subsistence needs of affected population</i></li> <li>3. <i>Immediately restore basic social services</i></li> </ol>

**Outcome 12**

**Well-established disaster response operations**

Indicators

- Activated functional Incident Command System (ICS) by the first responder on site
- Availability of timely, accurate and reliable information during response
- Rate of affected persons served
- Use of relief distribution mechanisms

Lead Agency

DSWD

Implementing Partners

AFP, BRP, CSOs, DA, DILG, DOE, DOTC, LGUs, OCD, MMDA, NTC, PHILVOLCS, PAGASA, PIA, PCG, PRC

Outputs	Activities	Operational Timeline		
		1-7 days	1-3 months	Beyond 3months
1. Activated functional ICS on site	1.1. Activation of the ICS and C3 at the national and local levels	Slow onset disaster: activate 24 hours prior to the incident		

Outputs	Activities	Operational Timeline		
		1-7 days	1-3 months	Beyond 3months
		Rapid onset disasters: within 12 hours after impact		
2. Well-established system of information gathering, reporting and dissemination	2.1. Issue public advisories in accordance with the protocols developed	X		
3. Established and functioning system for coordinated and efficient relief operations	3.1. Activation of relief distribution points/centers	X		

**Outcome 13**

**Adequate and prompt assessment of needs and damages at all levels**

Indicators

- Rapid needs assessment conducted in all affected areas
- Damage assessment and needs analysis conducted covering all areas affected
- Integrated assessment from national to local levels

Lead Agency

DRRMCs, OCD and DSWD

Implementing Partners

AFP, AFPRESCOM, ATO, BFP, CSOs, DA, DepEd, DPWH, LGUs, PCG, PNP, PRC

Outputs	Activities	Operational Timeline		
		1-7 days	1-3 months	Beyond 3months
1. Timely and appropriate and consolidated needs assessment reports	1.1. Activation of assessment teams at all levels, as needed	Within 12 hours		
	1.2. Using the latest DANA assessment tool, consolidate, analyze and disseminate data by the local and national DRRM Councils	Within 24 to 48 hours		

**Outcome 14**

**Integrated and coordinated Search, Rescue and Retrieval (SRR) capacity**

Indicators

- Number of persons rescued;
- Number of bodies retrieved, identified and turned-over to their respective families

Lead Agencies

DND, DILG, DOH

Implementing Partners

AFP, BFP, CSOs, DILG, DSWD, NBI, PCG, PNP, PRC, Volunteers

Outputs	Activities	Operational Timeline		
		1-7 days	1-3 months	Beyond 3months
1. Communities found, retrieved & reconnected with their families	1.1. Develop and implement a system for SRR and proper disposal with concerned agencies	Within 48 hours		

**Outcome 15**

**Evacuated safely and on time affected communities**

Indicators

- Number of persons transported and/or evacuated by voluntary, pre-emptive and mandatory actions

Lead Agency

LGUs

Implementing Partners

AFP, CSOs, PNP

Outputs	Activities	Operational Timeline		
		1-7 days	1-3 months	Beyond 3months
1. Safe and timely evacuation of affected communities	1.1. Coordination with appropriate agencies 1.2. Activate an evacuation system and/or set of procedures	Within # of hours		

**Outcome 16**

**Temporary shelter needs are adequately addressed**

Indicators

- Number of temporary shelters vis-à-vis number of people needing them
- Restored education services when evacuation centers are schools
- Number of evacuation centers with areas for nursing mothers
- Separate area provided for the poultry, livestock and pets
- Number of evacuation centers with livelihood training programs for the people

Lead Agency

DSWD

Implementing Partners

AFP, CSOs, DepEd, LGUs, NGOs, PCG, PNP

Outputs	Activities	Operational Timeline		
		1-7 days	1-3 months	Beyond 3months
1. All evacuees are sheltered in adequately equipped facilities for all (including areas for lactating mothers)	1.1. Identification of standard-based relief shelters and sites 1.2. Provision of tents and other temporary shelter facilities 1.3. Implement a set of minimum standard for temporary shelters	X	X	
2. Child-friendly spaces or temporary learning area in the evacuation center for continuity of education	2.1. Establishment of child-friendly spaces/temporary learning area in the evacuation center for continuity of education	X	X	
3. Safety for the sources of livelihood of the people	3.1. Provide spaces for people's livestock, poultry and pets in the ECs	X	X	
4. Increased and diversified people's livelihood skills	4.1. Conduct livelihood-oriented activities for internally displaced persons	X	X	

**Outcome 17**                      **Basic health services provided to affected population whether inside or outside ECs**  
 Indicators                     
 

- Number of patients seen, treated and served
- Number of identified high risk children enrolled in the nutrition in-emergencies program
- Water and sanitation services based on standards

 Lead Agency                      DOH  
 Implementing Partners        DSWD and Health Sector Partners

Outputs	Activities	Operational Timeline		
		1-7 days	1-3 months	Beyond 3months
1. All patients seen/treated and epidemics prevented	1.1. Medical consultation & nutritional assessment	X	X	
2. Water-borne diseases prevented	2.1. Assessment of water quality and conduct of quick damage repairs and road clearing operations;	X	X	
3. Database of hospitals and other health care providers	3.1. Determination if there is enough clinics and hospital to address the casualties	X	X	
4. Lifelines restored	4.1. Immediate restoration of lifelines	X	X	

**Outcome 18**                      **Psychosocial well-being promoted and mental health problems and risks reduced**  
 Indicators                     
 

- Number of affected population which were provided w/ MHPSSS (mental health and psychosocial services)
- # of people who are undergoing trauma debriefing (critical incident stress debriefing)
- % of the population undergoing psychological stress debriefing

 Lead Agency                      DOH  
 Implementing Partners        CSOs , DILG, DND, DSWD, NBI, PRC

Outputs	Activities	Operational Timeline		
		1-7 days	1-3 months	Beyond 3months
1. Disaster-affected population are in good mental and psychological state	1.1. Coordination among heads of MPHSS 1.2. Psychosocial programs and referral 1.3. Conduct of traumatic and/or psychological stress debriefings	With different phases; adopt the DOH guidelines and/or protocols		

**Outcome 19**                      **Coordinated, Integrated System for Early Recovery implemented on the national and local levels**  
 Indicators                     
 

- Number of persons w/ continuing assistance (financial, livelihood)
- % of vulnerable population provided with adequate and appropriate risk protection measures

Lead Agency                    DSWD  
 Implementing Partners    CSOs, DA, DPWH, NFA, PRC

Outputs	Activities	Operational Timeline		
		1-7 days	1-3 months	Beyond 3months
1. Mechanisms for coordinated and integrated early recovery established and essential services restored	1.1. Conduct of post-DANA 1.2. Develop and implement a system for early recovery, to include specific activities addressing the needs identified 1.3. Develop partnership mechanisms with utility providers and key stakeholders 1.4. Design and implement temporary livelihood and/or income generating activities (i.e., case for food or work; micro and small enterprise recovery)			X

## Thematic Area 4: Disaster Rehabilitation and Recovery

OVERALL RESPONSIBLE AGENCY: NEDA

The Disaster Rehabilitation and Recovery aspect covers concerns related to employment and livelihoods, infrastructure and lifeline facilities, and housing and resettlement. These are recovery efforts done when people are already outside of the evacuation centers.

Specifically for Priority Area of Disaster Response and Rehabilitation and Recovery, **Operational Timelines** are used primarily to give an overall guidance on the “rapid” time element in providing humanitarian activities and recovering from disasters. Likewise, the operational timelines will guide the plan’s implementation and monitoring activities for the two priority areas. These operational timelines are as follows:

Immediate Term (IT)	Within 1 year after the occurrence of the disaster
Short Term (ST)	Within 1 to 3 years after the occurrence of the disaster
Medium Term (MT)	Within 3 to 6 years after the occurrence of the disaster
Long Term (LT)	Beyond 6 years after the occurrence of the disaster

**Goal:**

*Restore and improve facilities, livelihood and living conditions and organizational capacities of affected communities, and reduce disaster risks in accordance with the “build back better” principle*

**Objectives:**

1. To restore people’s means of livelihood and continuity of economic activities and business
2. To restore shelter and other buildings/installation
3. To reconstruct infrastructure and other public utilities
4. To assist in the physical and psychological rehabilitation of persons who suffered from the effects of disaster

**Outcome 20**

Indicators

**Damages, Losses and Needs Assessed**

- % of livelihood activities restored/revived through government /LGU support
- % increase in livelihoods established through government/ LGU support
- % of approved credit for affected sectors

Lead Agency

OCD

Implementing Partners

National government agencies, regional line agencies and local offices

Outputs	Activities	Operational Timeline			
		Within 1yr	Within 1-3yrs	Within 3-6yrs	Beyond 6yrs
1. Post Disaster Needs Assessment	1.1. Conduct Post-Disaster Needs Assessment (PDNA)	X			
2. Strategic Action Plan	2.1. Coordinate the formulation of the Strategic Action Plan for disaster-affected areas	X			

**Outcome 21**

Indicators

**Economic activities restored and, if possible, strengthened or expanded**

- % of livelihood activities restored/revived through government /LGU support
- % increase in livelihoods established through government/ LGU support
- % of approved credit for affected sectors

Lead Agency

Agency to be determined based on the sectors affected

Implementing Partners AFP, CSO, DA, DBM, DILG, DSWD, DTI, LGU, MINDA, OP, Congressional Development Authorities

Outputs	Activities	Operational Timeline			
		Within 1yr	Within 1-3yrs	Within 3-6yrs	Beyond 6yrs
1. Livelihood programs and projects	1.1. Identify the needed assistance and formulate/ implement appropriate programs	X			
2. Credit facilities for affected sectors	2.1. Identify/ mobilize funding sources	X	X		

**Outcome 22.**

**DRRM/CCA elements incorporated in human settlement**

Indicators

- % of affected LGUs implementing appropriate safety codes
- % of affected LGUs providing safe relocation and resettlement areas
- Relevant government housing cum livelihood programs developed or implemented
- % of affected families involved in the construction of Core Shelter/Modified Shelter, Cash for Work/Food for Work and Sustainable Livelihood.

Lead Agency

NHA

Implementing Partners

AFP, DAR, DENR, DILG, DOST, DPWH, DSWD, HLURB, LGU, NEDA, PAGIBIG

Outputs	Activities	Operational Timeline			
		Within 1yr	Within 1-3yrs	Within 3-6yrs	Beyond 6yrs
1. Safe relocation sites	1.1. Identify and provide suitable relocation sites for affected population	X	X		
2. Disaster-resilient housing designed and reconstructed	2.1. Design/construction of disaster resilient housing	X	X	X	
3. Self-sufficient communities with access to basic social services	3.1. Conduct trainings for social preparation of host communities and those that will be relocated to reduce conflict.	X	X		
4. Empowered informal settlers/affected families	4.1. Organize NASA/Construct core shelter/engage in Cash for Work/Food for Work/Organize SEA-K groups	X			

**Outcome 23**

**Disaster and climate change-resilient and infrastructure reconstructed**

Indicators

- % of disaster-resilient transport infrastructure facilities rehabilitated/ reconstructed
- % of constructed/ reconstructed social infrastructure (hospitals and schools) following safety standards
- % of applications approved within the prescribed time (linked to risk transfer mechanism and anti-red tape act RA 9485)

Lead Agency

DPWH

Implementing Partners

AFP, ASEP, CSC, DENR, DepEd, DILG, DOJ, LGUs, PICE

Outputs	Activities	Operational Timeline			
		Within 1yr	Within 1-3yrs	Within 3-6yrs	Beyond 6yrs
1. Infrastructure facilities restored / rehabilitated according to safety and resiliency standards	1.1. Undertake the necessary rehabilitation or repair of damaged infrastructures		X	X	X
	1.2. Implement building code and promotion of green technology		X	X	X
2. Development permits approved within prescribed timeline	2.1. Close monitoring and/ or tracking of approval of infrastructure projects and permits		X	X	X

**Outcome 24** A psychologically sound, safe and secured citizenry that is protected from the effects of disasters able to restore to normal functioning after each disaster

Indicators

- % of vulnerable population provided with adequate and appropriate risk protection measures

Lead Agency DOH and DSWD

Implementing Partners AFP, CSOs, DILG, NBI, PNP, PRC, OPAPP

Outputs	Activities	Operational Timeline			
		Within 1yr	Within 1-3yrs	Within 3-6yrs	Beyond 6yrs
1. Vulnerable population provided with adequate and appropriate risk protection measures	1.1. Develop systems for appropriate risk protection measures	X			
	1.2. Conduct of post-disaster/conflict needs analyses with affected communities	X			
	1.3. Develop systems of support and communication among key stakeholders	X			
	1.4. Build capacities of psychosocial care providers	X	X		

### List of NDRRMP Priority Projects

To fast track the implementation of the NDRRMP, priority projects and demonstration sites identified are identified. The purpose is to either replicate good DRRM practices or implement projects in areas which need them most. All priority projects are to be implemented within the immediate or short term period from 2011 to 2013. The priority projects of the NDRRMP are:

1. Development of the following plans:
  - Joint workplan for DRRM and CCA
  - Local DRRM plans
  - National Disaster Response Plan (to include a system for Search, Rescue and Retrieval SRR; scenario-based preparedness and response plans)
  - Risk financing
2. Development of IEC and advocacy materials on RA 10121, DRRM and CCA

3. Development of guidelines on
  - Communications and information protocol before, during and after disasters
  - Creation of DRRM teams
  - Criteria/standards for local flood early warning systems
  - Evacuation
  - Infrastructure redesign and/or modifications
  - Manual of operations of disaster operations centers
  - Accreditation of stakeholders including volunteer groups
4. Development of tools on
  - DRRM and CCA mainstreaming in the national and local-level planning
  - DANA and Post-DANA
  - Psychosocial concerns
5. Establishment of
  - DRRM Training Institutes
  - Local flood early warning systems (through integrated and sustainable management river basins and water sheds – like the Cagayan River Basin (CRB) in Region 2
  - End-to-End Early Warning Systems in Provinces of Bulacan, Leyte, Albay, Municipalities of Kitcharao and Santiago, Agusan del Norte and Butuan City and other LGUs where necessary.
6. Establishment of local DRRM Councils and Offices and their operations centers, as prescribed by RA 10121.
7. Conduct inventory of existing DRRM and CCA resources and services;
8. Development and implementation of DRRM and CCA activities using 5% of government agency's allocation from the annual national budget or General Appropriations Act (GAA);
9. Hazard and risk mapping in the most high-risk areas in the country (e.g., community-based DRRM and CCA risk mapping in the municipalities of Kitcharao and Santiago in Agusan del Norte and Butuan City)
10. Institutional capability program on DRRM and CCA for decision makers, public sector employees, and key stakeholders;
11. Mainstreaming DRRM and CCA (e.g., Esperanza Municipality in Agusan del Sur in CARAGA and in San Francisco Municipality in Camotes Island);
12. PDNA capacity building for national government agencies, regional line agencies, and local offices.
13. Review, amend and/or revise the following:
  - Building Code and other relevant codes and integrate DRRM and CCA
  - Executive Order No. 72 s. 1993, which provides for the preparation and implementation of the CLUPs of local government units
  - Implementing Rules and Regulations of RA 10121
  - Various environmental policies (i.e. EO No. 26) to integrate DRRM and CCA

## Cross-Cutting Concerns

The NDRRMP recognizes that certain concerns cut across the four thematic areas. These include health, human-induced disasters, gender mainstreaming, environmental protection, cultural sensitivity or indigenous practices, and the rights-based approach. Lastly, R.A. 10121 provides that the OCD shall utilize the NDRRMP as the instrument by which the government ensures consistency of DRRM measures with the physical framework, social and economic and environmental plans of communities, cities, municipalities and provinces.

### **Health**

People's vulnerability to disaster has become more complex with the onset of climate change. Single hazard events such as floods and heat waves can overlap, resulting in a broad range of impact scenarios. Minor disturbances in the environment surrounding the ecosystem can have far reaching consequences on the exposure of humans to health-related hazards like avian influenza (which is related to the changes in habitats of migratory birds); malaria and dengue (which increases mosquito abundance in areas experiencing warmer and damper temperatures, respectively). Likewise, rising sea-level and increasing flooding events disproportionately affect the poor through sanitation of their water sources. It is thus important to look at these concerns in each of the thematic areas of the NDRRMP.

### **Human-induced disasters**

In the Philippines, people are vulnerable not only because of natural hazards but also due to disasters more commonly associated with armed conflict, terrorism and war. In the entire NDRRMP, consideration of the factors which contribute to these risks are important and should be looked into at all times, taking cognizance of the underlying causes of people's vulnerabilities.

### **Gender mainstreaming**

Gender mainstreaming is about the recognition, acceptance, identification and addressing of the different roles, needs, capacities and vulnerabilities of men and women. The NDRRMP is committed to promoting gender-sensitive vulnerability and capacity-analysis in all disaster risk reduction and management activities. It encourages balancing the roles, responsibilities, needs, interests, capacities of and effect on both genders of contingency plans as well as implementation of community-based activities. Gender mainstreaming is about reducing the vulnerabilities of men and women to disasters and encourages a balance in the participation and decision making roles of men and women in DRRM.

### **Environmental protection**

Care for the environment is essential in order to minimize vulnerability and avoid increasing risk levels. Measures must be undertaken so that activities in all priority areas do not create stress on the country's natural resources.

### **Cultural sensitivity/indigenous practices**

The NDRRMP recognizes the importance of culturally-sensitive risk reduction measures at all levels. People's vulnerability to disasters as well as their capacities to adapt to the changing realities are more often than not related to cultural and indigenous practices. By being sensitive to the indigenous practices and local knowledge, DRRM approaches will become more effective and more easily understood and embraced by the people.

### **Rights-based approach**

DRRM is our country's priority because people have the right to live, safety, information, education, cultural beliefs and right to better lives as protected by the Constitution.

## Implementation Strategies

Various strategies are identified below to implement the NDRRMP and achieve the desired key results under each of the four thematic areas.

### **Advocacy and Information, Education and Communication (IEC)**

A strong national and local commitment is required to save lives and livelihoods threatened by natural and human-induced disasters. Achieving this will need increasing visibility and understanding of DRRM and CCA issues, mobilizing partnerships, encouraging actions and gathering public support for successful implementation of the different activities. The NDRRMP will use evidence-based advocacy to influence people, policies, structures and systems in order to build resilient Filipino communities by raising awareness, working with the media and key stakeholders. The NDRRM will develop advocacy, IEC and various communication strategies based on risk assessments and good DRRM practices.

### **Competency-based capability building**

Customized training programs should be developed and conducted to ensure that people are trained based on the needed skills in the different DRRM aspects. Different people have different needs and capacities and developing competency-based capability building programs ensures that knowledge, skills and attitudes are enhanced and built upon further.

### **Contingency Planning**

More commonly used before as only part of disaster preparedness activities, the contingency plan is updated and used in all the different Priority Areas of DRRM. Lessons from past experiences and complementary actions between and across areas should be taken into consideration in developing contingency plans at all levels.

### **Education on DRRM and CCA for all**

Mainstreaming DRRM into formal education should be undertaken through the integration of DRRM and CCA concepts in the curriculum for basic education, the National Service Training Program (NSTP) at the tertiary level, and bachelors' degree programs. This also includes the conduct of DRRM and CCA training of all public sector employees as mandated by law, and the training of teachers and development of teaching materials at the primary and secondary levels.

### **Institutionalization of DRRMCs and LDRRMOs**

The creation of permanent local DRRM offices and functioning councils at the local level is one of the ways to ensure that all DRRM-related activities, plans and programs will be implemented and sustained, especially at the local level. Having a point of convergence is important to ensure that risk reduction measures complement one another and are institutionalized with the end in view of reducing people and institutional vulnerabilities to disasters. This will likewise promote the paradigm shift towards mainstreaming DRRM in local planning by investing risk-reduction measures from the reactive mode exemplified by activities limited to disaster response operations.

### **Mainstreaming of DRR in all plans**

In all four (4) Priority Areas under the NDRRMP, ensuring the mainstreaming of DRRM and CCA in the various programs, plans, projects of either national or local government units, including the private sector groups and other members of the community is a must. This primarily means that disaster risks analysis and impacts are integrated and taken into consideration in the development of policies and plans by the different agencies, organizations and sectors.

### **Research, Technology Development and Knowledge Management**

With the changes in the climate and technological advances, regularly conducting research and technology development will contribute to more innovative and adaptive mechanisms and approaches towards DRRM and CCA. Along side new information, knowledge management through database development, documentation, recognition and replication of good practices will help achieve the objectives and targets of the NDRRMP through more efficient use of resources, learnings and experiences.

### **Networking and partnership building between and among stakeholders, media and tiers of government**

Building resilient communities cannot and should not be done by a single agency or organization. Its success is highly dependent on the close collaboration and cooperation of the different stakeholders. Building effective and mutually reinforcing partnerships and evolving networks ensure the multi-stakeholder and multi-sectoral participation of the different players in DRRM.

### **Pre-disaster Recovery Planning for Faster Post-disaster Rehabilitation and Recovery**

Whenever a disaster occurs, there is always great pressure to quickly reconstruct damaged infrastructures and critical other facilities. Pre-disaster recovery planning will help in a more effective response, hasten the recovery from the impacts of a disaster, and ensure the achievement of rehabilitation and recovery outcomes. Pre-disaster recovery planning also promotes greater participation in a non-disaster environment. Within the perspective of building back better, this activity will involve creating disaster scenarios, determining the key areas of intervention, and establishing post-disaster recovery organization. Key inputs to this activity are the risk assessments as well as lessons learned from earlier disaster rehabilitation and recovery experiences.

## **Implementation Mechanisms**

At the national level, implementation of the NDRRMP shall take place through the integration of DRRM into relevant national plans such as the Philippine Development Plan (PDP) as well through the development and implementation of respective action plans of government agencies for their respective activities as indicated in the NDRRMP.

### **National Disaster Risk Reduction and Management Council (NDRRMC)**

As explicitly stated under Republic Act 10121, the NDRRMC has the overall responsibility of approving the NDRRMP and ensuring that it is consistent with the NDRRMF. It also has the main responsibility of coordination, integration, supervision and monitoring the development and enforcement by agencies and organizations of the various laws, plans, programs, guidelines, codes, or technical standards required by this Act; managing and mobilizing resources for DRRM, including the National DRRM Fund; monitoring and providing the necessary guidelines and procedures on the Local DRRM Fund (LDRRMF) releases as well as the utilization, accounting, and auditing thereof.

Within the NDRRMC, four committees will be established to deal with the four thematic areas set forth in the NDRRMP and the NDRRMF. These four mutually reinforcing thematic areas will be led by the four vice chairpersons (please see discussion below).

### **Office of Civil Defense (OCD)**

As prescribed in RA No. 10121, the Office of Civil Defense has the main responsibility of ensuring the implementation and monitoring of the NDRRMP. Specifically, it is tasked to conduct periodic

assessment and performance monitoring of member-agencies of the NDRRMC and the RDRRMCs as indicated in the NDRRMP. It is also responsible for ascertaining that the physical framework, social, economic and environmental plans of communities, cities, municipalities and provinces are consistent with the NDRRMP. OCD is also tasked to make sure that all DRR programs, projects and activities requiring regional and international support shall be in accordance with duly established national policies and aligned with international agreements.

At the regional and local levels, the OCD needs to review and evaluate the Local DRRM Plans (LDRRMPs) to facilitate the integration of DRR measures into the local Comprehensive Development Plan (CDP) and the Comprehensive Land Use Plan (CLUP).

### **Agency Leads and Implementing Partners**

Current government programs especially at the national level are already contributing to the achievement of NDRRMP goals and objectives, but may be still currently termed differently. The identification of specific programs and projects under the NDRRMP as well as their lead and partner agencies will help in pinning down specific budget and promote better planning for appropriate and effective DRRM investments at the national and local levels. It will also bring in synergies between different government programmed/schemes vis-a-vis the planning process and implementation.

Agency leads and implementing partner organizations and/or groups are identified in the NDRRMP to ensure the effective implementation of the NDRRMP.

***NDRRMC Vice-Chairpersons*** - Following RA 10121, the overall lead or focal agency for each of the four priority areas are the vice-chairpersons of the NDRRMC, namely:

- Vice-Chairperson for Disaster Prevention and Mitigation: Department of Science and Technology (DOST)
- Vice-Chairperson for Disaster Preparedness: Department of Interior and Local Government (DILG)
- Vice-Chairperson for Disaster Response: Department of Social Welfare and Development (DSWD)
- Vice-Chairperson for Rehabilitation and Recovery: National Economic and Development Authority (NEDA)

***Agency Leads*** – the following are their general duties and responsibilities:

1. Takes the lead in initiating the implementation of the activities
2. Coordinates and collaborates with the different implementing partners to ensure that the activities are operationalized.
3. Monitors the progress of the activities.
4. Evaluates the implementation development and program efficiency.
5. Consolidates reports from the implementing partners and submits to the respective vice chairperson of the DRRM priority area.

***Implementing Partners*** - the following are their general duties and responsibilities:

1. Perform the activities to achieve the specific outcomes.
2. Work with other implementing partners within the context of coordination, collaboration and partnership.
3. Submit reports to Agency Leads.

### **Regional Disaster Risk Reduction and Management Councils (RDRRMCs)**

At the regional level, the RDRRMCs shall be responsible for ensuring that DRRM-sensitive regional development plans contribute to and are aligned with the NDRRMP. The RDRRMC chairperson shall be the overall lead.

### **Provincial, City, Municipal Disaster Risk Reduction and Management Councils (P/C/MDRRMCs or Local DRRMCs)**

At the local government level, it is the primary duty of the Local DRRM Council to ensure that DRRM is mainstreamed into their respective CDP and CLUP and other local plans, programs and budgets as a strategy in sustainable development and poverty reduction. By doing so, the LGUs will be sure that their respective DRRM programs will be included in their local budgets for each fiscal year.

The NDRRMP shall serve as an overall guide to Local DRRM Office in formulating the LDRRMP. The LDRRMP shall in turn provide inputs to effectively mainstream DRRM into the CDP and CLUP.

### **Local Disaster Risk Reduction and Management Offices (LDRRMOs)**

The LDRRMOs at the provincial, city and municipal levels and the Baranagay Development Councils shall design, program and coordinate DRRM activities consistent with the NDRRMP and develop the Local DRRM Plan of their respective LGUs. The LDRRMPs shall be consistent and aligned with the NDRRMP. Likewise, this office shall take the lead in implementing the LDRRMP.

To do this, the office shall:

1. Facilitate and support risk assessments and contingency planning activities at the local level;
2. Consolidate local disaster risk information which includes natural hazards, vulnerabilities and climate change risks and maintain a local risk map;
3. Formulate and implement a comprehensive and integrated LDRRMP in accordance with the national, regional and provincial framework and policies on DRR in close coordination with the local development councils (LDCs)
4. Prepare and submit to the local sanggunian through the LDRRMC and the LDC the annual LDRRMO Plan and budget, the proposed programming of the LDRRMF, other dedicated DRRM resources and other regular funding source/s and budgetary support of the LDRRMO/BDRRMC.
5. Conduct continuous disaster monitoring
6. Identify, assess and manage the hazards, vulnerabilities and risks that may occur in their locality
7. Disseminate information and raise public awareness
8. Identify and implement cost-effective risk reduction measures/strategies
9. Maintain a database of human resources, equipments, directories and local critical infrastructures and their capacities such as hospitals and evacuation centers
10. Develop, strengthen and operationalize mechanisms for partnership or networking with the private sector, CSOs, and volunteer groups

### **Resource Mobilization**

At the national and local Levels, the following sources can be tapped to fund the various DRRM programs and projects:

1. General Appropriations Act (GAA) – through the existing budgets of the national line and government agencies

2. National Disaster Risk Reduction and Management Fund (NDRRMF)
3. Local Disaster Risk Reduction and Management Fund (LDRRMF)
4. Priority Development Assistance Fund (PDAF)
5. Donor Funds
6. Adaptation and Risk Financing Assistance
7. Disaster Management Assistance Fund (DMAF)

Aside from the above fund sources, the NDRRMP will also tap into the non-monetary resources available which can help attain the targets identified in this plan, namely:

1. Community-based good practices for replication and scaling up
2. Indigenous practices on DRRM
3. Public-Private-Partnerships
4. DRR and CCA networks of key stakeholders

### Monitoring and Evaluation

Feedback mechanisms are important aspects of gauging performance targets and learning from experiences on the ground. The NDRRMP, being a long term plan which outlasts political terms, administrations and leaderships, need to be constantly reviewed in terms of its relevance and impact on the changing situations on the ground.

Monitoring and evaluation are essential components of results-based programming in DRRM as these will ensure the plan's on-time implementation and that lessons from past experiences become input to the plan altogether. Also, through monitoring and evaluation activities, appropriate and needed revisions and/or changes can be identified, from the listed activities to the implementation mechanisms, in case more appropriate ones are realized. These will be led by the the Office of Civil Defense, in close coordination with the NDRRMC and its Committees, and will focus on relevance, effectiveness, efficiency, impact, and sustainability. A standard monitoring and evaluation template will be developed by the OCD together with the members of the Technical Management Group (TMG).

Monitoring and evaluation will use the indicators, targets and activities identified in each of the four thematic areas of the NDRRMP (refer to Annex E for some examples of means of verification). The indicators set in the NDRRMP will be applicable to both the national and local levels. The local level targets will be operationalized in the respective local DRRM plans which the LGUs need to develop through their respective local DRRM offices and councils. Customization of the targets will depend on the risk assessments and analysis done in their respective local areas. As regards the monitoring of the specific outputs and activities, this will be overseen by the respective chairpersons of the NDRRM Council to make sure that the activities are delivered efficiently and effectively.

This will also include an audit report on the use and status of the National DRRM Fund and how the said fund contributed to the attainment of the NDRRMP.

Throughout all activities, ensuring *“Safer, Adaptive and Disaster-Resilient Filipino Communities toward Sustainable Development”* will be the main focus. It will be essential that this learning is captured and shared amongst the various stakeholders, leads and partners. Throughout its implementation, reporting on the progress on the NDRRMP will be communicated through various media and partners, making sure that the learning are shared effectively. These will then feed into the NDRRMP, making it adaptive to the changing situations and needs on the ground. In the Monitoring and Evaluation activities, it will be essential to link up the learning from the NDRRMP implementation with that of the NCCAP and other related plans.

RA 10121 requires the NDRRMC through the OCD to submit to the Office of the President, Senate and House of Representatives, within the first quarter of the succeeding year, an annual report relating to the progress of the implementation of the NDRRMP.

Table 1. Steps for the Monitoring and Evaluation Process

Level	Step	Lead
LGU Level	1. Local DRRM Offices, together with key relevant stakeholders and partners will take the lead in the process by looking into their progress vis-a-vis their local DRRM plan's targets. A report will be submitted to the Local DRRM Council	Local DRRM Office
	2. The Local DRRM Council will prepare validation report through their respective DRRM committees. Once finalized, a report will be submitted to the Regional DRRM Council	Local DRRM Council
Regional Level	3. The Regional DRRM Councils, through their four DRRM committees, will monitor and evaluate at the regional level. A consolidated regional DRRM report will be submitted to the National DRRM Office through the Office of Civil Defense.	Regional DRRM Council
National Level	4. The implementing partners in each of the outcomes and/or activities identified under the NDRRMP will submit a report on the progress of the implementation to the lead agency in each of the activities	Implementing Partners
	5. The Lead Agency will consolidate the reports and submit to the appropriate National DRRM Committee	Lead Agency
	6. The National DRRM Committees will evaluate and come up with a consolidated report for each of the priority areas. The report will be submitted to the respective Vice Chairperson on DRRM (i.e., DOST, DILG, DSWD and NEDA)	National DRRM Committees
	7. The Office of Civil Defense will consolidate all the reports from the regional DRRM councils and the national DRRM committees to come up with a consolidated monitoring, evaluation and progress report on the NDRRMP.	Office of Civil Defense
	8. Based on the report on the progress of the NDRRMP implementation, the OCD will likewise use these information to look into the country's implementation progress on the HFA commitments and targets using the matrix below as a guide.	
	9. Once completed, the reports will be presented in multi-stakeholder workshops/meetings for further inputs and validation	

Level	Step	Lead
	10. The NDRRMP progress and evaluation report and the country's HFA implementation will be finalized.	

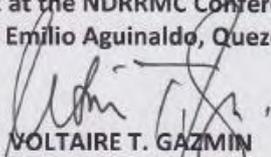
### HFA Monitoring Tool

Section 2-B of RA 10121 states that as a policy, the State needs to adhere to and adopt the universal norms, principles and standards of humanitarian assistance and the global effort on risk reduction as a concrete expression of the country's commitment to overcome human sufferings due to recurring disasters.

In line with this, the NDRRMP will likewise make use of the HFA Monitor online tool to capture the information on progress in HFA, generated through the multi-stakeholder review process. The primary purpose of the tool is to assist the countries to monitor and review their progress and challenges in the implementation of disaster risk reduction and recovery actions undertaken at the national level, in accordance with the Hyogo Framework's priorities.

The National Disaster Risk Reduction and Management Council will use this as a working format to undertake national multi-stakeholder consultation processes to review progress and challenges in implementation of risk reduction and recovery actions. The template will help the national coordinating authority to discuss and record inputs from various partners in a systematic manner. (The alignment of the four thematic areas of the NDRRMP with the HFA is summarized in Annex B.)

**Adopted by the National Disaster Risk Reduction and Management Council (NDRRMC)  
on 7 February 2012 at the NDRRMC Conference Room,  
Camp General Emilio Aguinaldo, Quezon City**

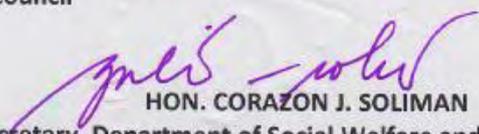
  
**HON. VOLTAIRE T. GAZMIN**  
Secretary, Department of National Defense  
Chairperson, National Disaster Risk Reduction and  
Management Council

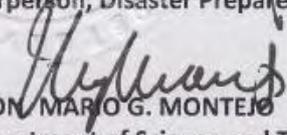
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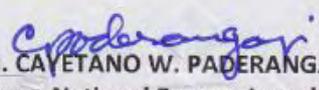
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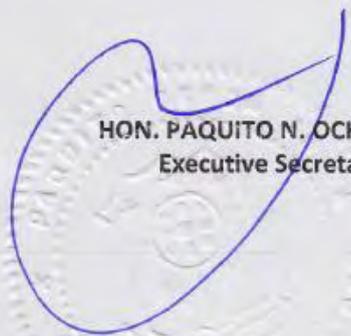


  
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**HON. CORAZON J. SOLIMAN**  
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Vice-Chairperson, Disaster Response 

  
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Secretary, National Economic and Development  
Authority  
Vice-Chairperson, Disaster Recovery and Rehabilitation

  
**HON. PAQUITO N. OCHOA, JR.**  
Executive Secretary 

In 2005, the Hyogo Framework for Action (HFA) was formulated and adopted by 168 governments as part of the global strategy to reduce disaster risk. The strategic goals of HFA are to have (a) effective integration of disaster risk considerations into sustainable development policies, planning and programming at all levels—disaster prevention, mitigation, preparedness and vulnerability reduction; (b) development and strengthening of institutions, mechanisms and capacities at all levels; and (c) systematic incorporation of risk reduction approaches into the design and implementation of emergency preparedness, response and recovery programmes in the reconstruction of affected communities.

These three strategic goals are to be achieved through the five priorities for action, namely:



On June 21, 2010, through Executive Order No. 888, the Strategic National Action Plan (SNAP) on DRR 2009-2019 was adopted. The SNAP is a “road map” indicating the vision and strategic objectives on disaster risk reduction of the country for the next 10 years and was based on (a) an assessment of the disaster risks, vulnerability, and capacity; (b) gap analysis that identifies and maps out significant on-going initiatives; and (c) DRR activities based on the HFA that are considered by stakeholders as achievable priorities for country, with adequate relevant resources and capacity for implementation over the next three to ten years.

The SNAP for DRR was developed using a set of assumptions, scenarios and DRM-related information up to the year 2006. Its development and implementation were based on two guiding principles, namely:

1. DRR is directly linked to poverty alleviation and sustainable development; and
2. DRR entails the participation of various stakeholders in order to mainstream DRR in relevant sectors in the society.

Consistent with the global commitment, the Philippine SNAP aims to build the resilience of communities to disasters. In more concrete terms, the expected outcome is **“to reduce disaster losses in lives, in the social, economic and environmental assets of communities and countries.”** The SNAP medium-term timeframe coincides with the HFA-set targets by 2015. The SNAP objectives provide support to strengthen cooperation and coordination mechanisms among various sectors and stakeholders.

The SNAP has five strategic objectives and 18 priority programs, with identified target for implementation of either short term (2009-2010); medium term (2011-2015); and long term (2016-2019).



However, due to lack of resources, most of priority projects have not yet been fully realized. Also, since there was no institutionalized mechanism to monitor the progress of SNAP's implementation, a formal review after its adoption could not be done. Thus, as part of the development of the National Disaster Risk Reduction and Management Plan (NDRRMP), a general review of the SNAP's implementation was conducted in order to see which among the 18 projects have been implemented, at what stage and when. The review confirmed that the five (5) strategic objectives, eighteen (18) projects, twenty two (22) outputs, three (3) sets of timelines, and one hundred six (106) activities are consistently aligned with the paradigm shift called for by RA 10121 and the new NDRRM Framework.

ANNEX B. Hyogo Framework for Action (HFA) and the National Disaster Risk Reduction and Management Plan (NDRRMP)

HYOGO FRAMEWORK FOR ACTION (HFA)			ALIGNMENT WITH THE 4 PRIORITY AREAS	
Priority Areas	Indicators			
1	Ensure that DRR is a national and local priority with a strong institutional basis for implementation	1.1	National policy and legal framework for DRR exists with decentralized responsibilities and capacities at all levels	Prevention & Mitigation Preparedness
		1.2	Dedicated and adequate resources are available to implement DRR plans and activities at all administrative levels	Prevention & Mitigation Preparedness
		1.3	Community participation and decentralization is assured through the delegation of authority and resources to local levels	In all 4 priority areas
		1.4	A national and multi-sectoral platform for DRR is functioning	Prevention & Mitigation
2	Identify, assess and monitor disaster risks and enhance early warning	2.1	National and local risk assessments based on hazard data and vulnerability information are available and include risk assessments for key sectors	Prevention & Mitigation
		2.2	Systems are in place to monitor, archive and disseminate data on key hazards and vulnerabilities	Prevention & Mitigation Preparedness
		2.3	Early warning systems are in place for all major hazards with outreach to communities	Prevention & Mitigation Preparedness
		2.4	National and local risk assessments take account of regional/trans boundary risks, with a view to regional cooperation and risk reduction	Prevention & Mitigation
3	Use knowledge, innovation and education to build a culture of safety and resilience at all levels	3.1	Relevant information on disasters is available and accessible at all levels, to all stakeholders	Prevention & Mitigation Preparedness
		3.2	School curricula, education material and relevant trainings include DRR and recovery concept and practices	Prevention & Mitigation Preparedness Rehabilitation & Recovery
		3.3	Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened	Prevention & Mitigation
		3.4	Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities	Prevention & Mitigation Preparedness
4	Reduce the underlying risk factors	4.1	DRR is an integral objective of environment related policies and plans, including for land use, natural resource management and adaptation to climate change	Prevention & Mitigation
		4.2	Social development policies and plans are being implemented to reduce the vulnerability of populations at risk	Prevention & Mitigation Rehabilitation & Recovery

HYOGO FRAMEWORK FOR ACTION (HFA)			ALIGNMENT WITH THE 4 PRIORITY AREAS	
Priority Areas	Indicators			
	4.3	Economic and productive sectoral policies and plans have been implemented to reduce the vulnerability of economic activities	Prevention & Mitigation Rehabilitation & Recovery	
	4.4	Planning and management of human settlements incorporate DRR elements, including enforcement of building codes	Prevention & Mitigation Rehabilitation & Recovery	
	4.5	DRR measures are incorporated into post disaster recovery and rehabilitation processes	Prevention & Mitigation Rehabilitation & Recovery	
	4.6	Procedures are in place to assess disaster risks of major development projects, especially infrastructure	Prevention & Mitigation Rehabilitation & Recovery	
5	Strengthen disaster preparedness for effective response at all levels	5.1	Strong policy, technical and institutional capacities and mechanisms for disaster risk management, with a disaster risk reduction perspective are in place	Preparedness
		5.2	Disaster preparedness plans and contingency plans are in place at all administrative levels and regular training drills and rehearsals are held to test and develop disaster response programmes	Preparedness Response
		5.3	Financial reserves and contingency mechanisms are in place to support effective response and recovery when required	In all 4 priority areas
		5.4	Procedures are in place to exchange relevant information during hazard events and disasters and to undertake post event reviews	Prevention & Mitigation Preparedness Response

## ANNEX C. Philippine Development Plan (PDP) 2011-2016 and the National Disaster Risk Reduction and Management Plan (NDRRMP)

The Philippine Development Plan 2011-2016 is the development roadmap of the country and translates its current development agenda – **“Social Contract with the Filipino People.”** It envisions a country with an organized and widely shared rapid expansion of the economy through a government dedicated to honing and mobilizing the people’s skills and energies as well as the responsible harnessing of the country’s natural resources. The attainment of the vision entails changes among each and every Filipino towards “doing the right things, giving value to excellence and integrity and rejecting mediocrity and dishonesty, and giving priority to others over ourselves.”

It ultimately seeks to achieve inclusive growth, create employment opportunities and reduce poverty. Inclusive growth is translated in terms of: higher economic growth of 7 to 8% per year for at least six years; generation of mass employment; and achieving or surpassing the Millennium Development Goals.

The target outcomes of poverty reduction and increased employment will be achieved through three broad strategies – (a) high and sustained economic growth; (b) equal access to development opportunities; and (c) effective and responsive social safety nets. Specifically, these include having a stable macroeconomic environment; mitigating potential impacts of environment factors; and advancing peace process and guaranteeing national security.

The PDP has identified DRRM and CCA as main cross-cutting concerns. As such, these have been integrated into the different sectors and sub-sectors using various strategies in order to address the underlying causes of people’s vulnerabilities and contribute to the reduction of people’s risks to disasters. In general, the PDP’s approaches to DRRM and CCA revolve around the following:

- Mainstream DRRM and CCA into existing policies (i.e., land-use, building code, General Appropriations Act or GAA), plans (i.e., CLUP) and programs (i.e., researches, school curricula, )
- Reduce vulnerability through continued and sustained assessments especially in high-risk areas. These will be done through geo-hazard mapping and risk assessments especially for highly susceptible communities and/or areas and be used as basis for the formulation and implementation of DRRM plans. Furthermore, this includes the reduction of CC-related risks and vulnerability of natural ecosystems and biodiversity through ecosystem-based management approaches, conservation efforts and sustainable environment.
- Integrate DRRM and CCA in all educational levels and in specialized technical training and research programs. In addition, use science-based tools and technologies to support decisions in identifying, preventing and mitigating potential disaster impacts.
- Raise public awareness of DRR and mitigating the impacts of natural disasters through the formulation and implementation of a communication plan for DRR and CCA. This also includes the conduct of extensive IEC campaigns for increased public awareness of DRR and enhancement of disaster-preparedness through multi-stakeholder coordination.
- Increase resilience of communities through the development of CC-sensitive technologies and systems and the provision of support services to the most vulnerable communities.

- Strengthen the capacity of communities to respond effectively to climate and other natural and human-induced hazards and disasters. This includes the strengthening of civil society-basic sector participation and PPP; encourage volunteerism and enhance competence of institutions in social services delivery.
- Institutionalize DRRM and CCA in various sectors and increase local government and community participation in DRRM and CCA activities
- Push for the practice and use of Integrated Water Resources Management (IWRM) and prioritize the construction of flood management structures in highly vulnerable areas, while applying DRRM and CCA strategies in the planning and design of flood management structures
- Intensify development and utilization of renewable energy and environment-friendly alternative energy resources/technologies. This include the assessment of the vulnerability of energy facilities to climate change and natural disasters (e.g., El Niño and La Niña)

Through these, the PDP hopes to attain transparent and accountable governance; uplift and empower the poor and vulnerable; achieve economic growth through infrastructure development, strategic public-private partnerships, and a policy environment for greater governance; and promote sustainable development.

2011-2016 Philippine Development Plan vis-a-vis Disaster Risk Reduction and Management (DRRM) and Climate Change Adaptation (CCA)			NDRRMP
Vision/Objective	Goal	DRR/CCA Strategies	Incorporated in the DRRM Priority Areas
<b>PDP Chapter 3- Competitive Industry and Services Sector</b>			
Globally competitive and innovative industry and services sectors contributing to inclusive growth and employment generation	Create a better business environment	Establish compliance mechanisms for business sector on DRR standards	Prevention & Mitigation
		Strengthen the implementation of or reform existing laws on land-use and related laws such as building code for disaster-resilient industry and services sectors; and	Prevention & Mitigation
		Assess the level of DRR awareness and activities among the private sector and disseminate IEC materials on DRR to ensure their support, participation and cooperation.	Preparedness
<b>Chapter 4- Competitive and Sustainable Agriculture and Fisheries Sector</b>			
Competitive, sustainable and technology-based agriculture and fishery sector, driven by productive and progressive farmers and fisher folks, supported by efficient	Increase sector resilience to climate change risks	Reduce climate change-related risks and the vulnerability of natural ecosystems and biodiversity through ecosystem-based management approaches, conservation efforts, and sustainable environment and natural resources-based economic endeavours;	Prevention & Mitigation

2011-2016 Philippine Development Plan vis-a-vis Disaster Risk Reduction and Management (DRRM) and Climate Change Adaptation (CCA)			NDRRMP
Vision/Objective	Goal	DRR/CCA Strategies	Incorporated in the DRRM Priority Areas
value chains, and well-integrated in the domestic and international markets, contributing to inclusive growth and poverty reduction		Increase the resilience of the agriculture communities through the development of CC-sensitive technologies, establishment of climate-resilient agricultural infrastructure and climate-responsive food production systems, and provision of support services to the most vulnerable communities;	Prevention & Mitigation
		Strengthen the agriculture and fisheries insurance system as an important risk sharing mechanism;	Prevention & Mitigation
		Incorporate natural hazards and climate risk in the agricultural land use plan or the Comprehensive Land Use Plan (CLUP);	Prevention & Mitigation
		Strengthen the capacity of communities to respond effectively to climate risks and natural hazards; and	Preparedness
		Continue vulnerability and adaptation assessments especially in food production areas.	Prevention & Mitigation
<b>Chapter 5- Accelerating Infrastructure Development</b>			
Speed up the provision of safe, efficient, adequate, reliable, cost-effective and sustainable infrastructure	To adapt to climate change and mitigate the impacts of natural disasters	<p>Institutionalize DRR and CCA in infrastructure sector</p> <p><b>Water</b></p> <ul style="list-style-type: none"> <li>▪ Practice Integrated Water Resources Management;</li> <li>▪ Prioritize construction of flood management structures in highly vulnerable areas;</li> <li>▪ Apply DRR and CCA strategies in the planning and design of flood management structures;</li> <li>▪ Develop a mechanism to expedite immediate financing for the rehabilitation of flood management structures; and</li> <li>▪ Increase local government and community participation in DRR and CCA activities.</li> </ul>	<p>Prevention &amp; Mitigation</p> <p>Rehabilitation &amp; Recovery</p> <p>Prevention &amp; Mitigation</p> <p>Preparedness</p>

2011-2016 Philippine Development Plan vis-a-vis Disaster Risk Reduction and Management (DRRM) and Climate Change Adaptation (CCA)			NDRRMP
Vision/Objective	Goal	DRR/CCA Strategies	Incorporated in the DRRM Priority Areas
		<p><b>Energy</b></p> <ul style="list-style-type: none"> <li>▪ Intensify development and utilization of renewable energy and environment-friendly alternative energy resources/ technologies; and</li> <li>▪ Assess the vulnerability of energy facilities to climate change and natural disasters (e.g., El Niño and La Niña)</li> </ul>	Prevention & Mitigation
		<p><b>Transport</b></p> <ul style="list-style-type: none"> <li>▪ Institutionalize DRR and CCA strategies in the National Transport Policy</li> </ul> <p><b>Social Infrastructure</b></p> <ul style="list-style-type: none"> <li>▪ Develop and implement the appropriate standards in the construction of the housing units;</li> <li>▪ Explore the use of indigenous and recyclable materials that are environment-friendly to reduce costs and incorporate DRR and CCA concepts in building health facilities; and</li> <li>▪ Design and construction of disaster-resilient school buildings and classrooms</li> </ul>	Preparedness  Prevention & Mitigation Rehabilitation & Recovery
<b>Chapter 8 – Social Development</b>			
Improve general welfare through equitable access to adequate and quality social services and assets	Social protection – to empower and protect the poor, vulnerable and disadvantaged individuals, families and communities from individual life cycle,	<p>Mainstream DRR and CCA in social development interventions</p> <ul style="list-style-type: none"> <li>▪ Mainstream DRR and CCA on on-going researches on impact of climate change on diseases, like dengue; and</li> <li>▪ Introduce DRR and CCA in school curricula, alongside the promotion of green technology in constructing houses and social infrastructure and social safety nets for vulnerable groups, like farmers dependent on agriculture</li> </ul>	Prevention & Mitigation  Preparedness
<b>Chapter 9– Peace and Security</b>			
Advance peace process and guarantee national security	Improve response capability to non-traditional	Strengthen the role of the security sector in emergency relief and rescue operations to maintain public order and safety during calamities; and	Preparedness Response

2011-2016 Philippine Development Plan vis-a-vis Disaster Risk Reduction and Management (DRRM) and Climate Change Adaptation (CCA)			NDRRMP
Vision/Objective	Goal	DRR/CCA Strategies	Incorporated in the DRRM Priority Areas
	security concerns	Enhance mechanisms to improve alert warning and monitoring before and during disasters.	Prevention & Mitigation
<b>Chapter 10 - Conservation, Protection, &amp; Rehabilitation of Environment &amp; Natural Resources Towards Sustainable Development</b>			
An environment that is healthy, ecologically-balanced, sustainably productive, climate-change resilient and provides for present and future generations of Filipinos	Enhance resilience of natural systems and improved adaptive capacities of human communities to cope with environmental hazards including climate-related risks	<p><b>Strengthen institutional capacities of national and local governments for DRR and CCA:</b></p> <ul style="list-style-type: none"> <li>▪ Mainstream and integrate DRR and CCA in national, sectoral, regional and local development plans;</li> <li>▪ Grant a priority to mainstreaming DRR and CCA initiatives in budget allocation;</li> <li>▪ Adopt a responsive national and local legal and policy framework through multi-stakeholder dialogues;</li> <li>▪ Enhance the self-reliance of local DRRM councils and their ability to implement the program;</li> <li>▪ Devise cost-effective means to offset socio-economic losses from disasters;</li> <li>▪ Enhance national and local capacities for monitoring, forecasting, hazard identification, early warning, and risk evaluation and management;</li> <li>▪ Improve the post-disaster rehabilitation and development process;</li> <li>▪ Make the newly-established national DRRM fund more accessible to poor LGUs; and</li> </ul>	<p>Prevention &amp; Mitigation</p> <p>Prevention &amp; Mitigation</p> <p>Prevention &amp; Mitigation</p> <p>Preparedness</p> <p>Rehabilitation &amp; Recovery</p> <p>Prevention &amp; Mitigation</p> <p>Rehabilitation &amp; Recovery</p> <p>Preparedness</p>
		<ul style="list-style-type: none"> <li>▪ Harmonize the implementation of the DRRM Act and the Climate Change Act.</li> </ul>	Prevention & Mitigation

2011-2016 Philippine Development Plan vis-a-vis Disaster Risk Reduction and Management (DRRM) and Climate Change Adaptation (CCA)			NDRRMP
Vision/Objective	Goal	DRR/CCA Strategies	Incorporated in the DRRM Priority Areas
		<p><b><i>Enhance the resilience of the natural systems</i></b></p> <ul style="list-style-type: none"> <li>▪ Conduct vulnerability assessment and mapping of different ecosystems;</li> <li>▪ Issue guidelines for height review and approval of design proposals and projects that are climate change-resilient; under the EIA and risk assessment system of the EMB; and</li> <li>▪ Establish a network of protected areas in coordination with other LGUs based on ecological, social and economic considerations to address the impacts of human-induced factors and climate change.</li> </ul> <p><b><i>Improve adaptive capacities of communities</i></b></p> <ul style="list-style-type: none"> <li>▪ Conduct geohazard mapping and risk assessments especially for highly susceptible communities and areas for the formulation and implementation of DRRM plans;</li> <li>▪ Integrate DRR and CCA in all education levels and in specialized technical training and research programs;</li> <li>▪ Raise public awareness of DRR and formulate and implement a communication plan for DRR and CCA;</li> <li>▪ Use science-based tools and technologies to support decisions in identifying, preventing and mitigating potential disaster impacts;</li> </ul>	<p>Prevention &amp; Mitigation</p> <p>Prevention &amp; Mitigation</p> <p>Prevention &amp; Mitigation</p> <p>Prevention &amp; Mitigation</p> <p>Preparedness</p> <p>Preparedness</p> <p>Prevention &amp; Mitigation</p>
		<ul style="list-style-type: none"> <li>▪ Enhance disaster preparedness through multi-stakeholder coordination; and</li> </ul>	In all 4 priority areas

2011-2016 Philippine Development Plan vis-a-vis Disaster Risk Reduction and Management (DRRM) and Climate Change Adaptation (CCA)			NDRRMP
Vision/Objective	Goal	DRR/CCA Strategies	Incorporated in the DRRM Priority Areas
		<ul style="list-style-type: none"> <li>▪ Conduct an extensive IEC campaign for increased public awareness of DRR.</li> </ul>	Preparedness

## ANNEX D. The National Climate Change Action Plan (NCCAP) and the National Disaster Risk Reduction and Management Plan (NDRRMP)

Among the seven strategic objectives of NCCAP, **Ecosystem and Environmental Stability** and **Human Security** directly interphases with DRRM.

Human well-being is highly dependent on ecosystems and the benefits they provide. The ecosystem provides services to man resulting in the reduction of disaster risk. Ecosystem services are the benefits people obtain from ecosystems. Maintaining healthy and stable ecosystems is therefore a necessity especially in the midst of changing climates. Ecosystem services that reduces disaster risk can be sustained only if man continually protects and manages the environment in a sustainable way.

The PDP defines human security as the state where the rights of the Filipino family and individuals, especially the poor and vulnerable, are protected and promoted through access to education, health, housing and social protection, while ensuring environmental sustainability. Security concerns associated with climate change include the potential conflict over natural resources, population displacement and migration as the result of sea-level rise or other large-scale humanitarian disasters as the result of extreme climate events. The notion of human security amidst climate change risks, therefore, considers a state or condition where individuals and communities have the options necessary to end, mitigate or adapt to threats to their human, environmental and social rights; have the capacity and freedom to exercise these options, and actively participate in pursuing these options. The growing recognition that there may be an increasing number of disasters linked to floods, droughts and other climate influenced events calls for a much deeper and broader assessment of the connections between DRRM, CCA and human.

The table below summarizes the priority areas and actions under the Human Security and Ecosystem and Environmental Stability and how they are reflected in the NDRRMP:

NCCAP	NDRRMP
<b>Human Security Agenda</b>	
Conduct of provincial-level vulnerability and risk assessments	Prevention & Mitigation
Mainstream and implement local plans based on information from the vulnerability and risk assessment	Prevention & Mitigation
Develop and impelment knowledge management on CC and disaster risks	Cross-Cutting Concerns Strategies Prevention & Mitigation Preparedness
Increase local and community capacities for CCA-DRRM	
Integrate CC and DRR in the training of health personnel and community workers	
Improve system for health emergency preparedness and response for climate and disaster risks	
Improve system for post-disaster health management	
Develop a long term plan for adaptation of highly CC vulnerable population and climate refugees	Prevention & Mitigation
Extensive IEC program on CC risks and population management	Strategies Prevention & Mitigation Preparedness
<b>Ecosystem and Environmental Stability</b>	
Conduct a nationwide gendered ecosystem vulnerability and risk assessment	Cross-Cutting Concerns
Derive and implement mitigation and adaptation strategies for key ecosystems	Prevention & Mitigation

<b>NCCAP</b>	<b>NDRRMP</b>
Implement the national REDD Plus Strategy (NRPS)	N/A
Expand the network of protected areas (PAs) and key biodiversity areas (KBAs)	Prevention & Mitigation
Establish ecosystem towns or ecotowns in protected areas and key biodiversity areas	N/A
Design gender-fair innovative financing mechanisms and a bundle of CC adaptation assistance for ecotowns communities	Cross-Cutting Concerns
Implement moratorium on polluting and extractive industries in PAs, KBAs and other environmentally critical areas	Prevention and Mitigation
Increase knowledge and capacity for integrated ecosystem-based management at the national, local and community levels	Strategies Prevention and Mitigation Preparedness
Review and revise Philippine Economic-Environmental and Natural Resources Accounting	N/A
Implement training program on wealth accounting or ENRA for key government agencies	N/A

## ANNEX E. Development of the NDRRMP

The NDRRMP was developed right after the approval of the NDRRMF by the executive committee of the National DRRM Council on June 16, 2011. A National DRRM Plan Task Force was created by the members of the Technical Management Group of the NDRRMC. To ensure multi-stakeholder participation, representatives from the national government and line agencies (especially the 4 vice chair persons as prescribed by RA 10121), leagues of local government units, civil society organizations through the DRR Network Philippines, and regional DRRM Councils through the regional directors of the Office of Civil Defense were chosen to become members of the Task Force.

The Task Force first did a review the SNAP vis-a-vis RA 10121 and the NDRRMF and the HFA – looking into the progress of the SNAP implementation from 2009 to 2011 as well as the various country and agency reports on DRR-related activities. Alignments of these initiatives were then undertaken since most of these documents did not have a one-to-one correspondence in terms of monitoring and reporting progress.

With a working draft of the NDRRMP already done, a 3-day national workshop was conducted in Tagaytay on July 11 to 13, 2011 to gather all the members of the TMG and discuss and develop national DRRM Plan’s logical framework, including the various outcomes, outputs and activities under each priority area. After the writeshop, the first draft of the NDRRMP was developed.

Since the first draft was submitted, the plan has undergone rigorous discussions and revisions by the members of the Task Force’s Core Group. The Core Group was created in order to have more in-depth discussion under each of the priority areas and across them, ensuring the mutual reinforcement and complementation of the four DRRM aspects with each other. The Core Group also discussed and developed the different parts of the Plan to include, among others, the monitoring and evaluation processes; implementation arrangements; resource mobilization and other key parts of the NDRRMP.

Once adopted by the members of the TMG, draft #3 of the NDRRMP will then be presented to the members of the executive committee National DRRM Council for their approval.

### *General Considerations and Planning Assumptions*

In the development of the NDRRMP, a number of external factors were considered which are likely to influence the success of the plan and its components. These are factors which the national government has little control over.

The **assumptions** include the following:

1. Good governance/strong political will
2. Resource availability
3. Enabling policies mechanisms in place
4. Availability of international/local organizations assistance
5. Strong public-private partnership
6. Strong support from LGUs
7. Presence of project management capacity
8. Sustainability of socio-economic support
9. Resource availability
10. Full-mission capabilities of Search and Rescue (SAR) Units of the Armed Forces of the Philippines (AFP), Philippine National Police (PNP), LGUs, and other agencies

11. Established parameters as an assessment tool for the measurement of effectiveness of Humanitarian Assistance and Disaster Relief (HADR) operations

The *risks* include the following:

1. Non-implementation of policy
2. Political
  - a. Lack of political will
  - b. Weak leadership
  - c. Weakened delivery mechanisms and structures among LGUs
3. Operational/Tactical
  - a. Disruption on peace and order
  - b. Delayed program/project implementation
  - c. Recurrence of disaster
  - d. Search and Rescue Units/Teams are not full-mission capable (in terms of manning, training, equipage)
4. Administrative
  - a. No action taken on recommended corrective measures
  - b. Access to timely release of funding
5. Cultural differences

#### *Means of Verification*

Likewise, a number of ways were identified to help **verify** the completion or non-completion of the activities in each of the priority areas. These are information or data required to assess the progress against the indicators and their sources, to include:

1. Attendance sheets
2. Database
3. Documents produced (i.e., teachers' manual, textbooks; plans; IECs; training materials)
4. DRRM and CCA related laws, policies and/or ordinances
5. Evaluation reports (status) and feedback
6. IEC materials developed
7. Interviews
8. Inventory report
9. Memorandum circular (MC)/Joint MC or publication of the policy
10. Memo and/or resolutions
11. Minutes of meeting
12. Post training evaluations
13. Resolutions, ordinances issued by LGUs
14. Signed memoranda of understanding (MOUs)/memoranda of agreement (MOAs)
15. Validated reports

ANNEX F. Narrative Summary of the National Disaster Risk Reduction and Management Plan (NDRRMP), 2011-2028

**Thematic Area 1: Prevention and Mitigation**

OVERALL RESPONSIBLE AGENCY: DOST

<u>Objectives</u>	<u>Objectively Verifiable Indicators</u>	<u>Outcomes</u>
1. Reduce vulnerability and exposure of communities of all hazards	% of reduction of loss of lives, livelihood and assets % of communities in high risks areas reduced % of reduction in poverty incidence	1. DRRM and CCA mainstreamed and integrated in national, sectoral, regional and local development policies, plans and budget 2. DRRM and CCA-sensitive environmental management 3. Increased disaster resiliency of infrastructure systems
2. Enhance capacities of communities to reduce their own risks and cope with the impacts of all hazards.	No. of communities participating in risk reduction activities No. of communities with increased awareness.	4. Community based and scientific DRR-CCA assessment, mapping, analysis and monitoring 5. Communities have access to effective and applicable disaster risk financing and insurance 6. End-to-End monitoring, forecasting and early warning systems are established and/or improved

In summary, Disaster Prevention and Mitigation aims to achieve the following outcomes:

**1. DRRM and CCA mainstreamed and integrated in national, sectoral, regional and local development policies, plans and budget**

DRRM is not and should not be a stand-alone program in any government or country. Hence, it should be mainstreamed and integrated into national and local policies, plans and programs, including budgets. At the local level, DRRM and CCA need to be mainstreamed into the LGUs' provincial development and physical framework plans (PDPFPs), Comprehensive Development Plans (CDPs) and Comprehensive Land Use Plans (CLUPs).

Key activities

- ✓ Mainstreaming and integration of DRRM and CCA into national, sectoral, regional and local development policies, plans, programs and budget, especially in regional physical framework plans (RPFs), PDPFPs, CDPs and CLUPs.
- ✓ Development of science-based mainstreaming tools for DRRM and CCA
- ✓ Institutionalization of Disaster Risk Reduction and Management Councils (DRRMCs) and Disaster Risk Reduction and Management Offices (DRRMOs)
- ✓ Utilization of the Local DRRM Funds

**2. DRRM and CCA-sensitive environmental management**

Disaster risk reduction should be an integral objective of environment related policies and plans, including for land use, natural resource management and climate change adaptation.

#### Key activities

- ✓ Integration of DRRM and CCA in the different environment-related policies and plans, including for land use, natural resource management
- ✓ Development of a joint work-plan and alignment of the NDRRMP and the National Climate Change Adaptation Action Plan (NCCAAP)

### **3. Increased disaster resilience of infrastructure systems**

Urban disasters are among the country's growing concerns in DRRM. With the exponential increase of poor people living in highly congested urban communities surrounded by old, unstable and highly vulnerable buildings, attention to how risks can be reduced in horizontal and vertical infrastructure systems need to be emphasized.

#### Key activities

- ✓ Conduct of inventory, vulnerability and risk assessments of critical facilities
- ✓ Develop guidelines on the redesign, retrofitting or operational modifications of infrastructure
- ✓ Integration of DRRM and CCA in the building code, subdivision code and zoning, or other relevant regulations.
- ✓ Advocacy for the strict or effective implementation of the building code and use of green technology

### **4. Community based and scientific DRR-CCA assessment, mapping, analysis and monitoring carried out**

To be a more effective guide in national and local planning, a combination of community-based and scientific DRR/CCA hazard and risk mapping will be a priority. Through this, not only will the findings be validated, communities will be able to participate and take part in knowing about the different factors which increase their risks and exposure to disasters as well as be involved in the process of assessment, analysis and the conduct of monitoring activities.

#### Key activities

- ✓ Conduct of hazard mapping and vulnerability assessments
- ✓ Conduct of studies on disaster risk prevention interventions for armed conflict situation and climate change effects
- ✓ Establishment of a knowledge management center within the OCD which will also conduct capacity building and research activities on DRRM
- ✓ Information dissemination through partnerships with various media

### **5. Communities have access to effective and applicable disaster risk financing and insurance**

Risk transfer mechanisms through disaster risk financing and insurance contributes to the prevention and mitigation of disasters, especially at the community level. Through this, their vulnerabilities are lessened through the options and safeguards available to them.

#### Key activities

- ✓ Conduct research and development of new modalities for risk financing schemes
- ✓ Develop advocacy and risk communication plan to encourage communities to avail of risk financing options
- ✓ Update the directory of available risk financing windows of LGUs

**6. People-centered end-to-end monitoring, forecasting and early warning systems (EWS) are established and/or improved**

As defined under Republic Act 10121, EWS is the set of capacities needed to generate and disseminate timely and meaningful warning information to enable individuals, communities and organizations threatened by a hazard to prepare and to act appropriately and in sufficient time to reduce the possibility of harm or loss. A people-centered EWS consists of four elements: (a) the knowledge of the risks; (b) monitoring, analysis and forecasting of the hazards; (c) communication or dissemination of alerts and warnings; (d) and local capabilities to respond to the warnings received. “End-to-end” emphasizes the fact that all steps from hazard detection to community response are incorporated into the system.

Key activities

- ✓ Develop and institutionalize EWS information sharing and communication systems between LGUs, communities and national government
- ✓ Develop criteria for accreditation and/or standardized EWS
- ✓ Procure equipment and establish EWS facilities
- ✓ Develop community-based and local early warning systems for various hazards

**Thematic Area 2: Disaster Preparedness**

OVERALL RESPONSIBLE AGENCY: DILG

<u>Objectives</u>	<u>Objectively Verifiable Indicators</u>	<u>Outcome</u>
1. To increase level of awareness of the community to the threats and impacts of all hazards, risks and vulnerabilities		1.1. Increased level of awareness and enhanced capacity of the community to the threats and impacts of all hazards
2. To equip the community with the necessary skills to cope with the negative impacts of a disaster		2.1. Communities are equipped with necessary skills and capability to cope with the impacts of disasters
3. To increase the capacity of institutions		3.1. Increased DRRM and CCA capacity of LDRRM Councils and Offices and Operations Center at all levels
4. To develop and implement comprehensive national and local disaster preparedness policies, plans and system		4.1. Developed and implemented comprehensive national and local preparedness policies, plans, and systems
5. To strengthen partnership among all key players and stakeholders		5.1. Strengthened partnership and coordination among all key players and stakeholders

In summary, Disaster Preparedness aims to achieve the following outcomes:

**1. Increased level of awareness and enhanced capacity of the community to the threats and impacts of all hazards**

In most cases, people and communities are vulnerable to disasters because of lack of information about the hazards; how to prepare for them; and how to reduce the risks of the hazards affecting their lives and livelihoods. When their level of awareness and understanding are increased, people are more prepared.

Key activities

- ✓ Develop DRRM and CCA information, education, communication (IEC) and advocacy plans

**2. Communities are equipped with the necessary skills and capability to cope with the impact of disasters**

Being aware is not enough. People, communities and governments need to be equipped with skills and capability to help them prepare for disasters. This includes, among others, development of contingency plans, pre-emptive evacuation, incident command systems, stockpiling and equipment pre-positioning. Undertaking disaster preparedness entails a process that analyzes a potential event that threatens a community and the environment and defines the root cause/s of the potential event. It not only establishes arrangements in advance to enable timely, effective and appropriate responses to such events and situations but it, too, identifies and plans for DRR strategies to address an imminent threat to life and property.

Key activities

- ✓ Development of standard DRRM training modules
- ✓ Conduct of training and simulation exercises
- ✓ Customized and specialized DRRM capacity building activities for specific groups (i.e., decision makers, responders, children, public sector employees, etc)
- ✓ Integration of DRRM and CCA in school curricula, textbooks, and manuals

**3. Increased DRRM and CCA capacity of local DRRM councils and offices and operations centers at all levels**

In order for the community to be equipped with necessary skills to cope with the negative impacts of a disaster, skills and capacity building and conduct of various drills are necessary. Through these, people will become prepared and at the same time lessen their fear of not knowing what to do and where to go when disasters strike.

Key activities

- ✓ Selection and accreditation of NGO representatives and volunteer groups
- ✓ Development of the Local DRRM plan
- ✓ Development of contingency plans
- ✓ Inventory of resources of the Local DRRM Councils and Offices
- ✓ Stockpiling and pre-positioning of resources
- ✓ Establishment of DRRM Operations Center

**4. Developed and implemented comprehensive national and local preparedness policies, plans and systems**

The actions and responses of communities and governments during disasters lie heavily on the amount of preparedness activities they do before the disaster happens. The development and implementation of comprehensive and coordinated preparedness policies, plans and systems

spell the difference between reduced and increased risks. When the capacity of institutions is increased, response operations will become more efficient, effective, and timely.

Key activities

- ✓ Develop and/or enhance and simulate scenario-based preparedness and response plans
- ✓ Develop and/or enhance ICS coordination and communication systems
- ✓ Develop and/or enhance a manual of operations for Disaster Operations Centers
- ✓ Develop and/or enhance guidelines for emergency response teams
- ✓ Develop and/or enhance agreed protocols for information gathering and reporting
- ✓ Develop and/or enhance common and integrated response assessment tools and mechanisms
- ✓ Conduct inventory of resources for disaster operations and response

**5. Strengthened partnership and coordination among all key players and stakeholders**

For DRRM to succeed, an all-of-government approach is needed. Key DRRM players and stakeholders should work together and complement their activities, strengths and resources in order to aptly prepare for and reduce the risks to disasters.

Key activities

- ✓ Development, maintenance and update of partner’s and key stakeholder’s database for DRRM
- ✓ Formulate coordination mechanisms and guidelines in the contingency plan for partnership arrangements
- ✓ Increased participation of CSOs in preparedness activities

**Thematic Area 3: Disaster Response**

OVERALL RESPONSIBLE AGENCY: **DSWD**

<u>Objectives</u>	<u>Objectively Verifiable Indicators</u>	<u>Outcomes</u>
1. To decrease the number of preventable deaths and injuries	Number of deaths, injured, and missing	1.1. Well-established disaster response operations 1.2. Adequate and prompt assessment of needs and damages at all levels 1.3. Integrated and coordinated Search, Rescue and Retrieval (SRR) capacity 1.4. Affected communities are evacuated safely and on time
2. To provide basic subsistence needs of affected population	Number of persons served Number of restored basic services	2.1. Temporary shelter and/or structural needs are adequately addressed 2.2. Basic social services

<u>Objectives</u>	<u>Objectively Verifiable Indicators</u>	<u>Outcomes</u>
3. To immediately restore basic social services		<p>provided to affected population whether inside or outside ECs</p> <p>2.3. Psychosocial needs of affected population addressed</p> <p>3.1. Coordinated and integrated system for early recovery</p>

In summary, Disaster Response aims to achieve the following outcomes:

**6. Well-established disaster response and relief operations**

Key to effective disaster response operations is the recognition of the importance of a seamless flow of information especially during calamities. This will ensure that reliable, accurate data are collected and shared in a timely manner in order to contribute to effective disaster response operations.

Key activities

- ✓ Activation of the Incident Command Systems (ICS) and C3 at the national and local levels
- ✓ Issuance of public advisories in accordance with protocols developed
- ✓ Establishment of coordination systems for effective and efficient relief and response operations
- ✓ Activation of relief distribution points/centers

**7. Adequate and prompt assessment of needs and damages**

Adequate and prompt assessment of damage and needs during and after a disaster is called for. Accordingly, this includes a timeframe (i.e., 24-48 hrs.) for damage and needs assessment (DANA) to be considered as “rapid.” Gathering data, conduct of interviews, ocular inspection, and creation of reports are among the key activities. In order to promptly produce and submit DANA Report, a DANA Team must be pre-created during normal times (under preparedness) and activated during disasters. The effectiveness of disaster response operations lies on the efficient and prompt information collection, consolidation, analysis, and use.

Key activities

- ✓ Activation of assessment teams at all levels
- ✓ Conduct of assessment, using the latest DANA tool and use of the information by the appropriate DRRM council

**8. Integrated and coordinated Search, Rescue and Retrieval (SRR) capacity**

Management of the dead and missing may be one of the most difficult aspects under disaster response. It has deep and long-lasting impact on victims, survivors, families, and communities. Accordingly, the care of the dead and missing must never be overlooked in disaster planning. There must be integrated and coordinated services for the dead and missing to ensure that the dead maintain its dignity and the missing, found.

#### Key activities

- ✓ Develop and implement systems for SRR with concerned agencies

### **9. Safe and timely evacuation of affected communities**

The decision to evacuate an area must be done promptly. Timing is essential to an orderly, safe, and effective evacuation. Authorities must ensure that no person gets stranded; all those who want/need evacuation must be attended to. Though timing is essential, it is not only the factor that contributes to successful evacuation operations. The availability of logistics is also a key consideration; the scale of disaster itself (e.g., inclement weather) is also important. Accordingly, there must be regular coordination with relevant agencies to ensure seamless activation of evacuation system/procedures.

#### Key activities

- ✓ Activate an evacuation system and/or set of procedures

### **10. Temporary shelter and/or structural needs are adequately addressed**

Disasters leave many people homeless. Temporary shelters in some ways provide a measure of comfort and safety for victims. The provision of adequate temporary shelters is of invaluable importance during cataclysmic times. Many factors need to be considered when designing, siting, building and removing/storing temporary shelters. As a temporary “home” for people, it is also a place of safety for sources of livelihoods and important valuables to find refuge in times of disasters.

#### Key activities

- ✓ Identification of standard-based relief shelters and sites
- ✓ Provision of tents and other temporary shelter facilities
- ✓ Development and implementation of a set of minimum standards on temporary shelters
- ✓ Establishment of women and child-friendly spaces and other learning areas in the evacuation centers
- ✓ Provision of spaces for people’s livestock, poultry and pets in the ECs
- ✓ Conduct of livelihood-oriented activities for internally displaced persons

### **11. Basic social services provided to affected population (whether inside or outside evacuation centers (ECs))**

Ultimately, the well-being of affected people may be compromised after a calamity. Critical lifelines (e.g. water system) may break down; restoration may take time. People living in evacuation centers may also have no access to proper nutrition. There is a need to safeguard the health and well being of affected communities.

#### Key activities

- ✓ Conduct of medical consultation and nutritional assessment
- ✓ Assessment of water quality and conduct of quick damage repairs and road clearing operations
- ✓ Determination of existing and available hospital services
- ✓ Immediate restoration of lifelines

### **12. Psychosocial needs of affected population addressed**

After a disaster, some of the victims may need professional help to normalize their feelings, overcome trauma and find ways to cope with their ongoing stress. Mental Health and Psychosocial Services (MPHSS) must therefore be provided in order to address the psychosocial needs of affected population. Aside from ensuring the physical and mental well-being of

disaster victims, it is equally important to preserve the dignity of evacuees especially the elderly, person with disabilities, women and children. Gender roles and rights should always be ensured.

Key activities

- ✓ Ensure coordination among heads of MPHSS
- ✓ Development and conduct of psychosocial programs and/or referral systems
- ✓ Conduct of traumatic and/or psychological stress debriefings

**13. Coordinated and integrated system for early recovery**

There must be a functional, integrated, and coordinated system to assist victims all the way through their early recovery. Success of such endeavor is dependent on both the national and local governments’ level of political commitment. Early recovery is the transition period which starts immediately after the onset of the disaster. It is the priority to produce immediate results for vulnerable populations and to promote opportunities for recovery. The overall response evolves over time into longer term recovery.

Key activities

- ✓ Conduct of post-DANA
- ✓ Develop and implement a system for early recovery, to include specific activities addressing the needs identified
- ✓ Develop partnership mechanisms with utility providers and key stakeholders
- ✓ Design and implement temporary livelihood and/or income generating activities (i.e., cash/ food for work; micro and small enterprise recovery)

**Thematic Area 4: Rehabilitation and Recovery**

OVERALL RESPONSIBLE AGENCY: NEDA

<u>Objectives</u>	<u>Objectively Verifiable Indicators</u>	<u>Outcome</u>
1. To restore the people means of livelihood and continuity of economic activities and business	Assistance provided to sectors affected (e.g., for agriculture, assistance will be in terms of credit and technical support)	1.1. Economic activities restored and if possible, strengthened or expanded
2. To restore shelter and other buildings/ installation	Government housing assistance provided such as loans for housing repair  Population of people from hazard-prone areas relocated to safe areas	2.1. Houses rebuilt or repaired to be more resilient to hazard events; safer sites for housing
3. To reconstruct infrastructure and other public utilities;	Essential services such as electricity, water and communications restored  Infrastructures facilities rehabilitated or reconstructed	3.1. Disaster and climate change-resilient infrastructure constructed/reconstructed

<u>Objectives</u>	<u>Objectively Verifiable Indicators</u>	<u>Outcome</u>
4. To assist in the physical and psychological rehabilitation of persons who suffered from the effects of disaster.	<p>No. of people who are undergoing traumatic debriefing</p> <p>Percentage of the population undergoing psychological stress debriefing</p> <p>Percentage of vulnerable population provided with adequate and appropriate risk protection measures</p>	4.1. A psychologically sound, safe and secured citizenry that is protected from the effects of disasters able to restore to normal functioning after each disaster

In summary, Rehabilitation and Recovery aims to achieve the following outcomes:

#### **14. Damages, Losses and Needs Assessed**

An assessment or accounting of damages, losses and needs will be the basis for identifying programs, projects and activities for the disaster-affected areas.

##### Key activity

- ✓ Conduct Post-Disaster Needs Assessment (PDNA) one month after the occurrence of a disaster, with the OCD taking the lead and using as basis the preliminary data gathered from the field by OCD regional offices.
- ✓ Coordinate the formulation of the Strategic Action Plan for disaster-affected areas

#### **15. Economic activities restored and if possible, strengthened or expanded**

The ability of people affected by disasters to bounce back easily lie heavily on the restoration of their sources of income and livelihood opportunities. By identifying what the existing situation is, the government can respond with the appropriate programs that will enable the people to build back better after the disaster.

##### Key activities

- ✓ Identify the needed assistance and formulate and implement appropriate programs
- ✓ Identify and mobilize funding sources

#### **16. DRRM and CCA elements mainstreamed in human settlements**

This is about the development of disaster-resilient housing designs and introduction of improved and modernized building systems and programs. It also includes, among others, the identification of secure relocation sites for people displaced by natural and human-induced disaster of those living in hazardous areas.

##### Key activities

- ✓ Design and construct disaster resilient housing
- ✓ Identify and provide suitable relocation sites for affected population
- ✓ Conduct trainings for social preparation of host communities and those who will be relocated to reduce conflict

**17. Disaster and climate change resilient infrastructure constructed/reconstructed**

Long term recovery ensures that the rehabilitation or reconstruction of infrastructures is disaster and climate-proof.

Key activities

- ✓ Undertake the necessary rehabilitation or repair of damaged infrastructure
- ✓ Implement the building code and other relevant codes and promote green technology
- ✓ Conduct monitoring and/or tracking of approval of infrastructure projects and permits

**18. Psychologically sound, safe and secured citizenry that is protected from the effects of disasters are able to restore to normal functioning after each disaster**

Disasters are devastating and usually leave a trail of human agonies including loss of human life, livestock, property, and livelihood loss, physical injuries and damages to development works. Along with relief, rehabilitation and care of physical health and injuries, psychosocial and mental health issues are also important and they need to be addressed. Emergencies also create a wide range of problems experienced at the individual, family, community and societal levels.

Key activities

- ✓ Develop systems for appropriate risk protection measures
- ✓ Conduct post-disaster/conflict needs analyses with affected communities
- ✓ Develop systems of support and communication among key stakeholders
- ✓ Build capacities of psychosocial care providers

## Annex G. Glossary

This document adopts the UNSIDR definitions, which were also the bases for the definition of terms under RA 10121. Those not included in the latter are defined below.

Terminology	Definition
Capacity development	The process by which people, organizations and society systematically stimulate and develop their capacities over time to achieve social and economic goals, including through improvement of knowledge, skills, systems and institutions. It extends the term of capacity building to encompass all aspects of creating and sustaining capacity growth over time. It involves learning and various types of training but also continuous efforts to develop institutions, political awareness, financial resources, technology systems and the wider social and cultural enabling environment. (UNISDR, 2009)
Contingency Plan	A plan which includes management processes that analyzes specific potential events or emerging situations that might threaten potential events or emerging situations that might threaten society or the environment and establishes arrangements in advance to enable timely, effective and appropriate responses to such events and situations. It is a set of responses you will do based on valid information even before the disaster strikes. It is a sub-set of the comprehensive plan.
Crisis	From the greek word <i>krises</i> , means “to separate.” It is a turning point in progress of an affair or a series of events. A progressive sequence of events, build-up of instability and growth of tension
Critical facilities	The primary physical structures, technical facilities and systems which are socially, economically or operationally essential to the functioning of a society or community, both in routine circumstances and in the extreme circumstances of an emergency. They include such things as transport systems, air and sea ports, electricity, water and communications systems, hospitals and health clinics, and centers for fire, police, and public administration services (Terminology on DRR. UNISDR, 2009)
Damage and Loss Assessment (DALA)	This methodology was developed by the UN Economic Commission for Latin America and the Caribbean (UN-ECLAC) and is used to estimate the effects and impacts of natural hazards. It bases the assessment of disaster impacts on the overall economy of the affected country as well as on household level and provides a basis for defining the needs for recovery and reconstruction following any disaster. It estimates (a) the replacement value of totally or partially destroyed physical assets that must be included in the reconstruction program; (b) losses in the flows of the economy that arise from the temporary absence of the damaged assets; and (c) the resulting impact on post-disaster economic performance growth, the government’s fiscal position and the balance of payments. (Focus. ECLAC Newsletter Issue 4, October – December 2008)
Damage Assessment and Needs Analysis	Damage assessment is of the greatest importance in obtaining a rapid diagnosis of the remaining functions and operational capacity of the systems, the damage suffered, its causes and required repairs and rehabilitation. Such an assessment

Terminology	Definition
(DANA)	will help to locate and quantify the needs that must be met in order to establish key services and to estimate the time needed until they can be back in operation. (PAHO/WHO)
Emergency	From the Latin word <i>emergentia</i> meaning a dipping or plunging. A sudden condition or state of affairs calling for immediate action.
Hazard Mapping	Process of establishing geographically where and to what extent particular hazards/phenomena are likely to pose a threat to people, property, infrastructure and economic activities
Humanitarian Principles	The UNOCHA define humanitarian through the following principles which provide the fundamental foundations for humanitarian action: <ul style="list-style-type: none"> <li>(a) Humanity – Human suffering must be addressed wherever it is found. The purpose of humanitarian action is to protect life and health and ensure respect for human beings;</li> <li>(b) Neutrality – Humanitarian actors must not take sides in hostilities or engage in controversies of a political, racial, religious or ideological nature;</li> <li>(c) Impartiality – Humanitarian action must be carried out on the basis of need alone, giving priority to the most urgent cases of distress and making no distinctions on the basis of nationality, race, gender, religious belief, class or political opinions;</li> <li>(d) Operational Independence – Humanitarian action must be autonomous from the political, economic, military or other objectives that any actor may hold with regard to areas where humanitarian action is being implemented</li> </ul>
Incident Command System (ICS)	A systematic tool used for the command, control, and coordination of emergency response. It is a set of personnel, policies, procedures, facilities, and equipment, integrated into a common organizational structure designed to improve emergency response operations of all types and complexities. It is based upon a flexible, scalable response organization providing a common framework within which people can work together effectively. ICS has been summarized as a "first-on-scene" structure, where the first responder of a scene has charge of the scene until the incident has been declared resolved, a superior-ranking responder arrives on scene and receives command, or the Incident Commander appoints another individual Incident Commander. (US Center for Excellence in Disaster Management & Humanitarian Assistance)
Preparedness Plans	There are 2 types of disaster preparedness plans. One is focused on the various activities that need to be done to ensure proper and timely disaster response operations. The other one is focused on the safety of the people and plans to increase their level of awareness and preparedness in case disasters happen.
Risk communication	Interactive exchange of information about risks among risk assessors, managers, news, media, interested groups and the general public (IPCS Risk Assessment Terminology. WHO, Geneva 2004)

