

Capacity Needs Assessment for Disaster Preparedness and Response in the Philippines

Submitted to the UN World Food Programme – Philippines

May 1, 2011

www.emi-megacities.org



© Earthquakes and Megacities Initiative (EMI) and World Food Programme (WFP). 2011.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without prior permission. Requests for permission to reproduce for noncommercial distribution should be addressed to the Partnerships and Communications Unit of the WFP in the Philippines. This publication or any part thereof may be only be used without prior permission from EMI and WFP, provided that it is for educational or personal use only and that any reproduction of this publication or extract therefrom reproduced is attributed to EMI and WFP and the title of this publication is stated in any publication and that a copy thereof is sent to WFP.

The opinions expressed in this publication are those of the authors and do not necessarily represent those of EMI nor of WFP. The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of EMI and WFP concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. All reasonable precautions have been taken by EMI and WFP to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either express or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall EMI or WFP be liable for damages arising from its use.

About the project

This project is funded by the United Nations World Food Programme (UNWFP), Philippines and implemented by EMI. The main objective of the project is to map existing capacity development activities for disaster risk reduction, identify key gaps in capacity and recommend specific areas of intervention at the national level and in four (4) highly disaster-prone provinces in Luzon. The outcome of this capacity needs assessment will inform UNWFP as it is preparing to implement a 12-month project to enhance the capacity of communities and key government agencies on disaster preparedness and response, which is funded by the United State Agency for International Development (USAID)/Office of Foreign Disaster Assistance (OFDA).

United Nations World Food Programme, Philippines

5/F GC Corporate Plaza, 150 Legazpi St., Legazpi Village, Makati City 1229 Philippines

Telephone: +63-2-7502561, 7519166, 8942730; Fax: +63-2-7502562

E-mail: wfp.manila@wfp.org; URL: www.wfp.org/countries/philippines

Earthquakes and Megacities Initiative

2/F Puno Bldg., 47 Kalayaan Ave., Diliman, Quezon City 1101 Philippines

Telefax: +63-2-9279643, +63-2-4334074;

E-mail: info@emi-megacities.org; URL: www.emi-megacities.org

Contributors

Dr. Fouad Bendimerad, Chairman and Executive Director

Mr. Jerome Zayas, Technical Manager

Mr. Jose Mari Daclan, Project Manager

Atty. Violeta Seva, Legal and Institutional Expert (Local)

Dr. Asteya Santiago, Legal and Institutional Expert (National)

Dr. Antonio Fernandez, Capacity Needs Assessment Expert (National)

Mr. Marino Deocariza, Capacity Needs Assessment Expert (Local)

Mr. James Buika, Disaster Preparedness and Response Trainer

Mr. Leigh Lingad, Provincial Coordinator, Laguna

Mr. Moses Kent Borinaga, Provincial Coordinator, Cagayan

Mr. Jerome Cruz, Provincial Coordinator, Benguet

Ms. Joyce Lyn Salunat, Provincial Coordinator, Sorsogon

Mr. Jesus Dominic Dizon, Support Staff, Sorsogon

Acknowledgments

A number of organizations and individuals supported the conduct of the Capacity Needs Assessment for Disaster Preparedness and Response and are hereby being acknowledged. We apologize for any persons or institutions that may have unintentionally been omitted.

United Nations World Food Programme, Philippines

Mr. Stephen Anderson, Country Director
Mr. Aomo Asaka Nyangara, Deputy Country Director
Mr. Dipayan Bhattacharyya, Head, Food Security
Mr. Abraham Sewonet Abatneh, Programme Officer
Ms. Carla Lacerda, Programme Officer
Mr. Juan Blenn Huelgas, Senior National DRR Consultant
Mr. Juanito Berja, GIS Specialist
Ms. Natasha Jaro, Field Monitor
Mr. Joseph Alviar, Field Monitor
Ms. Saripa Alangadi, Field Monitor
Ms. Ruby Senin, Field Monitor

Department of the Interior and Local Government

Mr. Manuel Gotis, Director, Bureau of Local Government Development (BLGD)
Mr. Lionel Dalope, OIC -Provincial Director, Laguna
Mr. Edward Templonuevo, BLGD
Ms. Ngen Mejillano, BLGD
Ms. Thelma Abdulrahman, BLGD

Department of Social Welfare and Development

Dir. Patricia Luna, Program Management Bureau
Dir. Arnel Garcia, Regional Field Office (RFO) 2
Mr. Dario Cubelo, Deputy Project Manager, UNDP-Bicol Recovery Project
Ms. Annabel Arieta, Head, Rehabilitation and Early Recovery Unit
Ms. Evangeline Tuazon, Head, Special Concerns Unit
Ms. Amada Dimaculangan, Project Development Officer
Engr. Honesto Pardo, Project Development Officer
Mr. Adrian Aldea, Social Welfare Officer
Mr. Franco Lopez, RFO 2

Office of Civil Defense

Atty. Priscilla Duque, Asst. Civil Defense Executive Officer/Chief, Training Division
Ms. Crispina Abat, Chief, Planning Division
Ms. Olivia Lucas, Regional Director, Cordillera Administrative Region
Ms. Norma Talosig, Regional Director, Region 2
Mr. Vicente Tomazar, Regional Director, Region 4-A
Mr. Bernardo Rafaelito Alejandro IV, Regional Director, Region 5
Mr. Jomel Merano, Training Division
Mr. Ronald Villa, Cordillera Administrative Region
Mr. Florito Dapena Sr., Region V

League of Cities of the Philippines (LCP)

Mr. Alvidon Asis, Program Officer for Environment

Ms. Ma. Veronica Hitoris, Program Officer for Policy

Union of Local Authorities of the Philippines (ULAP)

Mr. Patricio de Quiros, Finance and Administration Head

Benguet Provincial Government

Hon. Nestor Fongwan, Governor

Hon. Cresencio Pacalso, Vice Governor

Engr. Tuho Chapdian, Provincial Planning and Development Coordinator

Ms. Rosemary Badival, Support Staff, Provincial Planning and Development Office (PPDO)

Engr. Mike Epie, Support Staff, PPDO

Ms. Rosemarie Para-Melecio, Support Staff, PPDO

Municipality of Atok

Hon. Peter Albos, Mayor, Municipality

Hon. Marson Lay-At, Vice Mayor

Ms. Julie Sabado, Municipal Social Welfare Officer (MSWDO)

Municipality of Tublay

Hon. Ruben Paoad, Mayor

Cagayan Provincial Government

Hon. Alvaro Antonio, Governor

Ms. Edna T. Junio, Provincial Social Welfare and Development (PSWD) Officer

Mr. Bonifacio Cuarteros, Division Chief, PSWD Office

Mr. Restituto Vargas, Support Staff, PSWD Office

Ms. Rosario B. Manrac, Support Staff, PSWD Office

Mr. Leopoldo Caronan, Head, General Services Office

Municipality of Enrile

Mr. Arhel Isidro Luyun, Municipal Administrator

Ms. Erlinda Apolisin, MSWDO

Municipality of Amulung

Hon. Nicanor de Leon, Mayor

Hon. Anastacio Morgano, Vice Mayor

Ms. Myrna Matias, MSWDO

Laguna Provincial Government

Hon. Emilio Ramon Ejercito, Governor

Mr. Leonardo Montecillo, PSWD Officer

Mr. Valentin Guidote, Jr., Provincial Planning and Development Coordinator

Engr. Jen Sorel Jasareno, Provincial Disaster Risk Reduction and Management (DRRM) Officer

Capt. Jonas Javier, Chief Provincial Disaster Preventive Action Officer

Mr. Romeo Panisales Jr., Social Welfare Officer IV

Municipality of Pila

Hon. Edgardo Ramos, Mayor

Hon. Ricardo Batingal, Councilor
Ms. Cristina Saquilayan, MSWDO

Municipality of Mabitac

Hon. Gerardo Fader, Mayor
Hon. Ronald Sana, Vice Mayor
Ms. Buenafe Recio, MSWDO
Mr. Samuel Recio, Sangguniang Bayan Secretary

Sorsogon Provincial Government

Hon. Raul Lee, Governor
Mrs. Sally Lee, Former Governor
Mr. Jose F. Lopez, Officer in Charge, Sorsogon Province Disaster Risk Management Office (SPDRMO)
Ms. Cristina Racelis, Provincial Tourism Officer
Ms. Amy Maria Deniega, Executive Assistant III, Office of the Public Governance System
Mr. Von Andre Labalan, Public Information Officer, SPDRMO
Ms. Vivian Sincero, SPDRMO
Mr. Dante Bonos, SPDRMO

Municipality of Juban

Hon. Jimmy Fragata, Mayor
Ms. Lizpeth Nicolas, Municipal DRRM Officer
Mr. Romeo Higuít, Municipal Planning and Development Office (MPDO)
Mr. Eduardo Liparamon, MPDO

Municipality of Irosin

Hon. Eduardo Ong, Mayor
Hon. Roque Dorotan, Municipal Councilor
Mr. Edwin Garcia, Municipal Administrator
Mr. Edilberto Elorza, Municipal DRRM Officer
Mr. Noel Mercado II, Municipal Planning and Development Officer
Ms. Jerelle Marquez, Municipal Information Officer
Engr. Ben Gabionza, Municipal Engineer

Table of Contents

I.	Executive Summary	9
A.	Objectives.....	9
B.	Methodology	9
C.	Identified gaps	10
D.	Recommendations	12
E.	Strategic Plan and Implementation Process.....	13
II.	Introduction	20
A.	Scope and objectives of the capacity needs assessment.....	20
B.	Methodology	21
C.	Summary of activities.....	31
III.	Review of Policy and Institutional Environment.....	32
A.	Policy Context.....	32
B.	Institutional Environment of DRRM.....	37
IV.	Review of Relevant Capacity Assessments.....	42
A.	Paradigm shift.....	42
B.	Integration of DRR and CCA.....	43
V.	National Level Assessment.....	51
A.	Key Findings.....	51
B.	Analysis of Gaps	69
VI.	Provincial and Municipal Level Assessment	82
A.	Summary of Key Findings	82
B.	Analysis of Gaps	102
VII.	Summary of Gaps and Recommendations	109
A.	Recommendations (National Level).....	109
B.	Recommendations (Local Level)	120
VIII.	Strategic Plan and Implementation Process.....	129
A.	General Approach	129
B.	Step 1: Analysis and Interpretation of CNA Results (Local Level)	129
C.	Step 2: Analysis and Interpretation of CNA Results (National Level).....	131
D.	Step 3: Re-Structuring the Results of the CNA in Standard DRRM Practices	133
E.	Step 4: Aligning the WFP-DSWD-DILG-OCD MoU Deliverables with the DRRM Practices.....	134
F.	Strategic Plan.....	135
G.	Validation, Prioritization and Implementation Process	136

IX. Bibliography.....	140
-----------------------	-----

List of Figures and Tables

Table 1: Gaps in the National Policy and Institutional Environment for DRR.....	11
Table 2: Gaps from 3 National Level Institutions (DSWD, OCD, DILG)	11
Table 3: Major Capacity Gaps at the Local Level.....	12
Table 4: Recommendations Related to Policy and Institutional Environment	12
Table 5: Recommendations for National Level DRR Capacity.....	13
Table 6: Recommendations for Capacity Gaps Common to All LGUs	13
Table 7: DRRI Scoring & Ranking for 8 Municipalities	14
Table 8: DRRI Scoring and Ranking for Four Provinces.....	15
Table 9: Integration of National Level Analysis into DRRM Practices	15
Table 10: Alignment of WFP-DSWD-DILG-OCD MoU Deliverables with CNA Outputs and Practices ..	17
Table 11: Suggested Priorities for Allocation of Resources	18
Table 12: Five-Stage Implementation Process	18
Table 13: Five key areas for mainstreaming DRR.....	22
Table 14: Performance Target Levels for Indicator 1: Effectiveness of Legislative Framework	25
Table 15: Capacity issues and needs identified in four assessments/studies on DRR and CCA	48
Table 16: Identified issues and concerns relevant to the indicators in the DRRI framework.....	49
Table 17: Short list of local capacity issues/gaps	103
Table 18: Common Local Capacity Gaps and Issues	120
Table 19: DRRI Scoring and Ranking for eight Municipalities	130
Table 20: DRRI Scoring and Ranking for Four Provinces.....	131
Table 21: Gaps from Three National Level Institutions (DILG, DSWD, OCD)	132
Table 22: Gaps from three National Agencies and Two Local Government Organization using DRRI	132
Table 23: Integration of National Level Analysis into DRRM Practices	133
Table 24: Re-Structuring of WFP-DSWD-DILG-OCD MoU Deliverables.....	135
Table 25: Alignment of WFP-DSWD-DILG-OCD MoU Deliverables with CNA Outputs and Practices	136
Table 26: Suggested Priorities for Allocation of Resources	137
Table 27: Five-Stage Implementation Process	138
Figure 1: Aims, strategic goals and key areas for mainstreaming of the DRR Indicators	21
Figure 2: Sample DRRI Ranking Sheet.....	24
Figure 3: Schematic representation of the mainstreaming scale.	26
Figure 4: Provincial DRRI Ratings.....	83
Figure 5: DRRI ratings of Benguet Province	84
Figure 6: DRRI ratings for the municipalities of Atok and Tublay, Benguet.....	86
Figure 7: DRRI ratings of Cagayan Province	89
Figure 8: DRRI rankings of Municipalities of Amulung and Enrile, Cagayan	91
Figure 9: DRRI ratings of Laguna Province	93
Figure 10: DRRI rankings of the Municipalities of Pila and Mabitac, Laguna	95
Figure 11: DRRI ratings of Sorsogon Province.....	98
Figure 12: DRRI rankings of the Municipalities of Juban and Irosin, Sorsogon.....	100

Acronyms

CP	Contingency Planning
CCA	Climate Change Adaptation
CDP	Comprehensive Development Plan
CLUP	Comprehensive Land Use Plan
CNA	Capacity Needs Assessment
CNA-DPR	Capacity Needs Assessment for Disaster Preparedness and Response
CSO	Civil Society Organization
DILG	Department of Interior and Local Government
DND	Department of National Defense
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
DRRI	Disaster Risk Resiliency Indicators
DRRM	Disaster Risk Reduction and Management
DSWD	Department of Social Welfare and Development
EM	Emergency Management
EMI	Earthquakes and Megacities Initiative
EOP	Emergency Operations Plan
ESF	Emergency Support Functions
FGD	Focus Group Discussion
GIS	Geographical Information System
HLURB	Housing and Land Use Regulatory Board
HVRA	Hazard Vulnerability and Risk Assessment
IEC	Information, Education and Communication
ITC	Information Technology and Communication
KII	Key Informant Interview
LDRRMC	Local Disaster Risk Reduction and Management Council
LGA	Local Government Academy
LGU	Local Government Unit
LIA	Legal and Institutional Arrangements
LUP-CCS	Land Use Planning- Construction Code and Standards
MDG	Millennium Development Goals
MDRRMC	Municipal Disaster Risk Reduction and Management Council
MoU	Memorandum of Understanding
MTPDP	Medium Term Philippine Development Plan
NDCC	National Disaster Coordinating Council
NDRRMC	National Disaster Risk Reduction and Management Council
NEDA	National Economic and Development Authority
NGA	National Government Agency
NGO	Non-government Organization
OCD	Office of Civil Defense
PAGASA	Philippine Atmospheric, Geophysical and Astronomical Services Administration
PDRRMC	Provincial Disaster Risk Reduction and Management Council
PHIVOLCS	Philippine Institute of Volcanology and Seismology
PPA	Programs/Projects/Activities
RSLUP	Risk Sensitive Land Use Planning
SDRR	Shelter and Disaster Risk Resiliency
SOP	Standard Operating Procedure
SNAP	Strategic National Action Plan
TWG	Technical Working Group
UNWFP	United Nations World Food Programme

I. Executive Summary

A. Objectives

The Capacity Needs Assessment (CNA) for Disaster Preparedness and Response is a preliminary activity for the technical assistance project to be undertaken by UNWFP in support of the Philippine government's disaster risk management (DRM) initiatives. It is intended to systematically identify existing capacity development activities, pinpoint key gaps, and serve as the basis for recommending specific capacity building interventions that will build the capabilities of target national government agencies and local government units (LGU) at the provincial and municipal levels. The assessment seeks to accomplish the following: (1) Develop an assessment methodology and framework; (2) Review of the current policy and institutional environment for disaster risk reduction (DRR) at the national and local levels; (3) Inventory and review of existing capacity development initiatives and practices in DRR at the national and local levels; and (4) Develop a comprehensive report on current DRR-related capacity building efforts and gaps that provides recommendations on areas of possible intervention. The key findings of the report will be used to recommend specific capability building activities that will enhance the institutional capacities of the target agencies and LGUs. These recommendations are aligned with the objectives of a memorandum of understanding signed between UNWFP-DILG-DSWD-OCD to ensure that future activities adequately cover UNWFP's commitments to the Philippine government.

B. Methodology

At the national level, the assessment focused on UNWFP's main partners in the Philippine government, namely the Department of Social Welfare and Development (DSWD), Office of Civil Defense (OCD), and the Department of the Interior and Local Government (DILG). At the local level, the DRR capacity of four provinces, namely Benguet, Cagayan, Laguna and Sorsogon, were assessed. These areas were pre-selected by UNWFP based on their inclusion in the list of 27 highly disaster-prone provinces in the Philippines and their exposure to different hazards¹. Within each province, two municipalities were chosen to serve as sample sites, with the criteria for selection based on income classification, exposure to multi-hazards, and willingness of the local government to take part in the assessment. Eight towns categorized as being in the third to fifth class range were chosen through discussions between UNWFP, EMI and provincial officials, as well as consultations with members of the respective Provincial Disaster Risk Reduction and Management Councils (PDRRMC).

The assessment methodology was based on the Disaster Risk Resiliency Indicators (DRRI) developed by EMI. The DRRI is a set of 10 indicators aimed at establishing the stakeholders' initial benchmark of DRR mainstreaming in a local government's functional, operational and development systems and processes. The indicators can also capture the potential for achieving disaster resilience in particular sectors, based on pre-defined benchmarks and performance targets. The DRRI is divided among 5 key areas: (1) Legal and Institutional Processes and Policies; (2) Public Awareness and Capacity Building; (3) Critical Services and Infrastructure Resiliency; (4) Emergency Preparedness, Response,

¹ The classification is based mostly on recent experience with natural disasters.

and Recovery Planning; and (5) Development Planning, Regulation, and Risk Mitigation. Five performance target levels, ranging from *Little or No Awareness* to *Full Integration*, are used to measure attainment in terms of DRR mainstreaming for each of the 10 indicators (Mumbai DRMMP, Topical Report No. 7, EMI, 2011).

To establish the DRR rankings of the identified provinces and selected municipalities and gauge the level of capacity for DRR of these LGUs, EMI conducted local field investigations where LGU participants were introduced to the indicators concept and guided through a ranking process that evaluated the performance of the provinces/municipalities in terms of DRR based on the attributes of the 10 indicators that comprise the DRR. The existing legal and institutional arrangements for DRR at the LGU level were also assessed during the field investigations through key informant interviews.

Desk review of relevant documents and focus group discussions were conducted with key personnel of the DSWD, OCD, DILG, Union of Local Authorities of the Philippines, and League of Cities of the Philippines who are involved in disaster risk management in order to characterize the policy and institutional environment at the national level, as well as identify past and existing capacity development programs for DRR.

The data collected from the review of legal and institutional arrangements and inventory of DRR capacity development initiatives and practices were used to describe the current state of DRR knowledge, capacity and practice at the national, provincial and local levels. Needed improvements to build the capabilities of institutions at these levels were determined by comparing existing conditions with corresponding descriptors and performance target levels in the DRR. Appropriate capacity development recommendations were formulated to address the identified gaps. These recommendations were then aligned with the objectives of the UNWFP-DILG-DSWD-OCD Memorandum of Understanding (MoU) to ensure that they will effectively support the execution of the MoU. The resulting output constitutes a proposed strategic plan that provides the road map for future implementation of the program. An implementation process is also proposed for moving the overall UNWFP DRR capacity building program forward, all of which are contained in this report.

C. Identified gaps

The capacity needs assessment was able to provide a rapid appraisal of the current state of DRRM practice within the selected national government agencies (NGAs) and local government units, as well as issues and concerns relevant to their implementation of DRRM. As these NGAs and LGUs have been at the forefront of disaster management for several decades, the EMI experts noted their familiarity with certain aspects of disaster risk management and the significant experience and achievements they have gained in key areas such as capacity building, community preparedness, emergency response, disaster relief and recovery, and DRR mainstreaming. Together with these strengths, the assessment was also able to pinpoint particular areas where certain factors limit capacity in DRRM.

At the national level, several key gaps were identified within the policy and institutional environment and organizational capacity for DRR. In terms of legal and institutional arrangements,

the following major concerns surfaced from the focus group discussions and key informant interviews conducted with the target national government agencies and relevant local government organizations:

Table 1: Gaps in the National Policy and Institutional Environment for DRR

1. Inadequate understanding of the provisions of the new law by government agencies, LGUs and other stakeholders, particularly on their respective roles
2. Many sectoral agencies have not fully transitioned from PD 1556 to RA 10121 in terms of their roles and functions
3. Absence of broad DRRM framework and detailed guidelines to assist government officials and other stakeholders in policy formulation and law implementation
4. Constraints limiting the ability of national agencies to formulate guidelines
5. Difficulties in creating the prescribed local DRRM offices
6. Inordinate number of still to be organized policies
7. Difficulties in introducing the mainstreaming process in plans, programs and projects
8. A huge and potentially unwieldy national organization for DRRM

Based on discussions with the DSWD, DILG, and OCD, a total of 34 issues or gaps were identified with respect to DRRM capacity at the national level. These were summarized into the following areas of concern:

Table 2. Gaps from 3 National Level Institutions (DSWD, OCD, DILG)

1. Structure and competency of Local DRRM Offices
2. Guidelines to standardize the LGU Emergency Operations Plans
3. Damage assessment and monitoring
4. Early recovery and post-disaster needs assessments
5. Family and community preparedness
6. Selection and qualification of evacuation centers
7. Information and communication protocols and processes
8. Monitoring and evaluation of disaster risk reduction components of existing plans
9. Monitoring and evaluation of LGUs' progress of in meeting the provisions of the DRRM law

In the local level DRRM assessments, all four provinces scored at or near the moderate level of capacity (Level 3) in the DRRM scale. In comparison, 6 of the 8 municipalities evaluated scored at a

low level of attainment (Level 2) in the DRR scale. In general, the provinces scored higher than the municipalities in the capacity assessment.

Among the eight municipalities evaluated, the municipality of Irosin in Sorsogon scored highest with a score of 2.8 followed by Amulung, Cagayan with 2.7. Both towns registered moderate levels of overall resiliency on the DRR scale. Six of the eight municipalities registered at a low level of disaster resiliency in the DRR. The municipalities of Atok in Benguet and Pili in Laguna scored low with 2.1 and 2.15 scores respectively. Enrile, Cagayan scored 2.2, Tublay, Benguet with 2.3, Mabitac, Laguna with 2.35 and Juban, Sorsogon with 2.4.

The outcome of the focus group discussions, interviews, and structured consultations with the local stakeholders identified 19 issues in DRR capacity common across all the four provinces and eight municipalities. These have been summarized into six major concerns/gaps:

Table 3. Major Capacity Gaps at the Local Level

1. Low to moderate understanding of DRM/DRRM
2. Inadequate enabling environment for DRRM implementation at the local level
3. Inadequate funding and resources
4. Absence of DRRM information collection, utilization and dissemination systems at the local level
5. Lack of DRRM plans/absence of technical capacity for DRRM planning
6. Inadequate capacities in several key functional areas of DRRM implementation

The strengths and gaps in DRR capacity for each of the four provinces and eight municipalities are detailed in Chapters VI and VII of this report.

D. Recommendations

Eight recommendations were proposed corresponding to the gaps within the policy and institutional environment affecting operational and participatory aspects of national and local level capacity for DRR.

Table 4: Recommendations Related to Policy and Institutional Environment

1. Conduct information, education and communication programs to national agencies and local government units on the provisions of the law and their roles with respect to the law
2. Convene the NDRRMC to establish ground rules and set out as a regular body with policy-making, coordination, integration, supervision, monitoring and evaluation functions
3. Finalize and disseminate the DRRM Framework and Plan

4. Support OCD with additional technical resources to prepare the Guidelines
5. Provide specific Guidelines for creating the new DRRM offices
6. Set up of a “clearinghouse” to systematize these policies and provide coherence and clarification for implementation
7. Provide technical assistance to mainstream DRR into national and LGU systems and processes
8. Review and streamline current organizational set up of the DRRM Council

Based on an analysis of the 34 gaps identified at the national level, six main recommendations were developed to address the key issues affecting DRR capacity in terms of operations, coordination and participation.

Table 5: Recommendations for National Level DRR Capacity

1. Strengthen or enhance vertical and horizontal linkages
2. Adopt knowledge management
3. Enhance resource mobilization and encourage more strategic use of funds
4. Increase amount of resources available for emergencies
5. Strengthen capacity to generate scientific data/information on which to base decisions
6. Develop human resources and conduct training for local chief executives and political decision-makers

An additional six recommendations have been suggested to tackle the primary causes of the 19 local level capacity gaps identified as being common to all the LGUs evaluated in the assessment.

Table 6: Recommendations for Capacity Gaps Common to All LGUs

1. Develop multi-audience IEC strategies for DRM/DRRM awareness
2. Support creation of an enabling environment for DRRM implementation at the local level
3. Develop LGU capacity for resource generation for DRRM
4. Set up local DRRM information system
5. Support local Disaster Risk Reduction and Management Planning
6. Develop capacity building program for local DRRM implementation

E. Strategic Plan and Implementation Process

A strategic plan and related implementation process have been developed to rationalize the above recommendations and structure them into a guide for UNWFP's DRRM agenda. The strategic plan can be used as a road map for the implementation of the next phase of the project. The development of the strategic plan and its implementation follows a four-step analytical process:

Step 1: Analysis and interpretation of the local level CNA results (i.e., stakeholders' input) to establish the stakeholders' concerns and priorities

Step 2: Analysis and interpretation of the national CNA results (i.e., stakeholders' input) to establish the policy framework and the stakeholders' concerns and priorities

Step 3: Cross-referencing and re-structuring of outcomes of Step 1 and Step 2 along conventional DRRM practices (i.e., response/recovery, preparedness/advocacy, mitigation/mainstreaming, and evaluation/monitoring) to facilitate implementation

Step 4: Alignment of the deliverables of the UNWFP-DSWD-DILG-OCD Memorandum of Understanding (MoU) along the DRRM practices of Step 3.

Essentially, the process consists of rationalizing the stakeholders' input along conventional DRRM practices and correlating these to the objectives and deliverables of the UNWFP-DSWD-DILG-OCD MoU.

Local-Level Analysis

Table 7 and Table 8 below provide an ordering of the ten indicators using the average of the stakeholders' scoring, combined for all the provinces and municipalities (The scale varies from 1 to 5 where 1 is the lowest score and 5 is the highest score, and where a score greater than 3 means a positive outlook). The results are then organized into three groups that reflect the level of concern/ranking by the stakeholders, as follows: "Higher Concerns", areas where indicator scores are lowest; "Moderate Concerns", where scores are in the middle range; and "Lower Concerns", areas that have the highest indicator ratings. The grouping is done by ordering the results with respect to the average score.

Table 7: DRRI Scoring & Ranking for 8 Municipalities

Ranking		Indicator	Mean
Higher Concerns	1	Emergency Management	2.16
	2	RSLUP - Mitigation	2.18
	4	Resiliency of Critical Services	2.22
	3	Communication & Awareness	2.28
Moderate Concerns	5	Resiliency of Infrastructure	2.30
	6	Resource Management/Contingency Plans	2.30
	7	Training and Capacity Building	2.38
Lower Concerns	8	Hazard, Vulnerability & Risk Assessment	2.44
	9	Institutional Arrangements	2.72
	10	Effectiveness of legislation	2.76

Table 8: DRRI Scoring and Ranking for Four Provinces

Ranking	Indicator	Mean
Higher Concerns	1 Physical Framework Planning - Mitigation	2.38
	2 Hazard, Vulnerability & Risk Assessment	2.65
	3 Training and Capacity Building	2.66
	4 Communication & Awareness	2.69
Moderate Concerns	5 Resiliency of Infrastructure	2.75
	6 Resource Mgmt/Contingency Plans	2.85
	7 Resiliency of Critical Services	3.04
Lower Concerns	8 Emergency Management	3.03
	9 Effectiveness of legislation	3.25
	10 Institutional Arrangements	3.47

The outcome of the Municipal level analysis indicates the following local-level perspective:

- There is recognition that mitigation and the mainstreaming of disaster risk management in development are not taking place.
- The major concerns of the stakeholders are about responders' skills and tools (i.e., emergency management, public awareness and resource management).
- There are lesser concerns about legal and institutional arrangements.

The analysis of the DRRI results at the Provincial level and the grouping of stakeholders' input by category of concern provide the following insights:

- There is recognition that mitigation and the mainstreaming of disaster risk management in development are not taking place.
- The major concerns are about technical capacity and competence.
- There is moderate concern over resiliency of critical infrastructure and services.

National Level Analysis

The results of the national level CNA were cross-referenced to identify the common areas of concern and to link these to relevant disaster risk reduction and management practices (i.e., response/recovery, preparedness/advocacy, mitigation/mainstreaming, and monitoring/evaluation). The linkage is necessary in order to facilitate the implementation process of the CNA results. In other words, the implementation can only be done effectively if the activities are structured along particular DRRM practices and each one is associated with a known expertise. The results of the exercise are shown in Table 9. The table also shows the typical level of implementation (i.e., local vis-à-vis national).

Table 9: Integration of National Level Analysis into DRRM Practices

ID	DRRM Practice	Associated DRRM Activities	Level
----	---------------	----------------------------	-------

ID	DRRM Practice	Associated DRRM Activities	Level
1	Structure and Competency of Local DRRM Offices	Guidelines to standardize the LGU Emergency Operations Plans Technical assistance in contingency planning Contingency planning that links early warning information with response Promoting a technical working group for food, logistics and telecommunications	LDRRM Office; PDRRM Offices
2	Logistical preparation & post-disaster rapid needs assessment	Damage assessment and monitoring Early recovery and post-disaster needs assessments Technical assistance in emergency telecommunications Selection and qualification of evacuation centers	LDRRM Office; PDRRM Offices
3	Family and Community Preparedness and Awareness	Identify community-based projects for preparedness and response Establish contingency funding at village level Improve economic resilience of households through Cash for Work	LDRRM Office; PDRRM Offices
4	National Level Capacity Building and Mainstreaming	Monitor DRR components of existing plans (i.e., mainstreaming) Monitor and evaluate the progress of LGUs with respect to the DRRM law Targeted training and documentation of good practices Advocacy and public awareness	National Level

Note that the above structuring of the national level completely encompasses the outcomes of the local results. Each of the activities of the local assessment can be integrated in one of the activities of Table 9.

Thus, the outcomes of the CNA analysis can be grouped into four DRRM practice areas:

DRRM Practice Area 1: Reinforcing the Structure and Competency of Local DRRM Offices

DRRM Practice Area 2: Reinforcing Logistics Preparedness and Post-Disaster Rapid Needs Assessment

DRRM Practice Area 3: Undertaking Community and Family Preparedness and Awareness

DRRM Practice Area 4: National Level Capacity Building and Mainstreaming

Strategic Plan

The MoU prescribes three deliverables:

- 1) Enhance disaster response capacity of DSWD in logistics, vulnerability assessment and mapping, community preparedness, and small-scale community projects;
- 2) Enhance LGU/PDRRMC institutional capacities through specific hardware/financial support and build resiliency of targeted localities;

- 3) Enhance institutional capacity of selected DSWD, DILG, and OCD personnel at the national, regional and LGU level through trainings on international best practices and simulation exercises.

The re-structured CNA activities (Table 9) are aligned with the objectives of the UNWFP-DSWD-DILG-OCD MoU to ensure that the institutional requirements of UNWFP are met. The results of this last exercise are shown in Table 10. Table 10, together with the details of Table 9, encapsulate a **strategic plan** that accomplishes the following:

1. Organizes and structures the CNA results and findings into standard DRRM practices that can more easily and effectively be implemented;
2. Formulates the deliverables of the UNWFP-DSWD-DILG-OCD MoU in a structure that is compatible with the CNA results;
3. Integrates the objectives and deliverables of the UNWFP-DSWD-DILG-OCD MoU with the findings and results of the CNA;
4. Ensures that priorities and concerns of the stakeholders are fully integrated and represented in the recommended activities;
5. Conforms to the general DRRM concepts and practice.

Table 10: Alignment of WFP-DSWD-DILG-OCD MoU Deliverables with CNA Outputs and Practices

ID	Re-Structured WFP-DSWD-DILG-OCD Deliverables	Matched DRRM Activity from CNA	DRM Activities
1	a) Enhance disaster response capacity	Structure and Competency of Local DRRM Offices	1
	b) Enhance disaster response logistics and communication	Logistical preparation and post-disaster rapid needs assessment	2
2	Enhance LGU/PDRRMC institutional capacities through specific hardware/financial support	Structure and Competency of Local DRRM Offices	1
3	a) Build the resilience of communities in targeted localities; Improve community preparedness	Family and Community Preparedness and Awareness	3
	b) Undertake small-scale demonstration projects		
4	a) Enhance capacity of selected DSWD, DILG, OCD Personnel	National Level Capacity Building and Mainstreaming	4
	b) Disseminate sound practices		
	c) Undertake scenarios and simulation exercises		
Note: See Table 9 for details of activities related to each DRRM Practice			

EMI experience globally has shown that one of the key impediments to implementing disaster risk reduction and management at the local level pertains to the lack of an effective Disaster Risk Management system at the LGU level. Matching this observation with the practices identified by the CNA provides guidance that the UNWFP DRR program could benefit significantly from by focusing its efforts on the first area of concern which is: **Enhancing the structures and competencies for**

Disaster/Emergency Management at the local level. The cross-cutting nature of such action could bring fundamental change in the capacity of LGUs and provinces to engage effectively and sustainably into disaster risk reduction and support the national level policies and mandate. With this in mind, and based on experts' opinion, a prioritization of WFP's resource allocations is indicated in Table 11.

Table 11: Suggested Priorities for Allocation of Resources

DRRM Area of Practice	Match Activity from CNA	Priority for Resources
DRRM Area of Practice 1	Enhance the Structure and Competency of Local DRRM Offices	1
DRRM Area of Practice 2	Enhance logistical preparation and post-disaster rapid needs assessment	3
DRRM Area of Practice 3	Undertake Family and Community Preparedness	2
DRRM Area of Practice 4	Reinforce Capacity for Mainstreaming and Monitoring at the National Level	4

The strategy is to put most efforts in the strengthening of the structures and competencies of the LGUs and Provinces for disaster risk management by aligning them with the international standards such as the Emergency Management Accreditation Program (EMAP, www.emaponline.org), and to support such structural interventions with specialized training, local-level community pilot projects, and community-level awareness and participatory activities (i.e., non-structural interventions).

Pre-Implementation Process for the WFP-DSWD-DILG-OCD 9-month Project

Prior to project implementation, a 5-stage process is suggested as indicated in Table 12. The steps overlap with each other. The stages found below are the necessary mechanisms that should be put in place to ensure a coherent and consistent approach and understanding of the goals and priorities of the project.

Table 12: Five-Stage Implementation Process

STAGE 1: Internal Review of the EMI Deliverables and Understanding of the Content This is UNWFP's internal detailed review of the findings, analyses, and recommendations to ensure that these elements are completely understood within the institution and also an opportunity to obtain any clarifications from EMI.
STAGE 2: Stakeholders' Validation and Prioritization It is suggested that UNWFP undertake a validation of the findings and recommendations by the stakeholders as well as by UNWFP's partners so that there is complete consensus and, as well as the development of a solid base for undertaking the next phase of the project. Preferably more than one validation point should be established.
STAGE 3: Detailing the Proposed Activities into a Capacity Development Plan This is the purpose of the next phase of the project, where the recommendations are turned into well-defined activities.
STAGE 4: Developing the Terms of Reference, Timelines and Budgets This is a further refinement to Stage 3, where the project activities are related to specific

timelines and budget, and where terms of reference are written to further clarify the role of each stakeholder.

STAGE 5: Developing Partnerships and Moving Forward

The UNWFP-DILG-DSWD-OCD partnership moves fully into local implementation of the project.

The following structure is suggested for the implementation of the next stage of the UNWFP DRRM program:

- Establish a Project Implementation Team (PIT), which will be composed of UNWFP's project team and the experts and specialists of the implementing agency. The PIT will be in charge of all day-to-day activities, coordination, planning and decision making.
- An Advisory Committee should be constituted, which should have a broad representation of the stakeholders and partners in the project. The role of the Advisory Committee is to coordinate at the policy level, inform, guide and advise on the implementation process.
- Ownership-building mechanisms through participatory processes should be established through the creation of Focus Groups. In the focus groups, the stakeholders are organized according to their institutional responsibilities and professional expertise. They should be provided a meaningful role in the implementation process. This is critical to building sustainability.
- A monitoring process, through indicators, should be put in place to measure progress and to make necessary adjustments.

The UNWFP DRRM Capacity Program for the Philippines will fill an important gap in enabling DRR at the local level, where significant gaps and weaknesses were identified. However, the benefits of the program will be in the longer term. The program should emphasize institutional commitment, detailed planning, counterpart investments from the various stakeholders, and a continuous effort to build the required competencies.

II. Introduction

A. Scope and objectives of the capacity needs assessment

i. National (DSWD, DILG, OCD/NDRRMC)

The project entails the conduct of a comprehensive Capacity Needs Assessment (CNA) to systematically map out relevant existing capacity development activities on disaster risk reduction (DRR), identify key gaps and recommend concrete areas of intervention within national-level organizations such as the National Disaster Risk Reduction and Management Council and its partner institutions. The particular focus is on the UNWFP's main government partners, namely the DSWD, DILG and OCD. The tasks to be undertaken in the context of the assessment include:

- a. Development of the assessment methodology and framework;
- b. Review of the current policy and institutional environment, particularly the structures and mechanisms of the National Disaster Risk Reduction and Management Council (NDRRMC) and its partner institutions for DRR at the national level and within the selected LGUs at the local level.
- c. Inventory and review of existing capacity development initiatives and practices in disaster risk reduction and management at the national level, as well as in the selected LGUs;
- d. Development of a report on current DRR-related capacity building efforts and gaps, and the formulation of recommendations for potential areas of intervention compatible with the UNWFP core mandate and DRR Policy.

ii. Local (4 provinces and 8 municipalities)

The Capacity Needs Assessment at the local level has similar objectives: the identification of existing DRR capacity development initiatives, analysis of key gaps in capacity, and recommendation of specific interventions at the selected provincial and municipal governments in four (4) highly disaster-prone provinces in Luzon, namely Laguna, Benguet, Cagayan and Sorsogon. The eight (8) municipalities selected for the assessment include Pila and Mabitac in the province of Laguna, Atok and Tublay in Benguet, Enrile and Amulung in Cagayan, Juban and Irosin in Sorsogon.

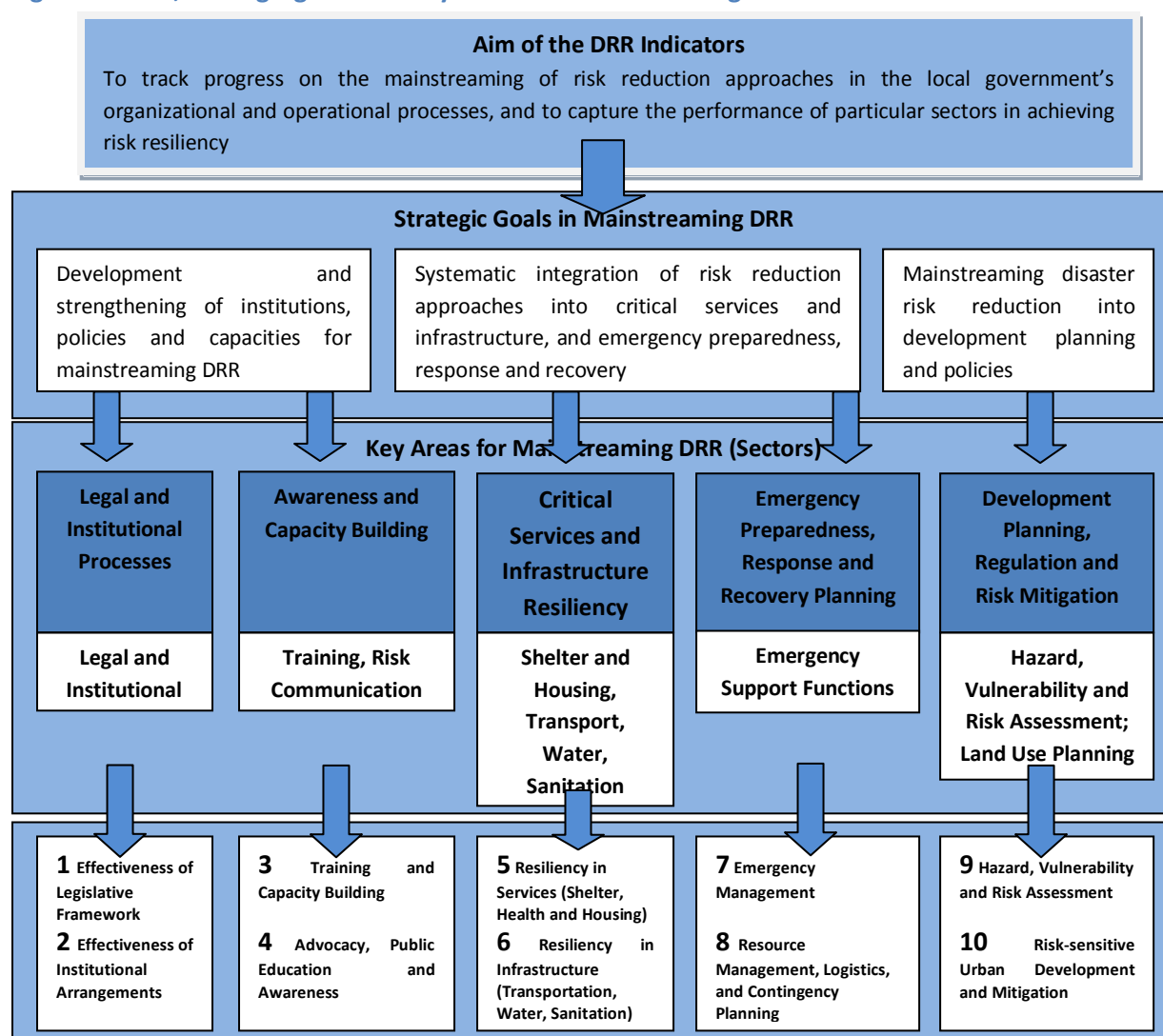
B. Methodology

i. Disaster Risk Resiliency Indicators (DRRI)

Development of the assessment methodology and framework

EMI used the Disaster Risk Resiliency Indicators (DRRI) as the basis for the assessment. The DRRI is a set of ten (10) indicators that are used to establish initial benchmarks to measure to what extent risk reduction approaches have been mainstreamed in the organizational, functional, operational and development systems and processes of local governments. The indicators capture the potential for achieving disaster resilience in particular sectors, based on pre-defined benchmarks and performance targets. Anchored on EMI's concept and approach to DRR mainstreaming and aligned with the five (5) elements of the Hyogo Framework for Action and the 10 Essentials for Making Cities Resilient, the DRRI is divided among 5 key areas: (1) Legal and Institutional Processes and Policies; (2) Public Awareness and Capacity Building; (3) Critical Services and Infrastructure Resiliency; (4) Emergency Preparedness, Response, and Recovery Planning; and (5) Development Planning, Regulation, and Risk Mitigation.

Figure 1: Aims, strategic goals and key areas for mainstreaming of the DRR Indicators



The rationale for applying the DRR indicators is illustrated in the figure above. As mentioned previously, the main aim of the indicators is to track progress on the mainstreaming of risk reduction approaches in a local government's systems and processes. That primary mainstreaming goal is further divided into three strategic goals. Each of the goals corresponds to one or more key areas affecting a local government's disaster resilience. Finally, two indicators corresponding to each of the five key areas of mainstreaming are identified, the descriptors for which provide a measure of the performance of the local government in mainstreaming disaster risk reduction in a particular key area.

The five (5) key areas for mainstreaming DRR, their corresponding indicators, and the characteristics evaluated are listed below:

Table 13: Five key areas for mainstreaming DRR

Areas	Indicators	Characteristics
Legal and Institutional	Indicator 1: Effectiveness of Legislative Framework	• Laws, acts and regulations • DRR Policies • Compliance and accountability • Resource mobilization and allocations (financial, human)
	Indicator 2: Effectiveness of Institutional Arrangements	• Organizational structures that define roles and responsibilities • Review, update, enforcement, monitoring and reporting process • Partnerships with civil society and communities
Awareness and Capacity Building	Indicator 3: Training and Capacity Building	• Institutional commitment to training and capacity building with dedicated resources and evaluations • Knowledge management, research and development
	Indicator 4: Advocacy, Communication, Education and Public Awareness	• Commitment to advocacy and public awareness and education programs that engage all relevant audiences and stakeholders including civil society and community organizations • Commitment to participatory processes and community involvement • Research facilitation, use of information technology and communication (ITC) to disseminate information • Pro-active and constructive media relations
Critical Services, Infrastructure Resiliency	Indicator 5: Resiliency of Critical Services	• Inclusive, participatory and transparent shelter and housing policies and programs • Protection of living (i.e. shelter) and livelihood conditions (i.e. access to and availability critical services including opportunities for livelihood) against disasters • Resiliency of health services to deliver services during a disaster
	Indicator 6: Resiliency of Infrastructure	• Resiliency of water, sewer and storm drain systems • Resiliency of transportation systems • Contingency for delivery of essential services

Areas	Indicators	Characteristics
Emergency Preparedness, Response Planning	Indicator 7: Emergency Management	• Functioning Emergency Operations Plan with Basic Plan and ESF system • Year-round response planning and functioning standard operating procedures • Drills and Simulation involving relevant stakeholders including civil society and communities • Preparedness programs for first responders and leaders and representatives of communities at risk
	Indicator 8: Resource Management, Logistics and Contingency Planning	• Self analysis of resource management and logistics • Contingency planning for key institutions for pre-defined scenario analysis and planning parameters • Ability to manage delivery of resources to most vulnerable populations
Development Planning, Regulation and Risk Mitigation	Indicator 9: Hazard, Vulnerability and Risk Assessment	• Awareness of hazards and vulnerabilities (natural and man-made) • Risk identification and assessment, vulnerability and capacity analysis • Impact assessments (loss analysis) by relevant sectors and segments of populations at risk • Use of forecasting and early warning in preparedness and response planning
	Indicator 10: Risk-Sensitive Urban Development and Mitigation	• Risk-sensitive land use planning and urban re-development, • Enforcement of codes and standards, particularly in shelter and housing programs; quality control norms in construction • Capital investments in disaster risk reduction • Reinforcing and retrofitting of critical assets and infrastructure

The DRRI allocates a 1-5 ranking for each of the ten (10) indicators that fall under the five (5) main areas of mainstreaming, using five Performance Target Levels of attainment. Each indicator has specific descriptors for its corresponding attainment levels, as well as guide questions that can be used to provide specific details to support the assigned ranking. The detailed guide questions and possible rankings for Indicator 1, Legal and Institutional Processes, are provided below as an example. Full details on the rankings and specific guide questions for the rest of the DRR Indicators can be found in the Annexes.

Figure 2: Sample DRR Ranking Sheet

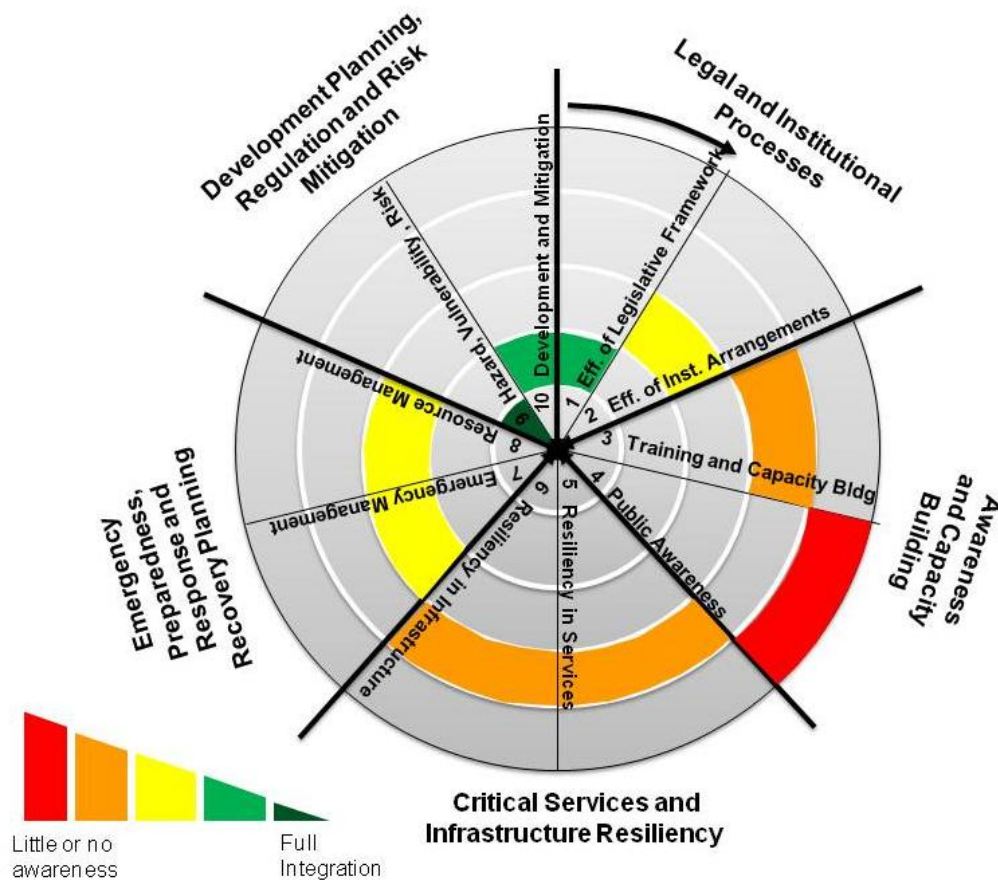
INDICATOR 1: Effectiveness of Legislative Framework The aim of this indicator is to measure the effectiveness of laws, policies, ordinances and regulations for achieving risk reduction. GUIDE QUESTIONS • How are DRR policies articulated? • How well are the DRR policies complied with? How well is accountability practiced? • Are there sufficient resources (financial, human) allocated for DRR? How are they sustained?					Group Round
Level of Attainment					
Level 1 ☐ Very Low Little or no understanding of relevance or importance of DRR	Level 2 ☐ Low Local laws and policies do not yet reflect relevant national or provincial legislation on DRR	Level 3 ☐ Moderate Recognition of the need to coordinate legislation and policies to reduce disaster risks	Level 4 ☐ High Existing legislative framework for disaster management	Level 5 ☐ Very High Existing DRR laws and policies on disaster risk with realistic, achievable goals for mainstreaming Compliance and accountability measures are <u>effective</u> and <u>operational</u> with policy and practice strictly following the law	
Explanation/Comments: 					

Table 14: Performance Target Levels for Indicator 1: Effectiveness of Legislative Framework

Level 1	Overall there is little or no understanding of the relevance and importance of disaster risk reduction and this is reflected in its laws, policy, practice and public statements.
Level 2	Relevant legislation exists at state or national level, but these are not paired with the mandates and authority of local government. There is awareness of this gap by some individuals, and such knowledge may translate into initiating legislation to empower institutional bodies and local authorities for DRM.
Level 3:	The need for legislation and policies to be linked in a coordinated approach for reducing disaster risks is generally recognized. Such knowledge may translate into action, and some relevant legislation is passed, but compliance and accountability remains <u>ineffective</u> with <u>insufficient application</u> within policy and practice.
Level 4	The institution has a legislative framework for disaster management with voluntary compliance <u>encouraged and successful</u> . Policy and practice already reflecting pending legislation.
Level 5:	The institution has laws and policies on disaster risk reduction with realistic, achievable goals for mainstreaming. This is understood and accepted across the organization. Compliance and accountability measures are <u>effective</u> and <u>operational</u> with policy and practice strictly following law.

The results of the ranking for each particular indicator can be represented through a graphic visualization of the mainstreaming of disaster risk reduction within the local government at a given point in time. In the schematic below, green is positive territory and red/orange is negative territory. An institution in yellow is in transition between positive and negative territory, meaning there is commitment, but this may not be sustainable. The “bull’s eye” representation depicts in one glance how close to the target a local government is in meeting the goal of fully integrating DRR within certain key areas. The schematic is flexible, and can be used to show the evolving mainstreaming of an institution through time.

Figure 3: Schematic representation of the mainstreaming scale.



The DRRI was employed in the field investigations that EMI conducted in each of the four (4) target provinces and eight (8) municipalities. During each field investigation, three (3) workshops were organized to establish the DRRI for the provincial government and two municipalities selected in consultation with relevant provincial agencies. At the start of each workshop, stakeholders were identified and organized. After which, they were introduced to the concept and methodology of the DRRI. Following the orientation, EMI facilitators led the workshop participants through the process of determining the prevailing state of DRR mainstreaming in local government processes and systems by using the guide questions to assess the attributes of the ten (10) indicators and arrive at a consensus on the current performance level of attainment for each one. The goal was to evaluate the following elements: human capacity, organizational capacity, and functional capacity with core mainstreaming parameters, namely:

Operations: Legislative framework; hazard, vulnerability and risk assessment; resiliency of critical services and infrastructure; emergency management; resource management, logistics and contingency planning; risk-sensitive development and mitigation; training and capacity building

Coordination: Institutional arrangements, emergency support functions

Participation: Advocacy, communication, education and public awareness

ii. Methodology for national and sub-national consultations

Review of the current institutional and policy environment for DRR at the national and LGU levels

National level

At the national level, a major focus was a review of the current policy initiatives (and practice) and institutional environment, particularly the structures and mechanisms of the National Disaster Risk Reduction and Management Council (NDRRMC) and partner institutions in disaster risk reduction. The relevant policies and the institutional structure are both found in the NDRRM Act (RA 10121), and, to a large extent, in the Climate Change Act (RA 9729) which is like a companion legislation of RA 10121. The provisions of these two laws are inextricably linked to each other and both make cross references to their respective relevant provisions.

The DRRM Act mandates addressing the root cause of vulnerabilities to disasters, strengthening the country's institutional capacity for disaster risk reduction and management, and building the resilience of local communities to disasters, including climate change impacts. The Climate Change Act, on the other hand, acknowledges that since "climate change and disaster risk reduction are closely interrelated, and effective disaster risk reduction will enhance climate change adaptive capacity, the State shall integrate disaster risk reduction into climate change programs and initiatives" (Section 2). Aside from these two statutes, other related national legislation and legal issuances such as executive orders which carry provisions on disaster risk management were reviewed.

Since the DRRM Act was only enacted in 2010, the review of current policy makes references to the period when the governing law was Presidential Decree 1566, which has been enforced in the country for over 30 years (since July 11, 1978) prior to the enactment of the new law. The policy environment and institutional framework in this precedent legislation (and other relevant national laws and legal issuances from the executive branch of government) provide useful historical context, perspectives, and practices to help understand the various aspects of the current policies, most of which have been derived from the earlier policies.

The assessment of the institutional environment explored the formal and informal organizational structure for DRRM, functional responsibilities and linkages of the relevant national, regional and local agencies, systems and procedures adopted, horizontal and vertical coordination, networking, and good governance principles, including implementing tools and mechanisms for plans, programs and projects; resources and budgetary allocation, institution building and capability development.

The activities that were conducted in order to generate sufficient information for the review of the current institutional and policy environment for DRR at the national level consisted of the following:

1. Desk review of all material legal documents such as the NDRRM Act of 2010 and its recently promulgated Implementing Rules and Regulations, and the Climate Change Act were carried out. Considering that these documents have only been in existence for a relatively brief period, their legal provisions and actual implementation were reviewed against earlier legislation, particularly P.D. 1566 and other relevant legal issuances and executive enactments on the same subject matter which have been implemented and enforced for several decades.
2. Interviews with policy makers and implementers at the national level were undertaken to identify, verify, and analyze the capacity needs of decision makers and stakeholders, as well as efforts they had exerted (adopted policies, plans, programs, and projects) to respond to these needs. A pre-selection process was also undertaken to identify the officials from relevant agencies who are most knowledgeable about the subject matter under investigation.
3. Regular interactive consultations were also conducted with other EMI project team members in charge of similar activities at the sub-national (provincial and municipal) levels because the policies and institutional arrangements at the national level were inextricably linked with those at these levels. The national tier of governance provides the framework, context, and backdrop of policy and institutional review at the regional and local government unit levels. The responses to the identified capacity needs at these levels were determined to a large extent by the policies, practices, and legal and institutional framework at the national level.

Local level

The activities relating to the investigation of the legal and institutional arrangements for DRR at the sub-national levels closely mirror those that were conducted at the national level, but with a more concentrated focus on issues, challenges, and gaps relating to relevant policies, organizational structures, and relationships at the provincial and municipal levels. Specifically, the approaches that were employed involved:

1. A desk review of relevant documents was carried out, more specifically on Republic Act No. 10121 (Disaster Risk Reduction and Management Act of 2010) and Republic Act No. 9729 (Climate Change Act of 2009), as well as their respective Implementing Rules and Regulation, environmental laws and other statutes, local ordinances, resolutions executive issuances , policies, plans, programs, studies relevant to

disaster risk reduction and climate change adaptation, the current organizational structures and mechanisms of coordination on DRRM.

2. As mentioned in the foregoing sections, workshops were conducted at the provincial and municipal levels in each of the four (4) target provinces, wherein the DRR Indicators were used to benchmark the current level of performance of the selected LGUs with respect to the mainstreaming of DRR in their organizational structure, operational development systems, and processes. Using the DRRM methodology, participants composed of members of the Provincial Disaster Risk Management Council (PDRMC), Municipal Disaster Risk Reduction Councils (MDRRMC), and the respective Disaster Risk Reduction and Management Offices, established the current state of their legal and institutional processes for DRR by rating their levels of performance with respect to two (2) indicators, Effectiveness of Legislative Framework and Effectiveness of Institutional Arrangements.
3. In order to provide further supporting details for the results of the DRRM ranking, key informant interviews were also conducted with PDRMC, PDRMO, MDRMC, MDRMO, and Barangay Disaster Risk Reduction Committee/ members, representatives of national government agencies based at the sub-national level (OCD, DSWD, DILG), and civil society to identify capacity needs of decision makers, technical staff and other stakeholders. Past initiatives addressing such needs were investigated, as well as to what extent these have addressed the identified gaps.

Inventory and review of existing DRR capacity development initiatives and practices at the national and LGU levels

National level

The investigation consisted primarily of a desk review of documents relevant to capacity development² and interviews.

Interviews were of two types: (1) key informant interviews (KII), and (2) focus group discussions (FGD) or group interviews. The interviews sought to further explore the experience of sectors whose DRR capacity development initiatives were not well-documented. The specific activities were:

² This includes training, technical assistance, community-based disaster risk management activities, institutional development and other such initiatives that develop disaster resilience in a community and/or society.

1. KIIs and FGDs of key persons at the government agencies with which WFP is collaborating (OCD/DND, DILG, and DSWD), especially for initial environmental scanning.
2. FGD on national-local DRR relationships with participants from the League of Cities, League of Municipalities and Union of Local Authorities of the Philippines (ULAP) and DILG.

Local level

For the review of the existing capacity development initiatives, practices and gaps at the local level, a mix of qualitative methodologies were employed. Prior to the conduct of on-site data gathering activities, a desk review was undertaken to explore the range of capacity building interventions provided by oversight and donor agencies to local governments. With regard to primary data gathering, in-depth interviews and desk review of local government documents were undertaken to probe deeper into details of capacity building interventions. The methodologies are described in more detail below:

1. A range of documents were reviewed to include, among others, the following:
 - Guidelines, training kits and toolkits including facilitator's handbooks issued by relevant oversight agencies, such as:
 - "Guidelines on Mainstreaming Disaster Risk Reduction (DRR) in Sub-national Development and Land Use/Physical Planning" prepared by NEDA;
 - "Rationalized Local Planning System" issued by DILG;
 - Training kits of oversight agencies (i.e. NEDA, DILG, OCD, Local Government Academy, Development Academy of the Philippines, and donor agencies involved in capacity building at the local level).
 - Training Reports of programs on disaster preparedness and response by select oversight agencies; and
 - Provincial and municipal Human Resources Development Office (HRDO) reports in 2010.
2. Key informant interviews at the provincial and municipal levels were undertaken with representatives coming from the selected local government units to map capacity building interventions. More specifically, the FGDs gathered information on the types of capacity building interventions that were provided to local governments

and other stakeholders, the nature of the intervention, the participants, and results/impact of the interventions, among others.

3. Key Informant Interviews at the national and local levels. Respondents include:

- Executive Directors/Presidents of the various leagues to include:
 - Union of Local Authorities of the Philippines;
 - League of Cities of the Philippines
- HRDO/Human Resource Management Officers of the local government units;
- Provincial Planning and Development Coordinators of pre-identified provinces;
- Municipal Planning and Development Coordinators of pre-identified municipalities.

iii. Development of a comprehensive report on current DRR-related capacity building efforts and gaps

The findings from the review of legal and institutional arrangements and inventory of DRR capacity development initiatives and practices were used to characterize the current state of DRR knowledge, capacity, and practice within the national, provincial, and local institutions of the four (4) participating provinces. Key areas where interventions to build the disaster resilience of these institutions are necessary were determined by comparing such existing conditions with corresponding performance target levels in the DRRI. These identified gaps, as well as recommendations on appropriate and cost-effective capacity development initiatives that can address them, have been consolidated and are being presented by EMI through this report.

C. Summary of activities

A listing of the activities that were conducted to assess the capacity needs for disaster preparedness and response at the national level and within the four (4) selected participating provinces and eight (8) municipalities is found in the Annexes. The list includes focus group discussions and key informant interviews at the national level; courtesy visits, key informant interviews and workshops at the local level.

III. Review of Policy and Institutional Environment

The context within which disaster risk management (DRM) is undertaken in the Philippines is found in the country's legal foundation and in the institutional platform (structural, functional, operational) where these activities take place. There exists a basic law on Disaster Risk Reduction and Management (DRRM) in the country, Republic Act 10121, which is less than a year old (enacted in May 2010), complemented by a plethora of policies which relate directly (and some, indirectly) to this system, and are implemented by offices at different levels of government. These policies are found in a wide array of legal instruments which at present, are in varying degrees of implementation.

The institutional structure for formulating, implementing and revising these policies and for carrying out plans, programs and projects in accordance with them are also in place; although in the case of that proposed in the new law, it is still in the process of being institutionalized. RA 10121, the governing law, provides a broad definition of capacity building quoted herein, which was used as a guide in the course of this assessment: "Capacity is a combination of all strengths and resources available within a community, society or organization that can reduce the level of risk, or effects of a disaster. Capacity may include infrastructure and physical means, institutions, societal coping facilities, as well as human knowledge, skills and collective attributes such as social relationships, leadership and management. Capacity may also be described as capability." (RA 10121, Section 2b)

It is against this backdrop that the assessment of the capability of national agencies and LGUs in DRM was conducted, utilizing the methodology earlier described.

A. Policy Context

i. Broad government development policies form part of the overall policy framework within which DRRM policies are implemented

There are a number of broad developmental policies adopted regularly by the government that impact on the various aspects of DRRM; an official acknowledgment that disasters not only cause much physical and socioeconomic damage, but set back whatever economic gains may have already been achieved by the country.

1. **Millennium Development Goals** – Very broad socio-economic goals are found in the Millennium Development Goals or MDGs, which originated from the United Nations Millennium Declaration. Among others, these aim to encourage development by improving social and economic conditions in the world's poorest countries and seek to ensure environmental sustainability and develop a global partnership for development. Its overarching goal of alleviation of poverty remains a priority target in all the development plans of the National Economic Development Authority (NEDA), where poverty is seen as a primary driver of risk, as it increases the vulnerability of marginalized groups who are exposed to hazards. As the Medium Term Philippine Development Plan (MTPDP) observes, "while natural disasters can affect any population group, it is the poor who tend to be most vulnerable and the least resilient to

calamities, less able as they are to recover quickly from their effects.” (MTPDP 2011-2016 Briefer, p. 2).

It has also been proven that impoverishment, combined with naiveté about DRRM make the effects of disaster greater (Caselet Documentation of Unique Experiences and Innovative Strategies applied by Three Provinces, by PRIMMR, undated.) Thus, Republic Act 10121 (Section 2c) explicitly mandates the State to “incorporate the implementation of national, regional and local sustainable development and poverty reduction strategies, policies, plans and budgets.” and “develop and strengthen the capacities of vulnerable and marginalized groups to mitigate, prepare for, respond to and recover from the effects of disaster.” (Section 2n)

2. **Medium Term Philippine Development Plan (MTPDP)** – The above-mentioned policies are inscribed in the documents prepared by the country’s top economic planning body and adviser of the President, the NEDA, which prepares the MTPDP and other related plans. More directly related to DRRM are the MTPDP policies to enhance the resilience of natural systems and improve adaptive capacities of communities to cope with environmental hazards. It aims to achieve this by strengthening institutional capacities of national and local governments for climate change adaptation and disaster risk reduction and management (MTPDP 2011-2016).

Other relevant policies include those on disaster risk-sensitive land use planning. As mentioned in the Mainstreaming Process Paper published by the ProVention Consortium, “The objective of mainstreaming DRR is to ensure the integration of risks from natural hazards in development policy formulation, planning and in the design of development programs and projects. This leads to the adoption of appropriate measures to reduce disaster risk and ensure that development undertakings do not worsen existing situations of hazards and vulnerabilities and create new forms of disaster-inducing activities.”

ii. There exists a governing law for DRRM in the country which is the basic legislation on this vital government concern

The country is guided in DRRM by a basic law (RA 10121) whose provisions are supported by policy directives and practices of national government agencies who are members of the governing Council created under it, and by other government offices and local government units. Most of these policies originated under the aegis of the then basic statute, Presidential Decree (PD) 1566, which had been enforced for the past 33 years until 2010, when the new law was passed. **This original DRR charter had generated valuable policies and practices which, to the extent compatible with its successor law, continue to be valid.** RA 10121 functionally links with a recently enacted statute (2009) which is the Climate Change (CC) Act (RA 9729), with which it shares common goals and objectives.

The CC Act officially recognizes that climate change and disaster risk reduction are closely interrelated and that effective DRR will enhance climate change adaptive capacity. Thus, it mandates that the State shall integrate DRR into climate change programs and initiatives (Section 2).

The present statute (RA 10121) is a comprehensive and integrated law which seeks not only to improve the existing DRR system, but to fill up its serious gaps and correct its weaknesses, among

which are: a.) the generally reactive (rather than pro-active) approach to disasters, which, with the new law's emphasis on preparedness, has signaled a major shift toward more proactive modes of mitigation and prevention; b.) the inadequacy of manpower, financial and other resources to effectively put into operation the policy directives of the law; and c) weaknesses of certain provisions which had given rise to recurring issues and difficulties in implementation, such as the nature and application of calamity funds and the commission of certain illegal acts by unscrupulous persons during the occurrence of disaster, which had then gone unpunished.

RA 10121 incorporates a hierarchy of policies from the most basic which is that of upholding people's rights to life and property, and of adhering to internationally accepted principles, norms and standards for capacity building in DRRM and humanitarian assistance, to those policies leading to an integrated, proactive and multi-sectoral approach in addressing the impacts of disasters.

iii. The country's basic DRRM charter is supported and complemented by a wide range of other related policies

There are other relevant policies which are valuable sources of approaches, tools and instruments for strengthening DRM capability building in the country. Found in existing regulatory codes that govern special subject matter, they carry provisions which lend full support to the various stages of DRR. These laws play an important role more particularly at present, where the new basic law still needs to be fully operationalized.

- 1.) **Local Government Code (RA 7160, 1991):** The LGUs implement emergency measures during and after a disaster or emergency and submit reports to higher authority on the extent of damages incurred during the disasters. The local legislators adopt measures to protect the inhabitants from the harmful effects of natural or man-made disasters; provide relief and rehabilitation assistance to victims and adopt comprehensive land use plans and zoning ordinances which are now required to mainstream DRR measures. The Local Government Code provides for the primary source of funding for DRM, the Local Calamity Fund, a mandatory budgetary item set aside by LGUs from their annual local budgets, amounting to 5% of the total annual budget.

Devolved services to the LGUS include the management of local disasters and include programs and projects supportive of DRR operations. The Local Government Code has also served as legal basis for local ordinances adopted by the LGUs, containing policies that respond to their particular DRR needs, such as risk-sensitive land use plans and zoning ordinances, and the creation of local offices placed in charge of DRR functions.

- 2.) **National Building Code (RA 6541, 1972):** This law prescribes minimum standards for buildings and structures in the location, siting, design, quality of materials, and construction and use, including their utilities, fixtures, electrical and other installations. The Code's primary concern includes the application of standard engineering procedures that are disaster-resistant, which are enforced on all types of construction including reconstruction, retrofitting, and improving the resistance of non-engineered buildings. LGUs also adopt, through local ordinances, their own safe building standards which are responsive to their unique local requirements.

- 3.) **New Fire Code of the Philippines (RA 9514, 2008):** Very specifically, the Code mandates the inspection of any structure for dangerous or hazardous conditions or materials, and orders the removal of hazardous materials and the stoppage of hazardous operations. Inspection of every structure at least once a year and every renewal time for business permits is required by the law. The Bureau of Fire Protection is authorized to enter into various agreements: a.) for the conduct of training and education of fire volunteers, practitioners and fire volunteer organizations; b.) for the acquisition of fire fighting, rescue, hazardous material- handling equipment and related technical services; and c) for the definition of areas of cooperation on fire prevention and fire safety education. There exists a school for police and fire protective services called the Philippine Public Safety College.
- 4.) **Environmental Code (PD 1152, 1977):** Among others, the Code requires the control of soil erosion on the banks of rivers and seashores, and the control of flow and flooding in and from rivers and lakes. It carries provisions which require the national government through, among others, the Philippine Atmospheric, Geophysical and Astronomical Services Administration, (PAGASA) to promote concerted research efforts on weather modification, typhoon, earthquake, tsunami, storm surge, and other tropical natural phenomena to mitigate or prevent their destructive effects.
- 5.) **Water Code of the Philippines (PD 1067,1976):** The disaster-related provisions of the Code include the requirement for approval by government activities of plans and specifications for the construction or repair of dams for the diversion or storage of water; structures for the utilization of subterranean or ground water and other structures for utilization of water resources; and the prohibition for the inducement or restraint of rainfall through cloud seeding, unless otherwise ordered by the President of the Philippines and only in time of national calamity or emergency.
- 6.) **Ecological Solid Waste Management Act (RA 9003, 2000):** The Code carries provisions which aim to ensure that solid waste mismanagement does not contribute to more risks for and increase the vulnerability of communities in case of disasters. Among others, the Code directs solid waste avoidance and volume reduction through source reduction and waste minimization measures before collection, treatment and disposal in environmentally sound solid waste management facilities. It also promotes proper segregation, collection, transport, storage, treatment and disposal of solid waste through the formulation and adoption of the best environmental practices in ecological waste management which, however, excludes incineration.

iv. Supporting the above laws are other forms of legal issuances by the former central agency for DRR, and other sectoral government agencies.

A plethora of legal directives of the former central organization on DRR, the National Disaster Coordinating Council (NDCC) issued through the past 30 years have antedated RA 10121's directives. These policies need to be reviewed for their validity and enforceability at the present time. They may also be improved or revised prior to their re-adoption or revision by the new Council. Among

these are: 1) 1999 revised policies and procedures on calamity fund management; 2) 1998 amended policies, procedures and criteria for calamity area declaration; and 3) 1998 amended policies and procedures on the provision of financial assistance to victims of disasters. The others are policies and procedures on foreign disaster assistance and community-based rescue, evacuation and relief operations, and volunteerism.

There are also policies enforced by other sectoral agencies such as the PAGASA, Philippine Volcanology and Seismology Institute (PHIVOLCS), and the Manila Observatory, which need to be reviewed and whose implementation will need to be coordinated with the various agencies concerned with the above-cited list of policies. For instance, policies on tree planting and on the prevention of proliferation of informal settlers have been adopted through directives of the DILG. While some of the above may remain enforceable, they may need modifications or adjustments to make them compatible and supportive of the new law.

There are other Codes and Republic Acts such as the Health and Sanitation Code and the Forestry Code whose concerns support the objectives of DRRM in the country.

v. There are seemingly unrelated policies but which, nevertheless, affect DRRM in the country. There is a need to review them to determine how they fit into the overall DRRM policy framework.

Policies which originally were seemingly unrelated to disaster management are those on human-made disasters such as insurgency, which has triggered armed conflicts displacing entire communities. Weak enforcement of public safety and environmental regulations, for instance, has caused some of the worst maritime disasters involving the collision of aging vessels in Philippine waters, while lack of modern fire-fighting equipment in large cities renders them unable to cope with frequent city fires (Serote, 2009). The new DRRM law now covers all types of human-made disasters that result from and contribute to the vulnerabilities of communities. Thus, RA 10121 mandates that disaster risk reduction be mainstreamed into the peace process and conflict resolution approaches to minimize loss of lives and damage to property, and ensure that communities in conflict zones can immediately go back to their normal lives during periods of intermittent conflicts.

vi. Policies at the international level, which, according to the Philippine Constitution “also form part of the laws of the land,” enrich the policy environment of the country and have become the basis of new policy directives in the country.

The new charter for DRRM explicitly mandates the State “to incorporate internationally recognized principles of disaster risk management in the creation and implementation of national, regional and local sustainable development and poverty reduction strategies, policies, plans and budgets.” This law also requires the adherence to and adoption of universal norms, principles and standards of humanitarian assistance and global effort on risk reduction as concrete expression of the country’s commitment to overcome human sufferings due to recurring disasters (Section 2b).

There are many international policies that guide the country in its DRRM activities, such as those of the United Nations International Strategy for Disaster Reduction (ISDR). Its coverage includes four proactive strategies which have become more relevant now that the country has shifted into a risk reduction mode. These are: a) environmental management, which covers climate change, biodiversity, water and air quality, solid and liquid waste management; b) disaster- risk sensitive land use planning, which focuses on the proper use of land and other natural resources for human settlements, economic activities, and related needs; c) safe building construction, that is concerned with the application of standard engineering procedures that are disaster-resistant, including: reconstruction, retrofitting and improving the resistance of non-engineered buildings; and, d) early warning systems, which consist of forecasting impending extreme events and disseminating warning information to political authorities and the threatened population.

The other international policies include the Hyogo Framework for Action (HFA) 2005-2015: Building the Resilience of Communities and Nations to Disasters, and the ASEAN Agreement on Disaster Management and Emergency Response (AADMER). Still another DRR initiative in local governance in support of the HFA is the Global Fund for Disaster Reduction and Recovery (GFDRR) Project.

B. Institutional Environment of DRRM

The institutional aspects of DRRM look into the organizational, functional, and operational elements of the system introduced by the basic law on DRRM in the country. Part B flows logically from Part A, which covers the wide range of DRRM policies enshrined in the Constitution, those found in RA 10121, and in the other legal issuances from both the executive and legislative branches of government. The legislation cited in Part A prescribes, and in many cases determine to a large extent the institutional arrangements and processes described herein.

i. The major organizations concerned with DRRM are multi-level structures with multi-sectoral and multi-aspectual functions

All the structures constituting the DRRM organizations at the various levels may be characterized as multi-sectoral and multi- agency, consisting of a collective aggrupation of the offices constituting the entire government bureaucracy. At the national level, the LGUs are represented by the federation of cities and towns, and at the regional level, by the LGUs under the regions. Also members are financial institutions and the police and security forces. At the regional and local levels, with minor exceptions, the membership is a mirror image of that at the national level. This composition underscores the fact that disaster management is the concern not only of the various sectors but of the entire government and of whole communities; and that the new approach to DRRM of giving serious attention to the different stages of DRRM (prevention and preparedness to reduction), and not just to rescue, and recovery.

National Level: At the National level, a governing Council for the implementation of the law has been established whose functions are described below.

1. Composition of the National Disaster Risk Reduction and Management Council (NDRRMC)

The Secretary of the Department of National Defense serves as Chairperson. He is assisted by Four (4) Vice-Chairpersons, representing the different phases of disaster management, namely:

- Secretary of the Department of Interior and Local Government (DILG) for disaster preparedness;
- Secretary of the Department of Social Welfare and Development (DSWD), for disaster response;
- Secretary of the Department of Science and Technology (DOST), for disaster prevention and mitigation; and
- Director General of the National Economic and Development Authority (NEDA), for rehabilitation and recovery.

The above departments are considered as lead agencies around which a cluster of other member-agencies is organized, as part of the Cluster Approach that has been adopted to make the Council's operations more manageable.

The National DRRM Council, with a membership of thirty-Nine (39) offices is the biggest organization in the country today, even larger than the NEDA, the top economic planning agency whose head is the President of the Philippines himself. The breakdown of this membership is as follows:

- Fourteen (14) line departments, namely the Departments of Health, Natural Resources, Agriculture, Education, Energy, Finance, Trade and Industry, Transportation and Communication, Budget and Management, Public Works and Highways, and Tourism, Foreign Affairs, Justice, Labor and Employment, which are all members of the cabinet;
- Twelve (12) other government agencies/offices (Office of the Executive Secretary, Office of the Presidential Adviser on the Peace Process (OPAPP), Commission on Higher Education (CHED); Armed Forces of the Philippines (AFP), Philippine National Police (PNP), Office of the Press Secretary, National Anti-Poverty Commission-Victims of Disasters and Calamities sector (NAPC-VDC), National Commission on the Role of Filipino Women (NCRFW), Housing and Urban Development Coordinating Council (HUDCC), Climate Change Commission (CCC), Philippine Health Insurance Corporation (PHILHEALTH) and Office of Civil Defense(OCD);
- Two (2) government financial institutions (Government Service and Insurance System (GSIS) and Social Security System (SSS);
- One quasi-government agency (Philippine National Red Cross);
- Five (5) Local Government Leagues (Union of Local Authorities in the Philippines (ULAP), League of Provinces in the Philippines (LPP), League of Cities in the Philippines (LCP), League of Municipalities in the Philippines (LMP) and Liga ng mga Barangay(LnB) ; and
- Four (4) Civil Society Organizations; and one (1) Private Sector Organization.

The Office of Civil Defense (OCD) is the implementing arm of the National Council and acts as its Secretariat. Its Administrator, with the rank of Undersecretary, serves as Executive Director of the Council. The OCD is clustered into quadrants, and in time of disaster, they are aligned with these clusters. Among its many functions are: to serve as adviser of the Council, and to formulate the National DRR Plan which shall ensure that the physical framework, social, economic and environmental plans of provinces, cities and municipalities are consistent with such a Plan. It is also charged with formulating standard operating procedures for various DRRM operations.

2. Functions of the NDRRM Council

The highlights of its wide-ranging functions are presented herein.

Advisory, Policy-making, and Recommendatory

- Serve as Adviser of the President of the Philippines on the status of DRRM implementation;
- Develop mechanism for policy-making, planning and decision-making processes;
- Establish DRRM Information and Management System and Geographic Information System;
- Create National Early Warning and Emergency Alert System;
- Establish risk transfer mechanisms;
- Formulate guidelines and procedures on the Local DRRM Fund releases, utilization and auditing;
- Recommend calamity area declaration and calamity fund allocation to restore normalcy in affected areas.

Planning, Coordination, Monitoring and Evaluation

- Prepare the National Disaster Risk Reduction and Management Framework (NDRRMF) that shall provide for a comprehensive, all-hazards, multi-sector, inter-agency and community-based approach to DRRM;
- Prepare a Framework for Climate Change Adaptation and DRRM, in coordination with the Climate Change Commission;
- Ensure that the National Disaster Risk Reduction and Management Plan (NDRRMP) is consistent with the NDRRM Framework;
- Manage and mobilize resources for DRRM;
- Develop vertical and horizontal coordination mechanisms for more coherent DRRM policy and program implementation by sectoral agencies and by LGUs ;
- Coordinate/oversee the implementation of the country's obligations under disaster management treaties to which it is a Party and see to it that the country's obligations are incorporated in DRRM frameworks, policies, plans, and programs (Duque).

Regional Level: At the regional level, Regular and Special Forms of Regional DRRM Councils have been established. The regular ones are those established for all the regions, while the special ones are those created in Metropolitan Manila, and in Muslim Mindanao.

1. Composition of the Regular Regional Disaster Risk Reduction and Management Councils

The regular Regional Disaster Risk Reduction and Management Councils (RDRRMC) have the following composition, where the chairperson is the Regional Director of the OCD, assisted by the following Vice Chairpersons for the following DRR concerns:

- Regional director (RD) of Department of Interior and Local Government, for preparedness;
- Regional Director of the Social Work and Community Development, for response
- Regional Director of Science and Technology, for prevention and mitigation ; and
- Regional Director of NEDA for Rehabilitation and Recovery.

There are 36 members consisting of:

- 14 line departments: on Health, Environment and Natural Resources, Agriculture, Education, Energy, Finance, Trade and Industry, Transportation and Communication, Budget Management, Public Works and Highways, Foreign Affairs, Justice, Labor and Employment and Tourism;
- 10 other government agencies: OPAPP, CHED, AFP, PNP, PRC, NAPC-VDC, NCRFW, HUDCC, CCC and PHILHEALTH;
- Two government financial institutions : GSIS, SSS;
- Five LGU Leagues: ULAP, LPP, LCP, LMP, LnB
- Four Representatives from the Civil Society Organizations ; and
- One Representative from the Private Sector.

The OCD Regional Office serves as the Secretariat. The RDRRMCs may invite other concerned institutions, organizations, agencies and instrumentalities in the private and public sector when deemed necessary to perform their mandate.

Aside from the regular RDRRMCs, there are two other special regional councils, in recognition of the unique situation, needs and requirements of these regions:

- 1) **Autonomous Region for Muslim Mindanao (ARMM)**, where the designated Chairperson is the Regional Governor, while there are four Vice-Chairpersons: Regional Secretaries of the DSWD-ARMM for Disaster Response, the DILG-ARMM for Disaster Preparedness, and the DOST-ARMM for Disaster Mitigation and Prevention, and the Executive Director of the Regional Planning and Development Office (RPDO) for Disaster Rehabilitation and Recovery
- 2) **Metro Manila**, whose chairperson is the chairman of the Metropolitan Manila Development Authority (MMDA), pursuant to its charter, RA 7924. The Civil Defense Officer serves as Regional Director of the National Capital Region (NCR) or as may be determined by the Metro Manila Disaster Risk Reduction and Management Council (MMDRRMC) Chair. The other Vice-Chairpersons are those on Response, Prevention and Mitigation, and Rehabilitation and Recovery as may be determined by the MMDRRMC Chair. The other members are the Executives of MMDA departments/offices and/or regional offices or field stations operating in the National Capital Region.

2. Functions of the Regional DRRM Councils

- Ensure the preparation of disaster- sensitive regional development plans;
- Coordinate, integrate, supervise, and evaluate the activities of the Local DRR;
- Convene, in case of emergencies, the regional line agencies and concerned institutions and authorities;
- Establish the Regional Disaster Risk Reduction and Management Operations Center (RDRRMOC); and
- Through the RDRRMC Chairperson, tap the facilities and resources of other government agencies and private sectors in pursuit of disaster risk reduction and management.

Local Level

1. Composition of the Local DRRM Council

The Chairperson is the Governor or Mayor, with eighteen members (18), nine (9) of who are the Heads of the following local offices under the Mayor:

- 1) the Local Planning and Development Officer;;
- 2) Local Disaster Risk Reduction and Management Office;
- 3) Social Welfare and Development Office;
- 4) Health Office;
- 5) Agriculture Office;
- 6) Gender and Development Office;
- 7) Engineering Office;
- 8) Veterinary Office; and
- 9) Local Budget Office.

The rest are the Division Head/ Superintendent of Schools of the Department of Education; the Highest-ranking Officer of the Armed Forces of the Philippines assigned in the area; Provincial Director/City/ Municipal Chief of the Philippine National Police; Provincial Director/City/ Municipal Fire Marshall of the Bureau of Fire Protection (BFP); President of the Association of Barangay Captains (ABC); Philippine National Red Cross (PNRC); four (4) accredited civil society organizations (CSOs), and one private sector representative. The Council can include other agencies as it may find necessary.

2. Functions of the LDRRMC

They have the following functions: a.) Approve, monitor and evaluate the implementation of the LDRRMPs and regularly review and test the plan consistent with other national and local planning programs; b.) Ensure the integration of DRR and climate change adaptation into local development plans, programs and budgets as a strategy in sustainable development and poverty reduction, and c.) Recommend the implementation of forced or preemptive evacuation of local residents, if necessary.

IV. Review of Relevant Capacity Assessments

At the national level, the past three years saw a flux of political and popular actions related to disaster and climate risks. They range from new laws to public forums tackling the link between weather-related (or hydro-meteorological) disasters and climate change. Damage from typhoons Ondoy, Pepeng and Santi to Metro Manila, Region IV and Northern Luzon between September and October 2009, further heightened the concern for long-lasting solutions. Prior to these hazard events, there had been much discussion about focusing on climate change adaptation rather than mitigation (or reduction of greenhouse gases) among government, non-government and civil society organizations.

A national capacity needs assessment on the subject of DRR is significant in light of two major movements. They are in themselves important because that can potentially drive meaningful change in governance as well as behavioral changes in society. These are:

- Paradigm shift from disaster response and relief to disaster preparedness and mitigation
- Integration of DRR and CCA

A. Paradigm shift

The paradigm shift from disaster response and relief to disaster preparedness and mitigation is now formally embedded in national policy. Even prior to the enactment of the new Disaster Risk Reduction and Management (DRRM) law and its provision that the OCD formulate and implement a National DRRM plan based on the National DRRM Framework, the Strategic National Action Plan for Disaster Risk Reduction 2009-2019 (SNAP) was already adopted by the Philippine government through Executive Order No. 888 on June 2010. Prior to this, the Philippine government submitted its in-depth country review to the HFA Monitor³ in 2008. About the same time, the process formulating the Strategic National Action Plan on Disaster Risk Management had begun.

Two principles have guided the development and implementation of the Strategic National Action Plan for Disaster Risk Reduction 2009-2019. These are: (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. In the Plan, Eighteen (18) programs/projects/activities (PPAs) are clustered under five strategic objectives. SNAP's strategic objectives are derived from the convergence of the strategic actions/responses proposed in national dialogues and a national assessment study. The strategic objectives are:

1. **Enabling environment.** Adopt a responsive policy and legal framework which creates an enabling environment for all Filipino citizens and the government and guides them towards reducing losses from disaster risk. (It shall be noted that one of SNAP's PPAs is the adoption of a law to institutionalize DRR in every agency of the government.)

³ The HFA Monitor is the UNISDR's online tool to monitor, review and report on the progress in the implementation of DRR and recovery actions undertaken at the national level, in accordance with the HFA priorities.

2. **Financial and economic soundness.** Pursue cost-effective ways and means to offset socio-economic losses from disasters and prepare the nation for disaster recovery.
3. **Supportive decision-making for an enlightened citizenry.** Use the best available and practicable tools and technologies from social and natural sciences to support decisions by stakeholders in avoiding, preventing, and reducing disaster impacts.
4. **Safety and well-being enhancement.** Increase capacity, reduce vulnerability and achieve improved public safety and well-being.
5. **Implementation and evaluation of disaster risk reduction.** Monitor and assess progress on disaster risk reduction (DRR) and prepare better for disasters of identified risks and early warning.

As part of the formulation process of SNAP, studies on national capacity for DRR and state of mainstreaming of DRR were conducted in 2008.

B. Integration of DRR and CCA

Insights on integrating DRR and CCA into planning and day-to-day operations became more evident from recent weather-related disasters. In this scheme, it is recognized that the negative impacts of disasters can be minimized by reducing vulnerabilities and enhancing capacities of communities. It is thus necessary for government, non-government and private actors to exert efforts on dealing with social, economic, physical and environmental vulnerabilities, either singly or jointly.

In government plans, disaster risk management (DRM) is not clearly demarcated as a sector. It is rather often handled as a cross-cutting issue. In terms of the Medium-Term Philippine Development Plan (MTPDP) 2004-2010, DRM issues are dealt with in sections on environment and natural resources, responding to the needs of the poor (disaster relief), peace and order, science and technology, and national defense and security. (It is worthy to note that environmental groups⁴ had been pushing for the integration of DRR and CCA measures into “the overall anti-poverty program of the government.”)

Likewise, plans on climate change adaptation in the Philippines do not treat DRM as a separate sector. While recognizing that poverty reduction and disaster management must be linked with climate variability, consultations in the formulation of the Philippine Strategy on Climate Change Adaptation 2010-2022 were organized into “eight major sectors”: agriculture, biodiversity, coastal and marine, energy, forestry, health, infrastructure, and water. The strategy was formulated between 2008 and 2010 by an Inter-Agency Committee on Climate Change spearheaded by the Department of Environment and Natural Resources (DENR) with funding support from GTZ (German Technical Cooperation). The Committee produced sectoral reviews consolidating the efforts of national government, the scientific and academic communities, advocacy groups and LGUs, as well as plans of action. The action plans for agriculture, fisheries, water, land resources, mines and geosciences, and biodiversity have objectives that explicitly mention disasters.

⁴ Anonymous, 2010 Aquino Urged to Prioritize Environment, ‘Climate Actions’ in MTPDP 2011-2016 (6 December 2010, [Manila Bulletin](http://beta.searca.org/kc3/index.php/news/philippines/177)) (Available at <http://beta.searca.org/kc3/index.php/news/philippines/177>).

In the water sector, the Strategy document observes: “Recent tropical storms and intense rainfall events demonstrated that current water infrastructures and disaster management structure cannot satisfactorily cope with extreme climate variability.” Stresses to the water management system are further aggravated by the poor ability of over 30 government agencies to respond to the additional challenges posed by extreme climate events. The plan of action thus aims to mainstream CCA in the water sector by using climate-resilient design criteria and climate-proofing of water-related infrastructure such as water supply distribution systems, dams and water impoundments, and community and LGU-managed rainwater harvesting infrastructure.

There are also NEDA-implemented projects that were initiated even before the DRRM Act and Climate Change Act which are envisioned to supply the tools that could augment the present situation. These are tools such as guidelines and technical regulations which shall provide the necessary standards and practices to gauge, monitor and evaluate the proposed actions. The Joint Program on Strengthening the Philippines’ Institutional Capacity to Adapt to Climate Change (2008-2010) implemented by NEDA with the Millennium Development Goal Fund (MDG-F) of the Spanish Government includes a component on developing a capacity development strategy based on capacity assessment. The project activities comprise efforts to build capacity at both national and local levels. These are tackled in a later section.

i. Review of Relevant Assessments

Several assessments of DRM have been conducted over the past eight years, i.e. some even prior to the adoption of the Hyogo Framework for Action 2005-2015 (Box 1). As mentioned earlier, a capacity assessment and mainstreaming study were conducted in 2008 as part of the SNAP process formulation.⁵ The 2008 capacity assessment reviewed reports that came out in 2005 – the joint World Bank-NDCC Assessment and its follow-up study, PCI-World Bank Study⁶ and the United Nations Disaster and Coordination Team (UNDAC) Mission Report⁷, a brief paper by Reario (2007) on “Developing a Comprehensive Disaster Risk Management Framework for the Philippines.” The report of the “Lessons Learned” Workshop assessing the response to the December 2006 typhoons that affected the Bicol Region was also included in the assessment. This report was the only post-disaster analysis that was available then.

At least three more relevant studies were done prior to the passage of the DRRM Bill, two of which sought to frame DRM as a sector relevant to climate change, specifically climate change adaptation. JICA did the “projects on measures against climate change” study in 2009. The other was a scoping study on DRM done in connection with the formulation of the National Framework Strategy for

⁵ The key stakeholder groups whose capacities were assessed are those identified by the Hyogo Framework for Action, namely: planning and policy making organizations; non-governmental organizations, women’s and community groups; media organizations; technical and scientific institutions r services; owners and operators of economic and social infrastructure; public agencies responsible for overseeing implementation of codes, regulating, sanctioning or providing incentives; key humanitarian and social services organizations; relevant professionals; financial institutions.

⁶ PCI: Pacific Consultants International.

⁷ UNDAC: United Nations Disaster and Coordination Team.

Climate Change under the auspices of the Climate Change Commission and funded through a NEDA-UNDP project.

As part of the MDG-F project⁸, a capacity assessment was done in 2010. Although the Post-Onoy disaster analysis dealt basically with the disaster impacts of the super typhoon, it brought a new level of awareness about the impacts of climate risks as well. All these studies however were done or completed prior to the passage of the DRRM Bill.

Box 1. Capacity assessments and studies relevant to disaster risk reduction.

- (1) World Bank-NDCC (2005) National Disaster Risk Management in the Philippines: Enhancing Poverty Alleviation through Disaster Reduction. The assessment of the country's "capacity to reduce and manage disaster risk" done between May 2003 and March 2004 related disasters with development in a comprehensive manner. The report's highlights were: the need for a proactive approach to disaster management through land use planning, risk identification and risk sharing/financing; the need to relieve the public sector from the burden of disasters; and the need to improve coordination.
- (2) PCI-World Bank Study (2005). This is a follow-on study to support the World Bank-NDCC study. The report basically echoes the findings and recommendations of the previous work, but provides more details with respect to risk assessment and risk transfer.
- (3) UNOCHA and NDCC (2005) UNDAC Mission to the Philippines: An Assessment of the National Disaster Response Capacity. In response to the government's request, a two-week mission came on 18 May – 1 June 2005. This came after the landslides and flash floods of November and December 2004. The report had 67 recommendations on the legal and institutional framework, disaster response, and disaster preparedness including the need for contingency planning and mechanisms for facilitating international assistance.
- (4) Reario, Ronaldo, 2007 Developing a Comprehensive Disaster Risk Management Framework for the Philippines. A framework was developed based on the assessment of, the 2005 UNDAC Mission Report. The author noted that the mission findings still applied at this time.
- (5) NDCC-UNDP, 2007 A Report on the Assessment of Organizational Responses to the December 2006 Typhoon Disaster: A "Lessons Learned" Workshop, 29-30 May, Legazpi City. A significant attempt to do post-disaster analysis – document lessons learned and best practices, and identify actions which pertain mainly to disaster relief, response and preparedness.
- (6) Fernandez, Antonio L., 2008 Capacity Assessment Report on Key Disaster Risk Reduction Stakeholders. A quick assessment using the framework of the UNDP capacity assessment methodology adapted to DRR and the HFA, and adopting specific attributes from the UNDAC Mission Report and the 2004 Metropolitan Manila Earthquake Impact Reduction Study (MMEIRS) conducted by the PHIVOLCS, Metro Manila Development Authority (MMDA) and JICA. It utilized results of SWOT analysis from the 2007-2008 National Multi-stakeholder Dialogues.

⁸ MDG-F: Millennium Development Goal Funds of the Spanish Government.

- (7) NDCC (2008) National Assessment on the State of Disaster Risk Management in the Philippines. With support from ADB and UNDP, a disaster risk management framework was formulated based on regional assessments, and an agenda for action recommended. This study used a DRM state index rating as assessed by different stakeholder groups using the HFA as study template. The new law necessitated a reformulation of the framework; the local consultations conducted were deemed insufficient.
- (8) IC Net Ltd and CTI Engineering International Co. Ltd., 2009 Preparatory Study for Measures Against Climate Change. Progress Report. Study Team for JICA. Disaster risk management is explicitly recognized as one among six thematic areas for designing measures to address climate change issues.
- (9) Philippine Disaster Recovery Foundation (2010) Typhoons Ondoy and Pepeng: Post-Disaster Needs Assessment. Damages and losses were estimated. The report provides a needs analysis pertaining to disaster risk reduction and management in light of the reconstruction and recovery efforts.

The 2008 capacity assessment of the country's DRM agrees with Reario's observation⁹ that the points made by the UNDAC mission report still apply at that time. Since then, two major assessments can be used as reference to benchmark the progress made so far. These are the Post-Ondoy Needs Assessment of 2009 and the JICA studies.

The JICA studies refer to the two (2) "preparatory studies" conducted through the technical assistance mode of the Japan International Cooperation Agency (JICA). The first study, completed in June 2009, dealt with "projects on measures against climate change" which was mentioned in an earlier paragraph. The second study, completed in 2010, was primarily directed towards "Building the Resilience of Communities and Nation to Natural Disasters." It was conducted in 2010 by JICA with OCD under a technical assistance grant. The latter study gathered primary data through interviews with donor agencies, field visits to selected OCD Regional offices and LGUs, and the four national agencies whose Secretaries were designated Vice-Chairpersons of the NDRRMC. The 2010 study is the only known analytical work done after the new DRRM Act was passed. However the latter report has not been made available.

A capacity assessment on climate change done from May to October 2009 under NEDA's auspices utilized the UNDP capacity assessment methodology.¹⁰ Unlike the SNAP quick capacity assessment, the methodology was utilized in its entirety.¹¹ The process utilized the organization level¹² as point

⁹ Reario, R. 2007. Developing a Comprehensive Disaster Risk Management Framework for the Philippines.

¹⁰ United Nations Development Programme (UNDP), 2007 Capacity Assessment Methodology – User's Guide. Capacity Development Group/Bureau of Development Policy.

¹¹ The UNDP capacity assessment framework consists of three dimensions: (1) Points of entry, recognizing that a country's capacity resides on different levels – individual level, organizational, and enabling environment; (2) Core development issues – institutional development, leadership, knowledge, and mutual accountability - which can be modified depending on the objective and country context of the assessment process; and (3) Functional capacities – engaging with stakeholders; assessing a situation and defining vision and mandate; formulating policies and strategies; budgeting, managing, and implementing; and monitoring and evaluation.

of entry, and four core issues (which UNDP is often called upon to address), namely policy and institutional arrangements, knowledge management, resource management and leadership. Sixteen (16) agencies/units and organizations¹³ participated in the process. The Capacity Development Strategy derived from the process proposed “competency activities” (in the form of training, workshops, orientation) and an implementation schedule.¹⁴

Based on the foregoing, two kinds of assessment are recognizable: the pre-disaster needs assessment and the post-disaster analysis. In both, insights about the capacity of individuals and organizations can be obtained. The former type includes the following: UNDAC assessment and World Bank-NDCC study.

The DRM field has witnessed several hazard events that turned out to be big natural disasters. This fact alone indicates that post-disaster assessment will have been done. However, this is not true in all cases. Two assessments of this kind stand out: the Post-Onoy Needs Assessment (2009)¹⁵ and the Lessons Learned Workshop report (2007)¹⁶ of the 2006 typhoon disaster that affected the Bicol Region. Although these assessments pertain to particular hazard events that turned into major disasters, and they also delve on the systemic issues and recurring concerns that previous reports have documented.

Typhoons Ondoy and Pepeng: Post-Disaster Needs Assessment (2010)

With future disaster scenarios in mind, the post-Onoy needs assessment identified six (6) areas requiring immediate attention with regards to recovery and reconstruction. These are: enterprise sector, rural production, flood management, housing, and resettlement of victims, DRRM, and local governance. The study identified several weaknesses in each of these areas such that a disaster impact of such large magnitude resulted. The total economic damage from Typhoons Ondoy and Pepeng is estimated at USD 4.383 Billion, which is equivalent to 2.7 percent of the GDP. The report says, “The existing DRRM system needs to become more pro-active, coherent and effective.”

The recovery framework for DRRM uses the five HFA Priorities for Action – one statement for each (The Priorities for Action are: (1) governance; (2) risk assessment and early warning; (3) knowledge management; (4) vulnerability reduction; and (5) disaster preparedness.) These are interlinked as stated in the report thus: “The quality of and access to scientific data for predicting and forecasting

¹² According the UNDP guide, the organization level “provides the framework for individual capacities to connect and achieve goals beyond the capability of one or even a few people.”

¹³ Service agencies: Department of Agriculture, Department of Education, Department of Health, Department of National Defense; Technical service agencies: PAGASA, PHIVOLCS; Regulatory agencies: DENR, HUDCC, DILG, DOLE; Oversight agency: NEDA, OCD; Pilot LGUs: Albay, Benguet; Organizations for stakeholder mobilization, education and research: Philippine Association of Tertiary Level Institutions in Environmental Protection and Management (Pattlepam), Philippine Network on Climate Change (PNCC).

¹⁴ Dulaylungsod, N. C., L. V. Tibig, and R. Bernardo, 2010 Report: Phase 1 of the Capacity Assessment and Development of Capacity Development Strategy for Climate Change (MDGF 1656), NEDA, pp.. 23-26.

¹⁵ Government of the Philippines, 2009 Typhoons Ondoy and Pepeng: Post-Disaster Needs Assessment Special National Public Reconstruction Commission Philippines, World Bank Group, UN, ADB, European Commission, GFDRR.

¹⁶ NDCC-UNDP, 2007 A Report on the Assessment of Organizational Responses to the December 2006 Typhoon Disaster: A “Lessons Learned” Workshop, May 29-30, Legazpi City.

disasters requires urgent improvement. Once adequate information is available, the mainstreaming of DRRM into local planning needs to be significantly expanded, and critical service infrastructure (e.g., water, power, hospitals) should be upgraded to withstand an acceptable level of risk. These measures need to be coupled with better access to disaster risk financing.”

Synthesis

The main issues/concerns identified in four major assessments/studies are shown in Table 15. The four were selected because these are the more recent and adoptive of a unified DRR-CCA framework. They also capture the disaster-related issues succinctly. Using the DRR framework consisting of five key areas for mainstreaming DRR, the main issues and concerns as identified in the said studies are synthesized and shown in Table 16. Not shown on this table is a common concern regarding inadequate human resource capacity, which may be ascribed insufficient or at a low level of individual competency.

Table 15: Capacity issues and needs identified in four assessments/studies on DRR and CCA

MDGF 1656	JICA (2009)	PSCCA 2010-2022	PDNA baseline situation
• The enabling policy environment on CCA needs to be advocated • Inadequate data and information • Insufficient physical and financial resources • Inadequate human resources and leadership • Institutional roles are not defined as well as coordination	• Mainstreaming DRM in national development planning and implementation (in terms of sectoral policies and policy for climate change adaptation) • Weak capacity in both horizontal and vertical linkages/coordination. Few appropriate base maps on which to plot risks and vulnerabilities • Few trained and capable people to operationalize disaster risk reduction (in the areas of community-based hazard mapping, community-based early warning system, and information system to implement DRM).	• Inadequate updated scientific and technical information and data relevant to decision making at the national and local levels • Inadequate public awareness on CC, disaster risk reduction and adaptation • Lack of integration of CCA concerns in national and local policies, plans and programs • Inadequate CCA financing and investment • Inadequate national and local capacity to respond to CC impacts • Inadequate knowledge and access to CCA adaptation technologies	• Need to accelerate mainstreaming DRRM into policies and programs, at the local and national levels, and in different development sectors. – slow dissemination of guidelines on mainstreaming; limited geographic coverage of CBDRM activities • Inadequate multi-hazard and/or risk maps in high-risk LGUs; poor access to technical information; shortage of human resources in technical agencies (mapping) • Poor or inadequate system of transferring knowledge and skills to LGUs and testing or monitoring effectiveness of capacity development programs • Large financial burden on government for addressing DRRM needs; risk of unfunded costs for post-disaster recovery and

MDGF 1656	JICA (2009)	PSCCA 2010-2022	PDNA baseline situation
			reconstruction. • Many LGUs are unable to meet requirements – personnel, systems, and equipment to effectively deal with crisis on the ground

Note: – MDG-F: “capacity development gaps” on climate change adaptation

Table 16: Identified issues and concerns relevant to the indicators in the DRRi framework

Area	Main issues/concerns
Legal and institutional processes	Inability to utilize horizontal and vertical linkages to accomplish similar goals of DRR and CCA
Awareness and capacity building	Inability to inform and disseminate knowledge needed to deal with disaster and climate risks
Critical services and infrastructure resiliency	Inadequate capacity to allocate funds and utilize financing schemes strategically
Emergency preparedness, response and recovery planning	Inability to meet requirements - personnel, systems, and equipment – to effectively deal with emergencies for a range of scenarios and intensities
Development planning, regulation and risk mitigation	Inadequate data and information resources in their appropriate form for decision making regarding DRR at individual, household, community, local and national levels
General: human resources	Inadequate human resources and leadership Insufficient supply of capable people to make DRR work in priority areas of specific localities (At community level, trained people are needed in the areas of community-based hazard mapping, community-based early warning system) (At national level, trained people are needed in hazard/risk mapping, hazard monitoring and forecasting, and information system to implement DRM.)

To develop the human resources needed to attain community and national disaster resilience, training can be an appropriate intervention to develop skills, increase knowledge and nurture attitudes required of particular target groups. Training needs assessment appears to have not been adequately done. Only one relevant study came to notice during the conduct of this study.¹⁷ It reviewed training (labeled as “programs in capability building in disaster management”) activities of five key national government agencies (OCD, DILG, DSWD, PHIVOLCS, PAGASA), four LGUs (municipality of Calumpit, Bulacan; Davao Oriental Province and the municipality of Manay; Quezon City), and four NGOs (Philippine National Red Cross, Organizing for Rural Development (non-

¹⁷ Asian Disaster Preparedness Center (2001) Piloting Analysis of Disaster Management Training Gaps in the Philippines.

operational based on searches made to date), Citizens Disaster Response Center (CDRC), and Center for Disaster Preparedness). The study falls short, however, in providing a human resources development plan. Such a plan, for example, could ascertain target number of persons to be trained for specific skills and from which agencies/ organizations. Done in 2001, most critical issues and recommendations are no longer relevant since the context has changed over the last ten years. The persistent issues that have remained are:

1. Inadequate national and LGU capabilities to respond
2. Inadequate dissemination of hazard-specific information and preparedness/mitigation measures
3. Inconsistent reporting concerning casualties, affected population; poor timeliness of reporting damage needs
4. Unavailability of disaster management training manuals and reference materials at the local level
5. Need for organizational strengthening of organizations/community groups involved in disaster management
6. Need for accreditation of disaster management and preparedness training
7. Need for standardization of training in disaster management and preparedness.

The items in the list are strikingly similar to most concerns pinpointed by the past assessments, and these are repeated in the focus group discussions conducted, as well as other documents reviewed.

V. National Level Assessment

A. Key Findings

Summary of the Policy and Institutional Environment for DRRM in the Country

i. New Policy Thrusts

1. One of the fundamental changes in the institutional aspect of DRRM in the country is the adoption of a completely new thrust in the law, from Disaster Coordination to Disaster Management, and from an emergency response to a risk reduction and management mode. This has required a renaming of all the organizations created, from the national to the local level, and of all the terms related to their activities, including framework strategies and plan preparation. More important than the renaming of these structures is the re-orientation of the philosophy, approach and directions of its functions, which will find tangible translation in the various documents required to be produced at various levels such as the National Disaster Risk Reduction and Management Plan and an integrated and responsive DRR Program incorporated in the DRRM Plan.
2. In keeping with the “comprehensive, holistic and integrated approach” introduced, there has been a considerable increase in the number of government implementers and other stakeholders named in the Act, and the vesting of additional powers and responsibilities assigned to them. This approach has also been marked by the expansion of the coverage of the government’s concerns. Additional stakeholders have been included in the system such as the accredited volunteers to help in carrying out DRRM functions.
3. The law has adopted a disaster management system characterized by a vertical hierarchy of government structures from the national, regional, provincial, city and municipal level, down to the political unit, namely the barangay.
4. Aside from incorporating DRR into policies and the day-to-day business of the government, mechanisms are required to be adopted to mainstream activities into development policies, plans and projects, at all levels of governance.
5. A community-based approach to disaster has been made part of DRRM. The shift from emergency management to disaster risk management has underscored the critical role played not only by local governments, but by the local communities. This approach acknowledges the fact that it is the local villagers who suffer the most, no matter what disasters occur in the area, and therefore they have to adopt coping and protective mechanisms to reduce the socio-economic losses from disasters.

ii. Policies and Capability Building

- 1) There are more than adequate policies prescribing the conduct of training and capability building on DRRM incorporated in the basic law and other policies adopted by the member-agencies of the DRRM Council. **The quality of these training programs, however, have to be reviewed insofar as their relevance and responsiveness to the needs of the government agencies, private sector and other stakeholders are concerned, more particularly under the new thrust and direction of the recently enacted charter of DRRM.**
- 2) Capability building programs are likewise undertaken not only by the Office of Civil Defense (OCD) which is the implementing arm of the NDRRM Council, but all the sectoral member-agencies of the Council, (which is the entire bureaucracy and most of the other stakeholders). **The training programs of these government offices and other organizations focus on and are prioritized based on their respective primary responsibilities in the different stages of DRM.** This is because they have their own mandated responsibilities to their mother agency which are the ones supported by their budgetary allocations. The content of these training programs are, however, linked closely with the related concerns of other institutions which make their programs interactive and interdependent.
- 3) All LGUs conduct their own capability building programs, focusing on their designated roles and participation in DRM, and generally, as part of their fairly established ongoing activities such as in land use planning and zoning. These programs are also in pursuit of programs devolved by the national level.
- 4) A review of the policies on training under the basic law on DRRM in the country shows the availability of a variety of modes to upgrade knowledge and skills of the concerned implementers, officials and staff, and these are:
 - a) Creation of several training institutes to be responsible for training public and private individuals, both local and national, in subjects on DRRM, including emergency response and other capacity building programs;
 - b) In relation to the above, preparation of training materials and publication of DRRM books and manuals; conduct of research programs and documentation of best practices; and conduct of periodic public awareness and education programs; and
 - c) Requirement of mandatory training for the public sector employees in emergency response and preparedness, which is a huge task, since this has never been an adopted policy before, even while this appears implicit in the responsibilities of the entire bureaucracy.

iii. Structural and Organizational Changes

The following is a brief summary of the institutional environment within which disaster risk reduction and management now takes place in the country:

1. Retention by the Secretary of National Defense of the chairmanship of the newly created National Disaster Risk Reduction and Management Council. The efforts by various interest groups of transferring the headship from the Defense department (the predominant role of the Department of National Defense in the government was a basic feature of the martial law regime during which the first comprehensive charter on DRM was enacted) to the Secretary of the Department of Interior and Local Government (which supervises all LGUs, considered as the “first responders” and the most familiar with the problems attendant to disasters) in the country was unsuccessful. Earlier legal issuances had even considered making the DSWD as head of disaster management since at that time the basic thrust was relief and recovery which are functions already undertaken by this department. The NDRRMC has been vested with policy-making, coordination, integration, supervision, monitoring and evaluation functions to be carried out through a long list of tasks and activities.
2. Institutionalization of the various phases of the disaster management system through the creation of four (4) positions of Vice-Chairpersons at the National and Regional DRRMCs indicating their lead roles on disaster preparedness, mitigation, rescue and recovery. These are agencies around which are clustered departments with which they have functional affinity. They are also divided into quadrants which are activated during disasters.
3. Retention of the Office of Civil Defense (OCD) as the Secretariat of the NDRRM Council, whose head serves as executive director, with the rank and privileges of an Undersecretary in keeping with the office’s expanded powers and responsibilities. The OCD has been performing most of these functions under the old law (PD 1566), but these have been further expanded under the new law, requiring now, not only bigger budgetary allocation but increased administrative and technical support.
4. Authorization of the creation of Local Disaster Risk Reduction and Management Offices through the enactment of local ordinances incorporating the needed staff and budget.
5. Expansion of the roster of new stakeholders whereby a wide array of participants in policy formulation and implementation have been embraced by the law. The institutionalization of their participation in the Council, more particularly, through the official accreditation of disaster volunteers is expected to “democratize” the DRRM process involving practically the entire community and facilitate coordinative arrangements.
6. Effecting of new partnership agreements with the Private Sector such as with the Private Sector Disaster Management Network (PSDMN), the Philippine Institute of Civil Engineers (PICE), the Association of Structural Engineers of the Philippines (ASEP), the Tiger Civic Action Group (TCAG), the Association of Contractors and Equipment Lessors (ACEL), and the Private Hospitals Association of the Philippines (PHAP).
7. Ensuring the pursuit of cost-effective ways and means to offset socio-economic losses from disasters and prepare the nation for disaster recovery.

8. Directing all the government departments and offices to prepare better for disasters in terms of identified risks and early warning. Inclusion of provisions for monitoring and assessing progress on DRR. In this regard, the Strategic National Action Plan or SNAP will serve as vital document since it provides the priorities, strategies, activities, timelines, resource requirements, and implementing entities.

iv. Innovative Financial and Funding Arrangements

1. Introduction of some of the critical components DRRM which, to a large extent determine the success of the implementation of the policies, programs and projects of DRRM in the country at various levels, and the provision of PHP 1 billion budget for the Office of Civil Defense, the Secretariat of the NDRRM Council, and its implementing arm under RA 10121.
2. Creation of the Quick Response Fund (QRF) as standby fund for relief and recovery programs, consisting of 30% of the so-called DRM and Recovery Fund (DRMF), which took the place of the Calamity Fund provided for in the original law (PD 1566). The remaining 70% of the DRMF is authorized to be used for DRR or mitigation, prevention and preparedness activities. Its use is not limited to training of personnel, procurement of equipment and capital expenditures. LGUs must set aside at least 5% of their revenue for disaster work. Upon their discretion, they can set aside more if necessary.
3. Release of calamity funds to relief and rehabilitation agencies as necessary, and waiver of charges/taxes/customs duties on importation/donations intended for affected areas, subject to certain requirements provided for under a memorandum of understanding on the International Humanitarian Assistance (IHAN) among the Secretaries of DND, DOH, DOTC, DOJ, DOF and DFA dated 15 February 2007 and NDCC Circular No. 02, S-2008 on the Revised Implementing Guidelines of the said the use of calamity funds.
4. Grant of calamity loans to GSIS, SSS and PAG-IBIG Members.
5. Review by the OCD of all foreign-assisted DRR projects to avoid overlap.
6. Imposition of price control for prime commodities and prevention of hoarding of said commodities by DTI (NDCC Memo Order No. 8, S-1989)

v. Proposed Programs and Projects

Part of the policy and institutional aspects of the DRRM system relevant to the assessment of the capacity of the NDRRMC to undertake DRRM are the proposed programs and projects of the NDRRMC at this stage of transition from the old law to the new law. Although the new law is 2 months short of a year old, the NDRRMC has already crafted a set of priority programs and projects to serve as its roadmap in pursuing its goals. (Duque, OCD Interview)

Examples of the areas of these projects are: 1) Governance through the following: institutionalization of Disaster Management Office, Enhancing Capacity Development for Local

Disaster Coordinating Councils, Efficient Financial System, Mainstreaming DRR in Various Government Plans and Programs, Conduct of Multi-stakeholder Dialogues on Disaster Risk Reduction, Public-Private Partnership; and, 2) Knowledge Management (Information and Database Generation; Institutional and Technical Capacity Building; Education and Research Knowledge Management; Information, Education and Communication (IEC) Campaigns, Intensification of Public Information Campaign on Preparedness (Duque, 2010).

Capacity Needs Assessment

Using the DRR framework, a broad overview of the DRR capacity needs at the national level is presented. DRR-related activities that help build capacities are highlighted while providing a broad context in which these are undertaken. Thus, the challenges of implementing policies, and gaps between what needs to be done to produce the desired outcome and what is done in practice are investigated.

This chapter reports on the results and insights obtained through desk review and focus group discussions with the Department of Social Welfare and Development (DSWD), Department of Interior and Local Government (DILG), and the Office of Civil Defense.

A tabulation of capacity building activities by the three collaborating agencies and descriptions of the agencies in terms of vision, mission, mandate/objectives, and functions/ tasks are provided in the Annexes.

Perspectives from WFP's Collaborating Agencies

1. Office of Civil Defense (OCD): Current Initiatives and Activities on Disaster Risk Reduction (DRR)

The new law stipulates that OCD shall have overall responsibility for civil defense and disaster risk reduction and management in the country. The OCD Administrator is also the Executive Director of the NDRRMC and has the rank of a Cabinet undersecretary. The OCD is the secretariat of the National Council; Sec. 8 states that the "National Council shall utilize the services and facilities of the OCD." The OCD retains its status as an office under the Department of National Defense; the Defense Secretary heads the NDRRMC.

The powers and functions of the OCD are listed in the new law. There are a total of 18 tasks of the OCD under Section 9 of RA 10121.

OCD regional directors are now the regional chairpersons of the Regional DRRMCs (RDRRMCs) in 15 regions. In the Autonomous Region in Muslim Mindanao (ARMM), the Regional Governor chairs the RDMMC, while for the National Capital Region; the MMDA Chairperson heads the Metro Manila DRRMC. Existing Disaster Coordinating Councils at the provincial, city, and municipal levels are now called DRRMCs at each respective level. The functions of the Barangay Disaster Coordinating Council are now assumed by the existing Barangay Development Council.

One of the functions of OCD is to monitor and evaluate the progress of LGUs in meeting the provisions of the DRRM law.

The Secretary of the Department of National Defense (DND), in his capacity as Chair of the NDRRMC is member of the advisory council of the Climate Change Commission (CCC). On the other hand, the CCC is a member of the NDRRMC. While the NDRRMC is empowered with policy making, coordination, integration, supervision, monitoring, and evaluation functions, the CCC is a policy making body under the Office of the President, with no funds allocated for its operations.

Consultations on the formulation of a framework required by law are still ongoing. Regional offices have begun collecting needed information, with the results expected in April/May 2011. The opinion that the resulting framework needs to keep DRRM and climate change adaptation (CCA) linked has been expressed. A memorandum of understanding (MOU) between OCD and the Climate Change Commission was signed recently.

It took a big disaster - the recent earthquake-tsunami and on-going nuclear disaster in Japan, for the NDRRMC to meet for the first time since the passage of the law. The meeting was held on Friday, 18 March 2011. In the interim period, the Technical Working Group of the former NDCC has been meeting formally and informally in project meetings.

Disaster Mitigation and Preparedness: Training

- Training activities conducted by OCD have been done: (1) in collaboration with foreign partners funded by international/bilateral agencies, or (2) co-funded by their partner beneficiaries. The OCD's foreign-assisted projects are mainly donor-driven. The former includes: (1) Program for the Enhancement of Emergency Response (PEER), funded by United States Agency for International Development (USAID) and the Asian Disaster Preparedness Center (ADPC). Among the courses conducted are hospital preparedness for emergencies (HOPE), community action for disaster response (CADRE), search and rescue of fallen buildings; (2) Association of Southeast Asian Nations (ASEAN)-United States (US) cooperation project on Disaster Management, which includes Incident Command Systems (ICS) Adaptation in the Pilot Countries and Implementation of Regional Components. Both are regional programs in Asia. PEER countries include India, Bangladesh, Nepal, Vietnam, etc.), while Brunei Darussalam is the other of two pilot countries within ASEAN adapting the ICS into their national disaster management systems. The latter is a project of the ASEAN Committee on Disaster Management (ACDM) and the United States Department of Agriculture-Forest Service (USDA-FA). Training of trainers (TOT) is being conducted. A regional planning meeting is scheduled within April 2011.
- A recent cooperation project with ASEAN is Capacity Building of Local Government Officials on Disaster Management. With technical assistance from the Asian Disaster Reduction Center (ADRC), TOT was conducted last 4-6 March 2010 and training modules were standardized as a part of the project. The activity has improved partnership and networking among the country's national stakeholders that participated in the TOT, enabling them to form a training team.

- Specialized OCD training conducted with co-funding by beneficiary stakeholders include contingency planning, water search and rescue, and damage assessment and needs analysis (DANA). OCD staff-related costs are shouldered by OCD.
- Training on contingency planning (CP) began in 2003 in Mindanao, where armed conflict situations prevailed. Published in cooperation with the United Nations Humanitarian Commission for Refugees (UNHCR), the third edition of the contingency planning manual came out in 2007. OCD conducts the three-day training course on request. The local government units (LGUs) make a list of their hazards, rank the most imminent, and make the plan(s) on the basis of their findings. OCD undertakes follow-up action to find out how effective the process of adoption of the CP was undertaken by the LGU and local communities.
- The CP training courses are tailored in one sense, based on the hazards to which a locality being assisted is exposed. Training activities to build capacity for the organic personnel of OCD in the provinces and regions are occasionally performed.
- At the end of the ADRC TOT workshop, a post-evaluation questionnaire was conducted.
- No systematic record of any post-training assessment was available.

Disaster Mitigation and Preparedness: Program/Project(s) with Capacity Building Activities

- Prior to the passage of the new law, NDCC was carrying out its “Four-point Plan of Action for Preparedness” which consisted of: (1) upgrading forecasting capability of PAGASA and PHIVOLCS; (2) public information and education campaign (“Safe Ka Ba?” campaign); (3) capacity building of local chief executives and disaster coordinating councils (especially in disaster-prone areas); and (4) strengthening public-private partnerships through the Collaborative Partnership Program. The OCD had a role to play in each of these.
- OCD can provide support to LGUs by providing advice on equipping the Emergency Operations Center. (There is a need, however, to modify the list of tools and the Emergency Operation Plan templates.)
- Foreign-funded projects are undertaken by the OCD through its Training, Planning, and Emergency Operations Divisions. The Training Division’s projects are discussed in the previous section (No. 2 question). Below are the recent projects handled by the Planning Division:

- ADPC Priority Implementation Projects (PIPs)¹⁸

- (a) Mainstreaming DRR in the Infrastructure Sector: Implemented with the Department of Public Works and Highways (DPWH) focusing on roads and bridges. Lessons learned and mainstreaming strategies were identified. Among the recommendations was to train the contractors as well as engineers. One issue was that construction monitoring/quality control “has not been integrated into any project yet.” DPWH is mandated to conduct inspection of projects.

¹⁸ The study conducted in parallel with the formulation of the Strategic National Action Plan for Disaster Risk Reduction in the Philippines (SNAP) included sections about the PIPs. See: Javier, Alwynn J., 2008 The State of Mainstreaming Disaster Risk Reduction in the Philippines, OCD.

(b) Mainstreaming DRR in the Education Sector:¹⁹ Implemented with the Department of Education (DepEd), introducing DRM modules into the school curriculum, promoting hazard-resilient construction of new schools, and introducing features into schools for their use as emergency shelters. The project introduced DRR into the social studies subject in the high school curriculum. A new DRM module that features exemplars was piloted in schools, school teachers were trained using the module and teaching aids distributed to schools (selected schools in two municipalities per province). Another project component was the review/revision of construction of school facilities.

- Funded by AusAID

(a) Hazard Mapping and Assessment for Effective Community-based Disaster Risk Management (“READY”) Project²⁰ – with the NDRRMC Sub-Committee on Collective Strengthening for Community Awareness to Natural Disasters or CSCAND (that includes PAGASA, PHIVOLCS, MGB, and NAMRIA), Geoscience Australia and OCD; focusing on 28 disaster prone provinces mostly along the Eastern Seaboard (originally from 2006 to 2010, then extended until June 2011)

(b) Enhancing Risk Analysis Capacities for Flood, Typhoon, Severe Wind and Earthquake for Greater Metro Manila Area (“Risk Analysis”) Project –with NDRRMC CSCAND Sub-Committee. The project began in 2010 after Typhoon Ondoy and will finish in 2013. The target area is defined by watershed areas and selected cities.

- Funded by Canadian International Development Agency (CIDA)

Building Community Resilience and Strengthening Local Government Capacities for Recovery and Disaster Risk Management (“Resiliency”) Project (with UNDP and NDRRMC); Responsible partners for the project are Marikina City, Pasig City, Cainta, League of Cities of the Philippines, CSCAND Sub-Committee. Output 1 consists of policy review and dialogues; conduct of comprehensive Land Use Plans (CLUP) review and enhancement; conduct of Rapid Earthquake Assessment System (REDAS)²¹ training and provision of the software; and conduct of contingency planning.

¹⁹ A study on the “The Impacts of Disasters on the Education Sector” was also conducted through the Center for Disaster Preparedness (CDP).

²⁰ Also commonly referred to as READY II. It was patterned after the approach used in the project on “Strengthening the Disaster Preparedness Capacities of REINA Municipalities to Geologic and Meteorological Hazards” (known as REINA project). REINA Project was a mitigation project for municipalities affected by typhoon, severe rainfall and landslides in Quezon Province (Real, Infanta, and Nakar) in 2004. It was supported by the UN Office for the Coordination of Humanitarian Affairs (UN OCHA) and UNDP through the Consolidated Appeals Process (CAP) in the aftermath of the flash floods.

²¹ REDAS is a GIS-based hazard and risk assessment tool developed by PHIVOLCS to model impacts from different sized earthquakes.

- The OCD regional offices also conduct projects that help develop capacity. The OCD Region VIII Office has partnered with non-governmental organizations such as PLAN International in community-based disaster risk management projects.
- The Operations Division also implements foreign-funded projects. However, the Division was not represented in the FGD. For example, CALAMIDAT.

Gaps

- While the new law has given a boost to OCD's advocacies, such as the use of 5% calamity fund that ought to be set aside by the LGU for disaster-related work and the penal clause against prohibited acts that can help minimize or prevent abusive acts, there are uncertainties with regard to funding. One of the areas where such uncertainties have significant implications is on the establishment of DRRM training institutes.
- There is uncertainty on the mechanisms for actualizing the PHP 1 billion revolving fund for the OCD to operate as the lead agency to carry out the provisions of the Act "starting from the effectivity of the Act."
- In 2012, 1,000 expected new personnel are needed for all regions. Establishment of regional offices (such as building construction) and training institutes is also planned to happen concurrently. An idea that has been tossed around is to establish partnerships with colleges, higher education and training institutions to get the training activities going under the new law.
- OCD until this present time has a limited budget. Therefore, training activities are mainly funded by foreign donors. No funds have yet been made available for fiscal year 2011-2012 for the items stipulated in the new law. As mentioned in the preceding section, the source of funds is uncertain.
- For a long time, OCD could not hire additional personnel, as it was affected by a no-hiring law. OCD needs subject matter experts (SME) for the many tasks that the law mandates. Even with the new law in effect, no hiring for the needed staff has been done.
- The lack of funds for training and the absence of SMEs can then jeopardize the sustainability of project impacts after the funding from international donors runs out. Continuing training activities after trainers are capacitated remains uncertain.
- OCD is unable to carry out its monitoring and evaluation effectively. There are no guidelines from its partner (national) agencies on how to conduct such actions. However, some of these agencies have these tools already in place such as for performance index/evaluation. A toolkit and template for evaluation are therefore needed.
- After an LGU completes the contingency planning exercise, the plan may not be utilized because the necessary equipment, tools and logistical support are not available. In Metro Manila, only Pasig City and Makati City are the best equipped. However, these two cities still have too few employees to fully carry out their mandated tasks.
- OCD is unable to provide strategic support to LGUs in the establishment of DRRM offices (DRRMO) in their respective locations.
- OCD does not have a monitoring mechanism in place to ensure that: (1) Disaster Plans of LGUs adhere to international standards, and (2) LGUs comply with the provisions of the Law.

- OCD supports LGUs through technical advice on emergency management. However, there is a need to modify the checklist of equipment/tools and the Emergency Operation Plan templates currently in use.

UNWFP Concerns

- There are several food-related problems for OCD, such as the need to identify locations for food storage, random locations of stockpiles throughout the country, difficulties in regional distribution and the lack of centralized control over donations during disasters.
- UNWFP's important role in the Food Cluster for humanitarian assistance for the country's DRRM was acknowledged.

Suggestions to UNWFP

- The UNWFP project's current provincial and municipal divisions can serve as pilot project areas wherein DRR coordination from national to provincial/regional to municipal/barangay levels and DRRMO coordination can be shown.
- The UNWFP can support more capacity building of staff, particularly subject matter specialists, in the OCD.
- Operationalizing the law at the national level presents great challenges. The current technical working group (TWG) can provide the base for developing the next steps. The WFP might provide support for concerns relating to this, such as organizing a separate grouping or technical working group for food.
- A number of good practices can be gleaned from the winners of the Gawad KALASAG²² awards for excellence in disaster risk management and humanitarian assistance, which is given annually for several categories. Initiated in 1998, it is "a mechanism" of the then NDCC that allows stakeholders to do benchmarking and build awareness about good practices, with the potential of raising the standard of performance among local disaster coordinating councils (Province, City, Municipality, Barangay), NGOs (Local, National, International on humanitarian assistance), private volunteer groups, schools, hospitals, individuals/groups for their heroic acts/deeds, partner organizations doing community-based disaster risk management. Present documentation is available, yet has not been systematically organized as case studies for dissemination to a wider audience. It was suggested that the UNWFP might consider providing support to producing instructional, educational and motivational materials on the lessons learned from the stories of the KALASAG Hall of Famers (winners of the award for five times).

²² KALASAG stands for "Kalamidad at Sakuna Labanan, Ang Sariling Galing ang Kaligtasan." The 2009 booklet entitled "Gawad KALASAG" published by the NDCC provides the guidelines, assessment forms and checklists used in judging the nominees for the award.

2. Department of Social Welfare and Development (DSWD): Current Initiatives and Activities on Disaster Risk Reduction (DRR)

The Department of Social Welfare and Development (DSWD) has often been identified as a humanitarian and response organization in the government. In the present set-up of the NDRRMC, the DSWD through its Secretary is given charge over disaster response. DSWD however is not only engaged in post-disaster activities; it also carries out a number of pre-disaster activities that serve to build capabilities for mitigation and preparedness, support pre-positioning of logistics/resources required during relief and response, and strengthen partnerships with government organizations, non-government organizations and local government units (Box 2).

- The DSWD has reorganized its structure with a new Disaster Risk Reduction and Management Division, consisting of three (3) units: (1) response and preparedness unit, (2) early recovery and rehabilitation unit, and (3) special concerns unit. The altered organizational structure was finalized in February 2011; however it has not been fully implemented yet.
- DSWD Implementing Guidelines are under development. Each Department will draft their own implementing rules. A writeshop on the guidelines was conducted in December 2010. However, information on the current status of the draft Implementing Guidelines was not provided.

Disaster Response

- DSWD has a Disaster Response Operations Monitoring and Information Center (DROMIC) Unit, which is in charge of collating and storing all types of disaster data. Field data is collected after a disaster. The DROMIC determines resource availability during the post-disaster period. A matrix (a table consisting of damage data such as number of dead, missing, and injured; houses partially or completely destroyed) is developed by the regional officer from LGU information after a disaster. Data is reported and then analyzed at the Central Office of DSWD. OCD is responsible for collecting data on infrastructure and crops.
- The DSWD Regional Social Welfare Officer is a member of the Social Welfare and Development Team (SWAD) operating at the regional level. The team is composed of the Project Development Officer, the Social Welfare Officer, and Planning Development Officer, who oversee a plan necessary for stabilizing the condition of the population after a disaster.

Disaster Rehabilitation and Early Recovery

- Emergency Assistance: Distribution of family assistance packages (volunteer family services), provision of emergency shelter assistance (PHP 5000.00 for damaged houses) and psycho-social services; post-disaster services include: shelter assistance, food subsidy in the form of a community food pack (through cash-for-work (CFW), food-for-work (FFW).

Box 2. Disaster-related activities of the Department of Social Welfare and Development.

- A. Disaster Mitigation and Preparedness
 - 1. Capability Building
 - ☐ Family and Community Disaster Preparedness (FCDP) Training
 - ☐ Critical Incident Stress Debriefing (CISD)/Psycho Social Support Training
 - ☐ Skills enhancement on evacuation center management and community kitchen
 - ☐ Training, organization and mobilization of volunteers (e.g. Registry of Volunteers on Disaster Risk Management and Response)
 - ☐ Quick Action and Response Team (QUART)
 - 2. Pre-Positioning of Logistics/Resources
 - ☐ Stockpiling and maintenance of standby funds and relief commodities at National Resource Operations Center (NROC) and Field Offices
 - 3. Strengthening of Partnership with Government Organizations, Non-Government organizations and Local Government Units
 - ☐ DSWD-Interfaith Groups partnership in disaster relief distribution monitoring
 - ☐ Organization of the local sub- committees on disaster response
- B. Disaster Response
 - 1. Disaster Incident Reporting System (DIRS)
 - 2. Disaster Response Operations Monitoring and Information Center (DROMIC) at the National and Field Offices
 - 3. Technical Assistance and Resource Augmentation to Local Governments and Partners
 - a. Funds
 - b. Manpower
 - c. Food and Non-Food Items
 - 4. Provision of Psycho-social Support Services
 - 5. Demonstration of Community Kitchen Management
 - 6. Donation facilitation
 - 7. Evacuation Center Management, especially provision of technical support to Local Government Workers in actual camp management
- C. Disaster Rehabilitation and Early Recovery
 - 1 Shelter Assistance
 - a. Emergency Shelter Assistance (ESA)
 - b. Core Shelter Assistance Project (CSAP)
 - c. Modified Shelter Assistance
 - 2 Food for Work (FFW)
 - 3 Cash for Work (CFW)
 - 4 Supplemental Feeding
 - 5 Balik-Probinsya Program
 - 6 Livelihood Assistance (SEA-K, Tindahan Natin, etc)
 - 7 Psycho-social Support Services

Source: DSWD-BLGD.

- Shelter Assistance Program: Provision of strong structural units for victims whose houses where completely destroyed by disaster. The program can be availed of only by those whose incomes are below the poverty line. There are selection criteria to assist families with partially destroyed structures. Shelter using DSWD's certified structure designs proved to be sound as these withstood Typhoon Juan with 290 kph winds, though the design speed was

200-kph winds. Modified shelter assistance refers to DSWD's support to rebuilding houses in cluster barangays using designs that are approved by agencies (such as local government units) other than the DSWD. For the latter, wherein the LGU provides skilled workers and a resettlement site clear of debris, financial support is provided for materials only. Most construction work is through sweat equity/self-help teams led by the existing skilled construction workers from the neighborhood.

Disaster Mitigation and Preparedness: Training

- Among the government agencies, the DSWD pioneered in the development and conduct of disaster management and preparedness training at the community level. The Family and Community Disaster Preparedness (FCDP) Training was started by the Bureau of Emergency Assistance following the First National Disaster Management Workshop held in 1988.²³ In general, training is part of regular activities in the DSWD regional offices.
- DSWD's training arm is the Social Welfare and Institutional Development Bureau (SWIDB).²⁴ It has twenty (20) trainers in the Central Office, who have roughly four (4) counterparts in each region. Other types of training although not necessarily linked to disasters, e.g. livelihood topics, are undoubtedly contributory to household and community resilience.
 - Entrepreneurship development training - targeting the poorest of the poor, two groups of implementers and managers form associations with 25-30 member, using rotating microfinance schemes
 - People's Credit and Finance Corporation (PCFC), developed for deferment of payment of loans after a disaster.
- The FCDP training activities have been devolved to the regional level and local government units. Together with the SWIDB and the Public Information Agency (PIA), DSWD has published a trainer's guide for the Family and Community Disaster Preparedness Modules from the base reference materials – Disaster Management Training for Social Welfare and Development Implementers. The training materials are being revised and enhanced as an add-on component to the two-year United Nations Development Programme Bicol Recovery Project grant. The Training Manual upgrade was conceptualized last year with DSWD initially eyeing UNWFP as a funding resource.

The revision began in December 2010 incorporating best practices on DRR as well as the new DRRM Act. From the concentration of the family in the earlier version, the focus shifted to community preparedness. ("Community training" can imply two scales: family or

²³ Asian Disaster Preparedness Center, 2001 Review of Training and Public Awareness Materials – Philippines, p. 9 (Available at www.adpc.net/pdr-sea/publications/5-Pi-TNA-Phils.doc).

²⁴ SWIDB belongs to DSWD's Operations and Capacity Building Group, which ensures that DSWD's field offices are in synch with the DSWD mandate and Central Office's directives. The Group also standardizes performance evaluation system for coordination with other units in the Central Office. (<http://www.dswd.gov.ph/index.php/about-us/36-about-us/1893-organization-and-functions>).

neighborhood/barangay). It is being piloted in six municipalities and one barangay in all six provinces of Region V (Bicol Region), with a course having an average of 35 participants per barangay. Training started 15 February 2011 and will last until 1 May 2011, under the UNDP project. Funds for piloting will be from the DRRM Fund. The fund for this year can still be tapped for training; it is not committed to other projects yet.

The training courses are being rolled out in May 2011 to other regions. A major conference is also being planned. The completed draft has several modules which include: (a) Planning process, (b) Basic laws and policies, (c) Identification of hazards and participatory hazard mapping, d) Tabletop exercises, and (e) Installing an early warning system, to which new modules are being added. Topics are not limited to prevention or DRR. There is also a focus is on internally displaced persons (IDPs).

With emphasis on community rather than family, community-based disaster risk management (CBDRM) at barangay level is the approach used in the revised training manual. The approach includes organizing a disaster risk reduction and management (DRRM) council for each barangay. The community is engaged in participatory hazard mapping to identify safe and unsafe places. An early warning system is established and preparedness planning is undertaken. Each participant undergoes one week of training using the manual. Training includes ways and means on how to work with OCD, DSWD and other offices after the disaster. The training manual has 10 modules.

- Based on the focus group discussion held with the DSWD, the other training activities over the recent years include: (1) Emergency management skills training (management of evacuation centers, community kitchen management, crisis management, psycho-social processing, and evacuation center coordination); (2) Basic survival skills; (3) Warehouse management and disaster preparedness (stockpiling of relief goods-food and non-food items, allocation and replenishment of standby funds).
- There is a formal feedback mechanism on the conduct of training activities and preparation of training materials. The SWIDB uses post-training evaluation instruments after training courses are held. Not all reports on training activities in the regions however are reported to SWIDB.

Disaster Mitigation and Preparedness: Program/Project(s) with Capacity Building Activities

- Bicol Recovery Program. The Bicol Recovery Program is a comprehensive two-year project that covers six provinces. It is a partnership between the Philippine government and the UNDP. Albay has some activities in place at the start of the project, and so most of the project work targets the other five provinces. The program has many target sectoral areas, including infrastructure as well as DRR and training. The goal is to enhance community disaster planning/preparation and DRR. The Bicol Recovery Program's products, such as the training manual shall be submitted to the NDRRMC's project management board.

Gaps

- Gaps exist in damage assessment, which at the moment is basically the collection of damage information, i.e. without relating the data to cost of rehabilitation and recovery. DSWD coordinates with the Social Welfare Office at the regional level while OCD coordinates with LGU Planning Offices. The original source of data used by both OCD and DSWD is the same however – the Planning Office of the LGU. In some instances, inter-agency coordination at the regional level may not work well. The reason for gaps according to the interviewees is that there is little time to coordinate during disasters. It appears that the main reason is that each agency trusts its own data sources (LGU Planning Office for OCD and Regional Social Welfare Offices for DSWD).
- DSWD has no Emergency Operations Plan, which can also help establish a regional response operation. Their focus is on relief operations in times of disaster.
- Parallel damage assessment and situation reporting by DSWD and OCD need to be investigated further.
- A potentially beneficial capacity building activity is to train LGU staff on accessing funding from a variety of available options.

UNWFP Concerns

- UNWFP renders technical assistance to Mindanao in the form of CFW and other activities. The interviewees mentioned they are expecting a proposal from UNWFP to implement the rice subsidy for Mindanao. For this, WFP can support communities to identify projects for disaster preparedness and response. FFW operates in Region 5 and Region 10, 11, 12 in Mindanao, which has been affected by armed conflict. CFW is used Luzon, which was hit by Typhoon Ondoy.
- DSWD's plan is to require potential CFW/FFW beneficiaries to complete training that DSWD will provide prior to program participation. Food/rice subsidy will be received after participating in the training course. After the beneficiaries are trained, they will work on projects related to disaster mitigation and response.

3. Department of Interior and Local Government (DILG): Current Initiatives and Activities on Disaster Risk Reduction (DRR)

The DILG Secretary is vice-chairperson for disaster preparedness in the NDRRMC. According to the new law (Sec. 3 (j)), the DILG's responsibilities include 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. Preparedness is also "based on a sound analysis of disaster risk and good linkages with early warning systems...." The DILG is set to focus on its role as vice-chair for preparedness, and is therefore gearing towards being able to perform accordingly in this capacity in the technical working group. It is also developing the capacities of local government officials and functionaries.

The Philippine National Police (PNP) is attached to the DILG, while the Bureau of Protection is one of the bureaus under the DILG. These are among the important post-disaster players mobilized from the government side. PNP preserves security, peace and order in disaster-stricken areas while BFD undertakes rescue and response operations.

- The memorandum circular signed by the DILG Secretary is DILG's main policy instrument for LGUs. Guidance to LGUs is also articulated as circulars which are drafted by the Bureau of Local Government Development (BLGD) and the other bureaus of the DILG. Of the 50 staff members of the BLGD, five are mobilized for drafting circulars.
- A DILG memorandum circular (No. 2011-21) that encourages tree planting under the Billion Trees Program supports the DRR function of LGUs.
- The DILG Secretary issued a memorandum circular (No. 2010-143) on 9 December 2010 in pursuance of the NDRRM Act. Thus, Local Disaster Coordinating Councils were renamed Local Disaster Risk Reduction and Management Councils. The membership of these councils has been expanded to include other stakeholders such as representatives from four accredited civil society organizations and one private sector representative while also encouraging to include officers from the Department of Environment and Natural Resources, DILG, and representatives of the local councils. There would therefore be the need to "capacitate" more stakeholders; among the first tasks of DILG would be to familiarize them about what the law means in practice.
- The DILG developed a DRR mainstreaming framework (including climate change adaptation) for local government systems and processes, including existing local-level plans such as comprehensive land use plan (CLUP) and comprehensive development plan (CDP). The present system envisions the LGU's Planning and Development Office to lead in identifying mitigation projects for inclusion in the annual investment plan. While the National Economic and Development Authority (NEDA) oversees provincial-level planning, the DILG does the same at the municipality/city and barangay level.

Disaster Response

- DILG's formal role in emergency situations is multi-faceted. However, DILG interfaces largely with the OCD. The disaster data that DILG gathers ought to tally with the Emergency Operations Center of the OCD which gets reports from the LGUs. The DILG regional office is assigned to report/monitor DRR for the LGUs. On the other hand OCD handles regional data not LGU data. For damage assessment, OCD requests assistance from DILG.

Disaster Rehabilitation and Early Recovery

- The Cluster Approach²⁵ is adhered to by DILG especially as LGUs have functions intrinsically linked with the clusters such as water (with sanitation and hygiene or WASH), food, health,

²⁵ In order to coordinate disaster response, the NDCC has adopted the cluster approach through NDCC Circular No. 5, 2007 and No. 4, 2008. The Philippines was among the first countries in Asia to embrace the cluster approach. The cluster approach was initiated by the Inter-Agency Standing Committee, which is a forum for coordination, policy development and decision making involving the key United Nations (UN) and non-UN humanitarian partners. The cluster approach is a mechanism intended to help address gaps in response and

logistics, nutrition, protection, and shelter. DILG ensures that LGUs are “aligned with these clusters” in times of disaster.

Disaster Mitigation and Preparedness: Training

- DILG develops offerings to local government units (LGUs) including the development of training packages. The Local Government Academy (LGA), a division of the DILG, is the training and education arm for LGU officials. The LGA has orientation programs for newly elected officials wherein disaster risk management is among the topics tackled.

The LGA applies the Local Governance Training and Research Institutes - Philippine Network (LoGoTRI-PhilNet) accreditation scheme, which is “a process by which an LRI (local resource institute) evaluates its local training programs in whole or in part and seeks an independent judgment by a qualified group of peers in LoGoTRI-PhilNet (<http://www.lga.gov.ph/linkages#accreditation>). On the other hand, there are feedback mechanisms that permit the flow of information from the field to the Central Office.

- DILG has a school for police and fire protective services called the Philippine Public Safety College.
- Comprehensive development planning (CDP) trainers have been trained on how to factor in DRR into the plans and the planning process. The CDP trainers provide technical assistance to LGUs. These are funded by the Philippine government. (Details were not available from BLGD.)
- Training on climate change adaptation (CCA) and governance has also been conducted. (Details were not available from BLGD.)

Disaster Mitigation and Preparedness: Program/Project(s) with Capacity Building Activities

- In light of RA 10121, an orientation for the officers and staff of DILG regional offices on how the DRRM Act impacts their operations will be conducted nationwide from April 2011. Local experts and consultants, including faculty member from the University of the Philippines shall be engaged for the orientation.
- The DILG has a role to play²⁶ in disaster mitigation that addresses environmental and physical vulnerability. LGUs are mandated to formulate comprehensive land use plans that must be approved by the Housing and Land Use Regulatory Board. The issuance of locational clearances has been devolved to LGUs, according to Executive Order No. 72. DILG Memorandum Circular 2008-143 declares that a certificate of clearance need not be required for forced eviction. Since 1992, a Local Housing Board has been the unit at the LGU dealing with eviction and demolition with guidelines on relocation.
 - Under the Local Government Code, the Barangay is mandated to “adopt measures to prevent and control the proliferation of squatters and mendicants in the

enhance humanitarian action through predictable leadership, strengthened accountability and strategic field-level coordination and prioritization in 13 areas. DILG is not a lead government agency in any of the humanitarian clusters.

²⁶ The DILG chairs the National Committee Against Squatting Syndicates and Professional Squatters in accordance with Executive Order No. 129.

barangay.” This is a function assigned to the Sangguniang Barangay (Sec. 391, paragraph 18). Pursuant thereto, the DILG enjoins the Punong Barangay (Barangay Captain) to first: adopt measures to effectively curtail the proliferation and further increase in the number of informal settlers and mendicants in his or her locality. And second: to find ways to relocate existing informal settlers to a site (or sites) with due general welfare and well being (DILG Memorandum Circular 2011-17 dated January 31, 2011). The barangays are also expected to map the so-called “hot spots” or those where there is a proliferation of squatters. Eviction is, however, allowed only where there are relocation sites available (in accordance with the Urban Development and Housing Act or UDHA Law).

- The local police and all the other relevant LGU offices, such as the Urban Poor Assistance Office or UPAO and the Local Housing Board (not all LGUs have unit), where they have been organized in the LGU, are required to assist the Punong Barangay and the Sangguniang Barangay in the prevention and the eviction of informal settlers.
- Foreign donors such as World Bank, UNHABITAT, UNDP, and GTZ have been tapped for technical assistance projects related to disaster. A World Bank-funded early warning system project includes the provision of hardware such rain gauges, lifeboats, two-way radios, among others. All foreign-assisted DRR projects are reviewed by the OCD to avoid overlapping activities among member agencies of the NDRRMC.
- Good practices are being documented by a separate DILG division, the Local Development Administrative Division. The good practices of Albay province are being replicated in the provinces of Pampanga, Saranggani, Sorsogon, and South Cotabato. At the municipality/city level, the municipality of Dumangas in Iloilo province is considered a model for others. Some documentation projects are funded by international organizations such as Oxfam.

Gaps

- The DILG recognizes the difficulty faced by LGUs in creating and operating a disaster risk management office that can operate with its own staff, budget and logistics. Certain provisions of the Local Government Code limit the capacity of the mayor and/or the local council to immediately create the offices in terms of allocating physical space, ensuring salaried positions and the like, in the current fiscal year. While this is recognized, it appears that DILG has not yet been able to move quickly, except for the abovementioned orientation which will start from April this year.
- DILG seems unable to offer assistance to address the situation of most LGUs that complain about “no increase of actual funding.” The same percentage (5%) of the LGU’s internal revenue shall be allocated for the local DRRM fund (previously called calamity fund).
- The DRRM Act requires an emergency operations plan at the regional/local level. LGUs also must have a contingency plan (CP) for worst-case scenario. Such plans are still to be formulated in many LGUs.
- OCD will assist with technical expertise (using its template), but the DILG will monitor the progression of events during emergency situations. This suggests a need to strengthen DILG’s capacity to monitor emergency situations.

- LGUs had already done budgets when the law came out; this is taken into account in current financial planning. This indicates that some LGUs (especially the lower class municipalities) may not be able implement the law particularly for this fiscal year.

UNWFP Concerns

DILG works with UNWFP on a Food for Work program funded by the Office of the United States for Disaster Assistance (OFDA) and with the Food and Agriculture Organization (FAO) for Food for School program.

B. Analysis of Gaps

i. Policy and Institutional Environment

Gaps in Operations:

Policy and Institutional Gap 1: Inadequate understanding of the provisions of the new law by government agencies, LGUs and other stakeholders concerned, more particularly on how their respective roles relate to, complement and reinforce those of the others

Experience has shown that there is generally an absence of clear and detailed understanding of any new legislation. At present, there is no common level of understanding of the new DRRM system among the various Council members and LGU officials, many of whom have confessed to their ignorance of some of the more important provisions of the law. They have not familiarized themselves with the law, which they believe is a basic and preparatory activity to implementing it. They still have to understand their respective roles and how these relate to those of the other member-agencies, particularly in view of the much expanded concerns and membership of the Council.

There are a number of documents which will need to accompany the review and familiarization of the laws to make adequate understanding possible. Among these documents are the Implementing Rules and Regulations (IRR) which, while these have already been formulated, need additional details for further clarification. The National Disaster Risk Reduction and Management Framework is also still being prepared by the OCD, with the assistance of a number of other agencies. The Framework will be the basis of the Plan whose preparation is expected to follow as soon as the guidelines expected to be provided in the Framework are available.

Policy and Institutional Gap 2: Confusion caused by the fact that many of the sectoral agencies are still operating under the old law

Still another problem related to the transition stage is that these national and local government officials are caught midstream in the performance of their functions under the old law. This is understandable because they had been operating under the provisions of the old law for the past three decades. It has not been easy for them to transit to the new legal and institutional environment, more particularly because this now covers not only the DRRM law but its companion legislation, the Climate Change Act.

Many of the plans, programs and activities undertaken by the concerned agencies are under the authority of the old law. Related to this is that by the time the new law and its IRR were ready for implementation, not only the national agencies but also the LGUs had appropriated their funds and committed them for operation in 2011. There is need, therefore, for implementing regulations to guide funding arrangements during the transition.

Policy and Institutional Gap 3: Absence of broad Framework and detailed Guidelines to assist the government officials and other stakeholders in policy formulation and law implementation

There are a number of documents which will need to accompany the familiarization sessions that policy makers and implementers need to undergo. One of these, the Disaster Risk Reduction and Management Framework, is still being prepared by the OCD, with the assistance of a number of other agencies. The Framework will provide the basic and comprehensive guidelines that will be the basis of the NDRRM Plan, that will, in turn, be the basis of the preparation of the regional plans, programs and projects.

A serious implication of the above predicament is that many officials have developed a “wait and see” attitude until all the guidelines are issued by the Council or their sectoral departments. This attitude is particularly obvious in situations which require incurring expenditures where the applicable rules are not yet clear. These officials are particularly worried about the possibility that they may face charges for noncompliance or erroneous implementation of the law, fully aware that their actions are subject to review by higher authorities such as the Commission on Audit.

Policy and Institutional Gap 4: Difficulties in the preparation of Guidelines

Related to the above is that it will not be easy to develop all the guidelines required by the new law, and it will take some time before this materializes. Very basic to this is making the determination of what form these details of implementation will take, aside from the conventional Implementing Rules and Regulations. For instance, there is already clamor from some sectors to introduce additional legislation for what has been identified as weaknesses and gaps in the law although realistically, these gaps may be filled by mere Presidential directives, executive orders, Memorandum Circular, etc.

Policy and Institutional Gap 5: Difficulties in creating the prescribed new local offices

At the LGU level, the interviews revealed that the most challenging part of implementing the new law in so far as they were concerned was the requirement for LGUs to create a DRRM office with its own staff and budgetary requirements. While the Local Government Code allows LGUs to create new offices necessary for the performance of their functions, the problem is that this requires corresponding increase in actual funding support. The only source under the new law is the 5 percent of the LGUs internal revenue allotment (IRA) which also constitutes its DRRM fund.

Policy and Institutional Gap 6: Inordinate number of still to be organized policies

While appearing to be useful and beneficial, the inordinate number of policies on the various aspects of DRRM calls for a new scenario for operation. This calls for installing a system characterized by tighter and more purposeful supervisory and coordinative arrangements, prioritization and reconciliation of possible conflict of interests and concerns among the sectors involved, and the determination of how weighty issues could be resolved. Policy formulation and implementation are not the exclusive prerogative of the NDRRMC, the designated central agency for DRRM. Although it has the primary responsibility for DRRM policy and program formulation, coordination, and evaluation, these responsibilities are, to a large extent, shared with other sectoral government agencies, sub-national levels of government and a wide array of stakeholders. It will be noted that the latter have their own official agenda, budgetary priorities and manpower, financial and other requirements based on their respective charters and enacting legislation, which should be considered.

Policy and Institutional Gap 7: Difficulties in introducing the mainstreaming process in plans, programs and projects

Although through “out of the box thinking”, mainstreaming DRR/CCA into national and local government systems and processes would not have to entail heavy expenditure, the fact remains that to do this would require the extension of technical assistance to the offices concerned, which also consumes time and attention. These translate into producing some kind of framework on how to undertake the mainstreaming process. As earlier mentioned, the preparation of this framework is only one of the many documents that is awaiting attention and resources, in view of the many outputs required by the law and its Implementing Rules and Regulations.

Gaps in Coordination

Policy and Institutional Gap 8: A huge and potentially unwieldy organization

Among the problems not related to the transition stage, but inherent in the law is that the DRRM structure is a huge organization, requiring a whole new system of horizontal and vertical linkages, and coordination mechanisms, and supervisory, monitoring and evaluation mechanisms. Its membership is not just confined to the entire bureaucracy, but includes additional offices and institutions which are not part of the cabinet of the President, which is the case of the top economic planning body, NEDA. NEDA used to be the biggest organization in the country, headed by the President of the Republic himself, until this record was replicated by the Climate Change Commission. The Commission is headed by the President, assisted by three commissioners. It has an advisory Board consisting of 23 members. The National DRRM Council has a membership of 39 which includes not only all the members of the President’s cabinet but also encompasses the various associations of local governments and other stakeholders such as the private sector and quasi – private organizations, such as the Philippine National Red Cross. As if this is not big enough, the law includes a provision allowing the inclusion of other offices. Thus, the Councils at the regional level, namely the regular Regional and the Special Regional organizations are authorized to invite other concerned institutions, organizations, agencies and instrumentalities in the private and public sector when deemed necessary to perform their mandate. This will require huge cost for, among others,

the additional personnel needed in the regions and the construction of regional offices and training institutes which will happen concurrently.

ii. DRR Capacity Development Gaps

The following section provides an assessment of the situation, using the DRR as performance indicators. Some activities of the UNWFP's three collaborating partners are repeated here in an attempt to give a complete description, especially when their roles are critical to the tasks. To provide a brief overview of the range of capacity building activities done by other stakeholders, particularly the NGOs, a partial inventory of these is provided in the Annexes.

Oxfam GB has particularly been at the forefront of documenting practices that can serve as models for others. Supported by the European Commission Humanitarian Aid Department (ECHO), its printed compilation "Building Resilient Communities: Good Practices in Disaster Risk Management in the Philippines" is accompanied by a DVD of video documentaries, which are effective as training and communication tools. Oxfam GB collaborated with the NDCC, OCD and DILG in the design, conduct, and evaluation of cases in "replication inception workshops."

Other activities involve the provision of "hardware" such as shelter, as DSWD could help communities through its Core Shelter Program, Water, Sanitation and Hygiene (WASH), and CFW. In recent disasters, NGOs have increasingly undertaken recovery work. Initially, some NGOs are brought to disaster-affected areas to render relief and other humanitarian work. They are then "drawn in" to continue to provide assistance through rehabilitation and the transitional "early recovery" phase.

Two points give the NGOs an edge over national agencies. Not a few NGOs carry out community-based projects in the affected communities, and skills for community-based organization are possessed by trained and experienced staff. NGOs may also be more attuned to humanitarian standards such as SPHERE, such that post-disaster assistance are carried out in accordance with international standards.

Another development over the last few years has been the National Economic and Development Authority (NEDA) leading the way towards capacity development in DRR and CCA by way of improving institutional capacity, developing tools/methods and devising processes/mechanisms in order to make mainstreaming take root and work. The development planning process being led by NEDA provides the entry point. **Error! Reference source not found.** describes the two major projects in terms of outcomes and outputs. These two projects provide a sound basis of responses, strategies or actions through enhanced geo-referenced datasets and vulnerability assessments that are then used to empower LGUs. They encompass many if not most of the DRRIs, which will be discussed in the next section.

The bases of the foregoing "performance assessment" are documents reviewed and the interviews. One of the major sources of information has been the interim version of the National Report on the implementation of the HFA (2009-2011), which was made available by OCD. The final version of this shall be submitted at the Global Platform on DRR to be held in Geneva in May 2011.

The “performance assessment” for each DRRi starts with a description of the existing set-ups and other general information on stakeholders particularly with particular concern or interest in the area of mainstreaming. This is followed by a list of gaps (or weaknesses), then the emerging desirable outcome (also defined by the DRRi framework). Finally, statement(s) to summarize and/or synthesize the baseline condition complete the whole assessment.

Gaps in Operations

1. Legal and Institutional Processes

National Capacity Gap 1: An inherent weakness in the current system is that poorer provinces (typically the ones more prone to disasters) have lower revenues, and thus fewer resources available for their local DRRM fund.

National Capacity Gap 2: There is no institutionalized system (national government agencies and LGUs alike) for measuring efficiency and accountability (i.e., performance indicators) in the utilization of government resources for disaster response.

National Capacity Gap 3: Limited flexibility in the national budget due to the very high levels of non-discretionary annual budget allocations leaves the Philippines government potentially exposed to economic shocks such as major disasters.

The paradigm shift from response and relief to preparedness and mitigation is embodied in the new DRRM Act (RA 10121) and its Implementing Rules and Regulations. OCD lobbied for the passage of the new law in cooperation with NGOs and CSOs and thus consolidated the views of various multi-stakeholders. The DRRM Act is complemented by the Climate Change Act of 2009 (RA 9729). Both share the common goal of poverty alleviation through reduction of vulnerability. Frameworks for DRR and CCA shall guide the formulation and implementation of respective plans based on inclusive and participatory processes. At the national level, a convergence between the DRR and CCA is being achieved through a memorandum of understanding between the OCD and the Climate Change Commission. The National Strategic Framework for Climate Change recognizes and adopts DRR as one of its pillars. Mainstreaming projects of NEDA have taken into account the needs of LGUs by ensuring the capacity building at sub-national levels.

Both the DRRM and CC Acts place the bulk of responsibility for preparedness, mitigation and adaptation on LGUs. There are already several programs/projects funded by international donors are supporting integration of DRR and CCA into local development planning processes. However, there is a lot more work to be done and capacitating the LGUs presents some challenges. One example is the need to harmonize the various sectoral plans expected from the LGUs under a single DRRM framework. Enhancing the capabilities of LGU personnel to be able to do this and other duties mandated by the two new laws is a big task. A significant factor limiting the capacity of LGUs for DRRM is the availability of resources. Although RA 10121 mandates that LGUs set aside a minimum of five per cent (5%) of the estimated revenue from regular sources as the local DRRM fund, this is often not enough to effectively fulfill all the mandates associated with DRRM.

Another challenge is presented by the fact that local disaster risk management is at times influenced by local political agenda and interests. Given its resource constraints, the NDRRMC cannot adequately monitor and evaluate progress made in DRR at the national and sub-national levels, vis-à-vis the appropriate use of resources and investments made in DRR activities.

2. Training and Capacity Building

National Capacity Gap 4: Among national government agencies involved in DRRM, there is no organized system for conducting DRR training needs assessment and evaluation.

National Capacity Gap 5: OCD is unable to sustain training activities using its own budget.

National Capacity Gap 6: Opportunities for documenting and diffusing best practices are not being maximized.

Currently, OCD's training activities are externally funded. Without additional financial support from the national government budget or its partner organizations, it is doubtful that OCD will be able to sustain such activities on its own. Thus, individuals trained through previous capacity building programs may not be able to utilize or share their newly acquired skills due to the lack of follow-up training activities.

The lack of resources for training also raises questions about the establishment of the national DRRM training institutes mandated in the IRR of RA 10121. The institutes are tasked to provide capacity building programs on various aspects of DRRM, and undertake research programs and document best practices, as well as conduct awareness and education activities. At the moment, there are no available guidelines on the establishment of the institutes.

The institutes or similar organizations could contribute greatly in the training of individuals to meet the staffing requirements of the local DRRM offices. At the moment, 45 out of 85 provinces have DRRM units/offices and only 23 of these have permanent staff for the offices. The gap needs to be filled by qualified and trained persons who can effectively work together with the different stakeholders involved in DRRM.

Oxfam GB, and other NGOs and international organizations have been quite active in promoting sound DRRM practices through documentation and replication in other parts of the country. This is one avenue where OCD and other national government agencies involved in DRRM can look for additional opportunities to diffuse and scale up good practices.

3. Resiliency of Critical Services, Infrastructure and Lifelines

National Capacity Gap 7: Hazard impacts on infrastructure and other lifelines are not well understood.

National Capacity Gap 8: Monitoring and evaluation for infrastructure projects, in terms of disaster resilience, are rarely done.

National Capacity Gap 9: Despite the adequacy of legislation and implementing guidelines (Local Government Code, Urban Development and Housing Act, DILG directives) to prevent settlements in high-risk areas, implementation has always been a problem as a result of the housing backlog arising from the basic problem of poverty.

National Capacity Gap 10: Addressing social vulnerability remains a huge challenge especially in the poorer and highly disaster-prone regions of the country.

National Capacity Gap 11: Risk transfer schemes such as insurance have a very low penetration rate in the Philippines. The absence of or inadequate reinsurance facilities is considered as a constraining factor for the insurance industry. Disaster insurance schemes need private-public participation in order to thrive.

There is relatively little information published or made known about the the risk management of lifelines such as water supply, drainage, sewerage, roads, electricity, and telecommunications, and multi-stakeholder initiatives on disaster risk management in the country do not always include utility companies, lifeline operators, industry and relevant associations. The corporate social responsibility practices of such firms can be expanded to include community and national interests regarding public safety and DRR concerns.

Many LGUs face significant resource constraints when considering relocation programs for the informal sector and people living in vulnerable areas. Such challenges also extend to the provision of social safety nets to improve the resilience of households and their livelihoods. Risk transfer options are not fully understood by many stakeholders. There are very few financial institutions which provide emergency loans to residents, especially the poor whose livelihoods are affected by disasters. Community-based approaches to micro insurance and micro financing are also limited.

Although the Department of Health has the Health Emergency Management Service (HEMS) to deal with health issues during disasters, addressing the impacts of disasters on the health sector at the local level presents some institutional challenges, especially as public hospitals are run by LGUs, who often face constraints in terms of funding, manpower, equipment and training. In light of climate change impacts, experience with transboundary health emergencies such as avian flu and SARS, as well as communicable diseases, needs to be reviewed.

4. Emergency Preparedness, Response, and Recovery Planning

National Capacity Gap 12: Technical capacity building in contingency planning is still inadequate.

National Capacity Gap 13: LGUs are mandated to act as first responders. However, many are unable to meet the requirements, such as personnel, equipment and systems, to effectively deal with crises on the ground.

National Capacity Gap 14: Many LGUs have yet to identify sites for temporary shelter.

National Capacity Gap 15: The status of stockpiles and distribution systems has not been assessed.

National Capacity Gap 16: Humanitarian standards and gender concerns are not yet fully

integrated into the provision of relief, shelter and emergency health services. Gender-related measures are yet to be institutionalized.

National Capacity Gap 17: Data gathering methods for post-disaster reporting and assessment may differ among the members of the NDRRMC; harmonization of methods is needed.

Many LGUs lack the appropriate personnel, technical knowledge, access to information, and equipment to formulate contingency plans for various hazards, as well as carry out their other mandates in emergency management (EM). There is also a question as to whether the LGUs are using suitable protocols and operating procedures in their EM practice, as post-event reviews that involve various stakeholders are not institutionalized as part of the disaster risk management process.

Overall, recovery planning is still a new process and area of opportunity to be fully utilized for disaster risk reduction. During a disaster or emergency situation, it has been difficult to incorporate DRR objectives and gender concerns while planning for the recovery and reconstruction of a disaster-affected area. The urgency to restore the situation to pre-disaster conditions quickly can jeopardize DRR and gender concerns, which are then relegated to the background.

5. Development Planning, Regulation, and Risk Mitigation

National Capacity Gap 18: LGUs often lack access to multi-hazard and/or risk maps

National Capacity Gap 19: Information disseminated about hazards is sometimes inaccurate and untimely.

National Capacity Gap 20: There is a lack of understanding about hazard-specific early warning systems (EWS).

National Capacity Gap 21: Knowledge about basic hazard monitoring systems is not well diffused to vulnerable communities.

National Capacity Gap 22: A culturally sensitive manner of communicating risk has not been given enough attention.

National Capacity Gap 23: Warning and mapping agencies are losing scientific and technical personnel to the private sector without adequate replacement.

National Capacity Gap 24: Some LGUs lack the capacity to incorporate hazard and risk information into risk reduction and contingency plans.

There is a need to further enhance the scientific and technological capacities of early warning agencies by committing additional resources for scientific instruments and equipment, and the retention of experienced personnel. There is also a need to develop means to communicate effectively communicate hazard and risk information to stakeholders. Many LGUs face multiple hazards, but do not have any idea where to access such information to guide planning and decision-

making. LGU personnel also require the appropriate skills to be able to integrate risk factors into development and land use planning.

Gaps in Coordination

Emergency Preparedness and Response

National Capacity Gap 25: Many local level DRRMCs do not fully understand how they should function. Higher DRRMCs need to look into how lower DRRMCs function and how DRRMC coordination can be strengthened.

National Capacity Gap 26: There is a need to fine tune existing support mechanisms of the NDRRMC-RDRRMC-PDRRMC-MDRRMC/CDRRMC-BDC channel and vertical coordination without cultivating a culture of dependency at the local level.

National Capacity Gap 27: Fast turnover of Regional DRRMC Chairs does not enable them to grasp regional disaster management issues. There is a need to revisit the Regional DRRMC set-up to find ways to strengthen it and ensure that it adds value to the coordination and information management process.

National Capacity Gap 28: Existing “trigger mechanisms” and protocols for disaster response are not clearly understood by relevant agencies and LGUs. As a result, there is inconsistent adherence to protocols, leading to an absence of clarity in decision making.

National Capacity Gap 29: There is some doubt as to whether the coordination systems and standard operating procedures (SOPs) are sufficiently defined to avoid duplication and confusion amongst responding agencies.

Better coordination mechanisms are urgently needed. The NDRRMC has met only once, to apprise the new officials regarding the country’s state of disaster preparedness. Operational matters have only been discussed at the level of the Council’s Technical Management Group. Clear guidelines, standards and agency terms of reference on coordination in disaster response to avoid confusion and non-compliance are yet to be established.

A rational volunteer system needs to be organized, to complement government’s available resources. The PNRC and DSWD systems can provide examples to learn from. Existing MOUs of OCD with government agencies, NGO, private sector, and others may also need to be reviewed in light of the new law.

Gaps in Participation

Advocacy, Communication, Education and Public Awareness

National Capacity Gap 30: Linkages among the academe and disaster management practitioners are weak.

National Capacity Gap 31: Budgetary constraints limit the development, production and

distribution of information, education and communication (IEC) materials, as well as training of teachers/trainers.

National Capacity Gap 32: Although the DepEd integrated disasters in the elementary and high school level curricula, there is a need to produce skills-based teaching guides for disaster management.

National Capacity Gap 33: Setting up a monitoring and evaluation system of DepEd programs and projects in order to improve them is beset by resource constraints such as inadequate budget and lack of staff assigned specifically to DRR mainstreaming work in the curriculum. Further, personnel dealing with DRRM and CCA are borrowed from different offices in the department, who have their own regular workload.

The feedback mechanism among science communicators, scientists and the end-users of research is currently weak. There are linkages among scientists and disaster managers established in recent years through the READY project that can be utilized to further science communication and research utilization in DRR. Also, mainstreaming DRR in DepEd and other departments is a challenge given current levels of staff time dedicated to the relevant tasks. Overall, current public education programs focus on information dissemination with a “top down” approach, rather than a “bottom-up” approach which involves local communities, NGOs and other civil society organizations’ inputs to promote greater public ownership.

Experience and knowledge about disasters accumulated through the years are poorly recorded. There is very little record of reliable data and systematic lessons to guide local officials unless a project or study has been done in a particular LGU. Despite the training provided by the Local Government Academy to local chief executives, they are often inadequately prepared to undertake disaster-related tasks and are not familiar with good practices in good local governance as applied to DRR.

The assessment findings can be divided into two realms of discussion. In the previous sections, main issues and concerns in terms of the five key areas for mainstreaming DRR were pinpointed based on a synthesis of past assessments. In a later section, gaps related to the components of the key areas (i.e., indicators) were identified. Some of the gaps were relatively easy to set against the outcome or desirable characteristics while examining the activities of various stakeholders. Though not exhaustive, the description provides a brief background to provide context and grasp the situation, especially only after less than a year from the passage of the DRRM Act. This we shall refer to as first realm.

The second realm of discussion refers to the UNWFP partners. In as far as UNWFP’s partners are concerned, some analytical insights were deduced further from additional pieces of information which were acquired from a review of documents, FGDs and supplemented by Web searches.

Drawing from the first realm, it is noted that a common or generic set of issues came out and their solutions lie in the following, respectively: (1) linkages (or coordination); (2) knowledge management; (3) resource mobilization/strategic use of funds; (4) resource availability for

emergencies; (5) scientific data/ information on which to base decisions. Human resources and leadership comprise a sixth concern which underpins all the others. Training interventions can be appropriate for the last concern. Thus, capacity development can take place in one or a combination of the five thematic areas for improvement. There are specific needs which were identified in the second realm of discussion.

Insights from UNWFP's Partners

In addition to the performance assessment above, insights from the FGDs with WFP's national government agency (NGA) partners – OCD, DSWD and DILG – are presented to enhance the analysis further and sharpen the focus to what WFP might consider embarking on.

With the legal basis already established, the on-going process to formulate the DRRM framework is being watched eagerly as a possible catalyst to propel the necessary changes which the law promises. The linkage of DRR and CCA is formally recognized in the laws and within OCD, there appears to be more of an appreciation of the need to consider actions that take the two in a consistent matter.

Convening the NDRRM Council to establish ground rules and set out as a regular body with policy making, coordination, integration, supervision, monitoring and evaluation functions appears to be critical to the three NGAs. DSWD have been liaising with OCD closely over the last few months. DILG has remarkably programmed an orientation on the new NDRRM system for DILG regional officers and staff. Understandably, DILG is in a state of flux, similar to the situation of DSWD. The situation should be a temporary one as the mechanism that existed through the old NDCC needs to be revived at the high level; this is somehow augmented by the pre-existing technical management group.

1. Office of Civil Defense (OCD)

The OCD as a key stakeholder in the new DRRM system is handicapped in many fronts – financial, human (personnel), logistics, and management. As the government steps up its performance in preparedness and mitigation, OCD also has to hurdle great challenges in delivering disaster relief and response.

Given that financial resources are limited, it is difficult to adopt a “no-regrets” approach, wherein DRR expenditure is treated not as an added expenditure but part and parcel of budget allocation for development. Therefore, it appears that efforts among international donors to provide a more comprehensive approach to assistance are a must. The humanitarian assistance component of DRRM is a mainstay in the mandate of OCD and the NDRRMC particularly in a very disaster-prone country. UNWFP's role in the humanitarian assistance area is an expected one. However, there are indications that pre-disaster assistance is an area where UNWFP can help in terms of emergency preparedness in its many components. The most relevant aspects of preparedness are securing the resource base (such as stockpiling) and contingency planning.

Enabling OCD to pursue its training mandate is an important area to develop capacity. However, capacity development is not limited to training. The OCD has undertaken quite a few projects which promote capacity development. The overriding concern is the sustainability of impacts of these training interventions. A sense of priorities may develop further during the ensuing months particularly as the framework is being finalized. Global events including the recent disaster in Japan also portend other perspectives that may be influential in the political and economic sense. For instance, food security is a concern that has been there all the while. There is a need for further investigation to find out how food security interfaces with disaster scenarios, especially when transport routes and communications are adversely affected.

Timing of interventions has shown to be a decisive ingredient in assistance for DRR. Experience from recent disasters both here and abroad show the urgency to collaborate in times of big disasters. The Post-Typhoon Ondoy and Post-Typhoon Pepeng projects are an example of seizing the opportunity and using what is already available. The relative 'ease' to assemble a project team to undertake risk assessment can be attributed to the previous projects (such as READY and its precursor, REINA project). Thus, it can be said that such combination of factors have been fortuitous to formulate a new or a "follow-up" project, which can, in fact, contribute substantially to a sustainable capacity development.

2. Department of Interior and Local Government (DILG)

DILG being the national agency most closely associated with LGUs in various aspects of governance can potentially set the tone with respect to actual implementation of plans, programs and projects. LGUs are typically portrayed and/or perceived as "overburdened with requirements," such as a plan for DRR, another plan for climate change, in addition to CLUP and CDP. There is so much room for innovation so that the goal of DRR can be attained. A few LGUs have shown that it can be done. Therefore, documenting good practices is an excellent way to increase the learning curve of local officials and LGU employees. Better and more effective ways to use these documented good practices for a truly lasting impact should be designed and implemented. For example, Oxfam Great Britain in the Philippines has developed a DVD of good practices that shows how different stakeholders work together in the various phases of disaster management. The effectiveness of study visits by local chief executives together with technical staff has also been proven by international non-governmental organizations such as the Regional Network for Local Authorities (or CITYNET) through the City-to-City (C2C) Cooperation. See <http://www.citynet-ap.org/programmes/city-to-city/>.

There is also a need for LGU officials and staff to be more knowledgeable about where and how to obtain resources whenever needed, given the limitations in their own budgets. Many LGUs continue to be unfamiliar with how they can spend the DRRM fund, especially in areas where the risk levels are low. A few LGUs in the Philippines, such as Albay Province and Makati City have demonstrated ways and means to make communities safer and more resilient.

In relation with food assistance, no food-related issues were readily identified during the FGD. Such issues could easily surface when discussing issues at the local level. However, it seemed therefore

that raising awareness within LGU about what food- and employment-related matters LGUs have to contend with was necessary.

3. Department of Social Welfare and Development (DSWD)

DSWD has a close linkage with the UNWFP through CFW and FFW projects. No significant issues related to the projects were indicated. The DSWD has shown capacity in rendering shelter assistance, based on statements heard, although issues (not limited to shelter) in relation to working together with LGUs need constant attention. Within the new DRRM system, an added dimension is how to work together with a disaster risk management office within the LGU.

There are concerns about post-disaster relief and response related to information and communication channels and media (such as consistency/accuracy of disaster data). This eventually translates to the need to building capacity in this area, as well as in the area of post-disaster damage and needs assessment. In the context of building capacity among the DSWD stakeholders while conducting UNWFP projects, training interventions in improving post-disaster food-related issues may be appropriate. In connection with this, a training module concerning food and related aspects (such as health) may be designed for future training activities.

A crucial factor in contributing to loss reduction (especially, in terms of human lives) is emergency preparedness. It is highly likely that the concern mentioned above regarding the information system will affect response. Capability to respond to disasters in a timely manner is a weakness of some, if not many LGUs. Components of emergency response, particularly information systems and response mechanisms, merit closer attention. However, a more thorough assessment relative to gaps in the other national agencies should be able to highlight the other components²⁷ that should be prioritized in the context of the NDRRM Act.

²⁷ The United Nations Development Programme lists the following components of emergency preparedness: vulnerability assessment, planning as an inclusive process, institutional framework, information systems, resource base, warning systems, response mechanisms, public education (communication) and training, and rehearsals.

VI. Provincial and Municipal Level Assessment

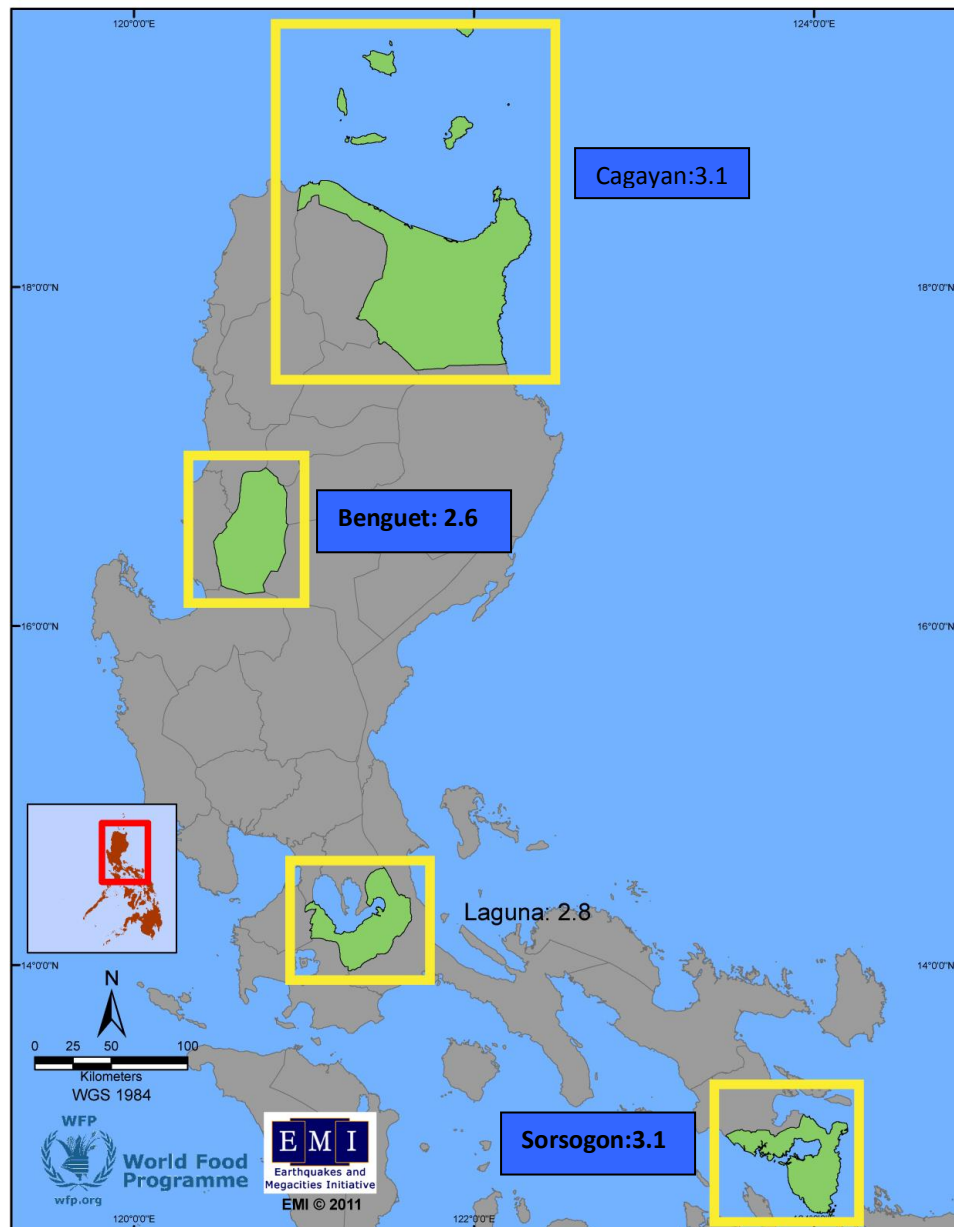
The assessment of DRRM capacity of selected local government units at the provincial and municipal levels was guided by the Disaster Risk Resiliency Indicators. The DRRI is an evaluation tool designed by EMI to assess the capacities of LGUs in undertaking the wide range of DRRM activities as specified under RA 10121 (DRRM Act), particularly those functions assigned to the Local Disaster Risk Reduction and Management Council (LDRRMC), Local Disaster Risk Reduction and Management Office (LDRRMO) and other relevant departments, organizations and institutions mandated to ensure safety and protection of individuals and communities at the local level. The DRRI is composed of ten indicators representing key DRRM functional areas and each LGU is assessed by their level of attainment in each of these functional areas. These ten indicators also serve as benchmarks or performance targets for local institutions to address their gaps and achieve the needed capacities to ensure local disaster resiliency.

The DRRI was designed as a self-assessment tool wherein stakeholders evaluate and score their institution's capacities in these 10 areas. The DRRI scores were not intended to provide pass or fail marks as they simply provide a general indication of the DRRM capacity levels of individual LGUs. The assessment should also be placed in the context of the level of organizational development of each LGU. The results of the DRRI can be used to identify major gaps and issues in terms of local level DRRM implementation, which in turn determines potential areas for improvement, as well as strategic areas for providing assistance to these LGUs.

The local level capacity assessment was conducted in 12 pilot LGUs composed of 4 Provinces and 8 Municipalities in Luzon, Philippines. These LGUs are considered among the most vulnerable to natural disasters and through the years have become established partners of the UN World Food Program. The local DRRM capacity assessment was held through a series of one-day workshops, secondary data collection and key informant interviews in each LGU. The workshops were attended by several stakeholders and sectoral representatives. The results yielded volumes of information and findings that served as the basis for this capacity assessment report.

A. Summary of Key Findings

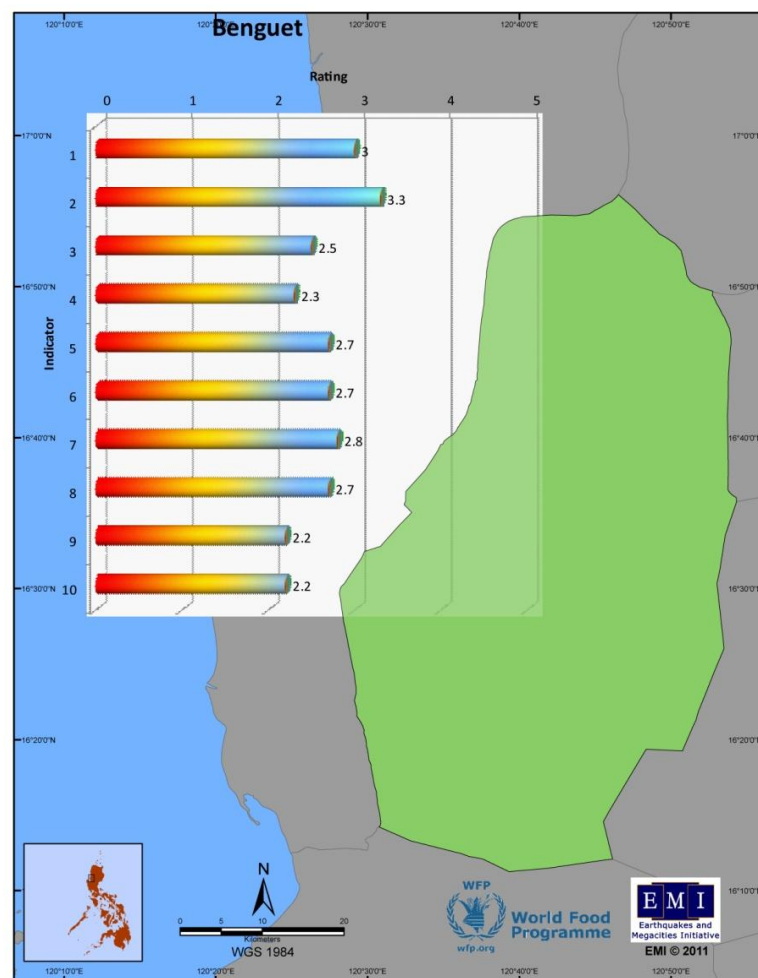
The 12 pilot LGUs covered by the capacity assessment showed mostly low to moderate levels of DRRM capacity using the DRRI scale. The provinces of Sorsogon and Cagayan both scored 3.1 in the DRRI scale, while Laguna and Benguet scored 2.9 and 2.6 respectively. All four provinces scored at or near the moderate level of capacity (Level 3) in the DRRI scale. In comparison, 6 of the 8 municipalities evaluated scored at a low level of attainment (Level 2) in the DRRI scale. In general, the provinces scored higher than the municipalities in the capacity assessment. This may be due to the fact that provinces have far greater resources in terms of funding, personnel, technical competency and institutional linkages compared to municipalities. Provinces have also received considerably huge amount of direct financial and technical assistance from external institutions such as various national government agencies, NGOs and international development organizations.



Provincial DRRRI Rating

Sources: Data Repository of the Geographic Information Support Team, EMI

Figure 4: Provincial DRRRI Ratings



DRRI Rating, Benguet

Sources: Data Repository of the Geographic Information Support Team, EMI

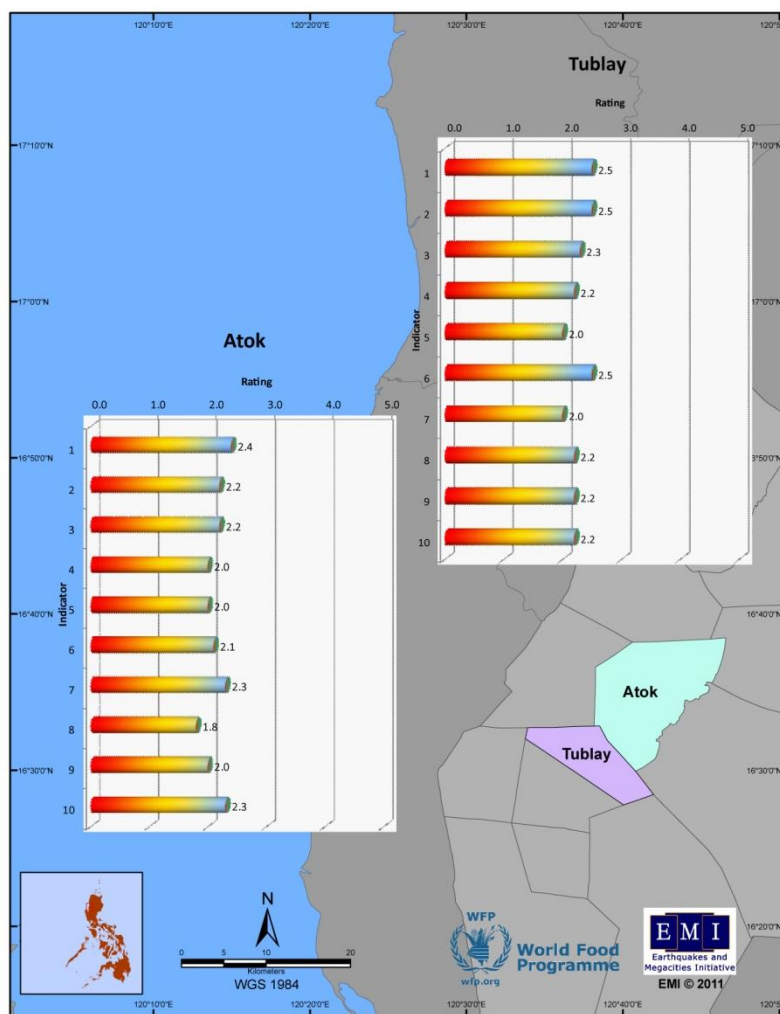
Figure 5: DRRI ratings of Benguet Province

Benguet Province (DRRI: 2.6)

DRRI	RATING	STRENGTHS	GAPS
1	3 Moderate	- EO issued by Governor adopting DRRM; funds allocated for DRRM - Provincial DRRM Council in place - EO creating Provincial DRRM Office signed - Internal budget augmented with supplemental budget when necessary - Province has capacity to tap outside resources	- EO needs to be translated into ordinances and policies to guide other agencies and departments - DRRM awareness low at the community/household level - Insufficient funds to cover all DRRM activities. May not be enough for large magnitude disasters and extended rescue operations
2	3.3 Moderate	- Good coordination among different provincial and local agencies, NGOS - Communities are actively involved in some DRR activities - Several agencies e.g. DSWD, DOH, PNP, etc. are well prepared for disaster	- Provincial DRRM Office has no full-time personnel. The provincial government is saddled by personnel budget ceiling on hiring - Decision-making is highly centralized, but should improve with the creation of the DRRM Office
3	2.5 Low	- Disaster response trainings undertaken - Funds for training is available - Training of trainers conducted	- Lack of comprehensive DRRM capacity building program - Limited funding for DRRM capacity building, limited range of DRRM trainings offered - Lack of training for other DRRM competencies like early warning, IEC, hazard mapping, ICS, Basic and Advanced Life Support, and other special trainings

DRRI	RATING	STRENGTHS	GAPS
			Limited nos. of manpower trained
4	2.3 Low	- Yearly IEC programs on preparedness and response - Fire/disaster prevention months celebrated - Various modes used to disseminate DRM messages (radio, posters, meetings, community gatherings)	- No IEC program on DRRM - Moderate level of DRRM awareness for policy makers, managers and professionals - Low level of DRRM awareness among the public
5	2.7 Moderate	- Livelihood programs available - Presence of water delivery services (trucks) in 5 municipalities - Volunteer nurses may be tapped during emergencies and disasters	- Inadequate supply of water (water shortage) even during normal conditions, water shortage during summer - Inadequate capacity of provincial and district hospitals in terms of medical equipment, manpower, resources - Several areas not accessible to critical emergency services
6	2.7 Moderate	- Damage assessment conducted by the Provincial Engineering Office and PPDO - Engineering group has the capacity to construct temporary infrastructure; LGUS have capacity to restore infrastructure systems in case of disruption - Province purchased heavy equipment and rescue equipment	- Poor resiliency of infrastructure in Benguet. Massive damages to roads, power supply and water supply system during Typhoon Pepeng 2009. - No retrofitting program for critical structures - No internal capacity yet for risk assessment on infrastructure - Lacks funds for rehabilitation
7	2.8 Moderate	- Emergency Operations Center is temporarily lodged at the Provincial Governor's Office - Earthquake drills and simulations conducted - Enough stockpile of food for disasters - Emergency management service under BFP in place	- Lack of Emergency Operations Plan - No incident command system in place - No centralized disaster information management system - No full-time first responders, rescue team - Lack of preparedness program for communities and leaders
8	2.7 Moderate	- Ongoing contingency planning conducted thru OCD - Province conducts logistics inventory of resources - Resources are generally easy to mobilize when needed; most vulnerable are prioritized in resource mobilization	- No permanent evacuation centers; sanitation is a big issue in temporary evacuation centers - Inadequate resources, logistics, emergency equipment - Lack of communication systems for remote areas
9	2.2 Low	- Risk identification conducted - Hazard maps provided by MGB	- Lack of in-house technical capacity for HVRA - Limited hazard information/ hazard maps (landslide susceptibility only c/o MGB) - Only 4 out of 9 municipalities have early warning devices - Province may be unaware of other risks and vulnerabilities such as faults, soft soils, subsidence, etc.
10	2.2 Low	Investment in flood control programs in place	- Risk parameters not fully integrated in PPFP and municipal land use and development planning - Enforcement of building codes strict in some LGUS but weak in others - No plan on retrofitting and reinforcement of vulnerable infrastructure

Benguet. The province scored at a moderate level (Level 3) in 6 out of the 10 DRRI indicators. The legislative framework and institutional arrangements for DRRM in the province have gained some footing. The provincial government has issued an Executive Order/Administrative Order re-organizing the PDCC into the Provincial DRRM Council, thus providing the necessary support for the expanded functions of the Council. Although the province is only in the initial stages of implementing the provisions under the DRRM Act, some of the key strengths of Benguet include the effective inter-department and inter-agency coordination during disasters and emergencies, and the active involvement of civil society organizations (CSOs) in DRRM activities. On the other hand, the province has reported weaknesses in terms of the inadequacies in its DRRM capacity building and awareness raising programs, and the lack of capacities in undertaking risk assessments, risk sensitive physical planning and mitigation initiatives.



DRRI Rating, Atok and Tublay

Sources: Data Repository of the Geographic Information Support Team, EMI

Figure 6: DRRR ratings for the municipalities of Atok and Tublay, Benguet

Atok, Benguet (DRRI = 2.1)

	RATING	STRENGTHS	GAPS
1	2.4 Low	- EO re-organizing the Local DRRM Council in place - Municipality can request additional resources from the provincial and national government and NGOS - Volunteers augment existing manpower and resources	- No resolution formally creating Local DRRM Office - Compliance with DRRM Act constrained by policies from national level (budget, procurement, etc.) - Local DRRM Fund is small; external support from national, provincial and NGOS needed
2	2.2 Low	Roles and functions defined in EO	- No DRRM office yet - Financial constraints limit DRR activities - Not all sectors engaged in DRRM
3	2.2 Low	- Basic DRM, first aid and rescue training conducted - BFP conducts first aid and rescue training at the barangay level	- Absence of DRRM capacity building program - Limited trainings received e.g. response, first aid, rescue - Lack of funds, no incentives for training
4	2.0 Low	- Text messaging used for warning; forest fire prevention - Earthquake and fire drills conducted - IEC drive conducted during public gatherings	- Lack of IEC program / awareness raising campaign on DRRM - Lack of knowledge and awareness on DRRM
5	2.0	Plan to improve health centers and increase	Limited medical services, staff, equipment in the

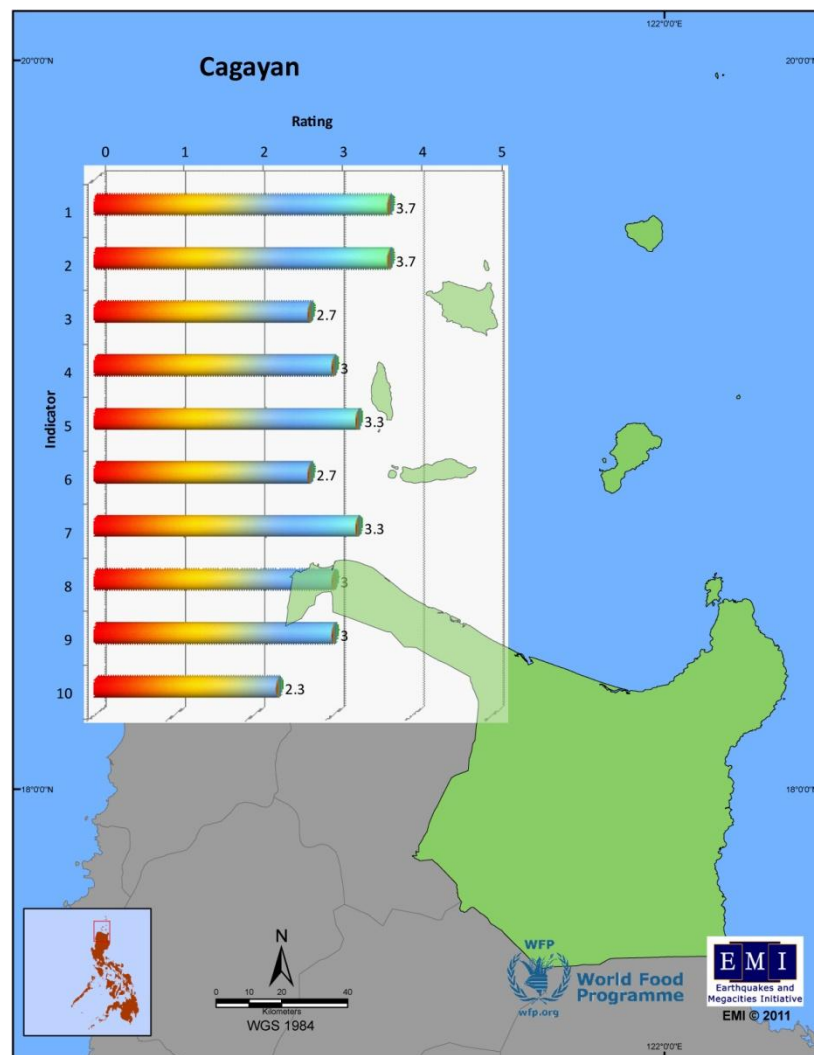
	Low	number of ambulances	- municipality - Several areas inaccessible to emergency services during typhoons and landslides - High possibility of water shortage
6	2.1 Low	- Households stock food and water - Investments made on resiliency of infrastructure and utilities systems	- Rice shortage experienced during disasters - Road damages, power outage and lack of communication hampered response operations during Typhoon Pepeng; long period to restore damaged infrastructure.
7	2.3 Low	- Existing plan with SOPs and specific roles and responsibilities of different offices/sectors, - Barangay officials are designated as first responders - BFP and Police have SOPs, conduct earthquake and fire drills - Existing plan for deployment	- Emergency Operations Plan needs updating - First responders are volunteers, not full-time - Lack of preparedness program for communities - Drills and simulations rarely undertaken due to limited funds - No permanent evacuation centers (school buildings and churches are used)
8	1.8 Low	- Existing inventory of equipment that can be used during emergencies - Emergency equipment purchased and donated - Existing warehouse for stockpiling of food; MSWD stockpiles certain amount in preparation for disasters	- Absence of DRRM resource management system, MIS - Lack of emergency equipment e.g. power generators, stretchers, rescue vehicles, reliable communications equipment, lack of transport for resource mobilization, early warning system - Lack of contingency planning - Lack of communication systems for remote areas
9	2.0 Low	- Information on hazards communicated to the community - Post-disaster damage assessment being conducted	- Lack of technical capacity to conduct HVRA - Limited knowledge in using hazard maps (HVRA results)
10	2.3 Low	- CLUP is being updated to integrate DRRM - Zoning ordinance is strictly complied with - Regulation on commercial establishments; for residential construction before building permit	- Limited safe areas to build houses - Limited enforcement of building code/building permit system - No plan for retrofitting and reinforcement of vulnerable infrastructure

Tublay, Benguet (DRRI: 2.3)

		STRENGTHS	GAPS
1	2.5 Low	- EO issued creating the MDRRM Council; council needs to be supported by committees - Existing DRRM ordinance in place - Municipal officials, implementers have good knowledge of DRRM	- MDRRMC has been created but roles and responsibilities not fully defined - Need to communicate DRRM policies at community level - Minimal funds for DRRM, P1.8M fund available for DRRM but damages from Typhoon Pepeng reached P60M
2	2.5 Low	- Barangay tanods and BDC also in place for DRRM - Existing committee structure for disaster response; roles and responsibilities generally understood	- No established DRRM Office - No personnel for DRRM Office - No incident command system in place - Lack of clear system on decision making, some confusion in terms of roles during actual disasters
3	2.3 Low	- Barangay volunteers active during disasters - Trainings on 1st aid, rescue skills, and contingency planning; providers - Budget allocation for DRRM trainings	- No formal capacity building program or strategy for DRRM - Trainings mostly on response e.g. first aid, rescue and contingency planning; other specialized trainings needed - Lack of funds for training, no incentives for trainings
4	2.2 Low	- Municipal and barangay officials are aware of DRR, PNP and BFP provide disaster-related IEC - IEC during barangay general assemblies	- Lack of IEC program / awareness raising campaign on DRRM - Low level of DRRM awareness among the public
5	2.0 Low	- Barangay health centers can attend to simple medical needs - Churches and schools as temporary evacuation centers	- Limited medical services in the municipality - Several areas not accessible to critical emergency services during typhoons and landslides - Shortage of rice supply during disasters
6	2.5 Low	Ability to restore road networks through community effort and provincial support	- Roads annually damaged due to landslides - Water scarce during summer, streams are damaged and soiled during typhoons and landslides, 2-3 days to restore water source - No retrofitting program for critical structures.
7	2.0	PNP, BFP and Mayor's office provide	Lack of Emergency Operations Plan

	Low	- emergency response - Barangay volunteers serve as rescue responders - EQ drills in schools; preparatory meetings convened for forecasted hazards - Food stockpiles good for 5 days	- No Emergency Operations Center - No contingency and recovery plans - Lack of preparedness program for communities - No permanent evacuation centers - No permanent food storage
8	2.2 Low	- Contingency planning training recently conducted - Existing inventory of equipment undertaken	- Inadequate emergency resources, logistics, equipment - Lack of contingency planning
9	2.2 Low	- MPDC, MSWD, Engineering Departments in charge of damage assessment - Landslide hazard maps available	- Lack of technical capacity for HVRA - Lack of hazard information/ hazard maps (landslide susceptibility only c/o DENR-MGB)
10	2.2 Low	- CLUP updating currently ongoing, to integrate DRRM - Some investments in slope protection	- CLUP needs updating (on-going). Limited risk information used in the old CLUP - Lack of safe spaces to build houses in Tublay - Limited enforcement of building code/building permit system, enforced only in business areas

Atok and Tublay (Benguet). The municipalities of Atok and Tublay have shown start-up levels of attainment in institutionalizing DRRM in their towns. A critical finding of the assessment is the poor resiliency of the road system in these towns which was reported to sustain heavy damages annually, due to landslides caused by major typhoons. These slides and road damages were reported to take months to restore, heavily affecting not only the relief and response operations during disasters but also the social and economic situation in Atok, Tublay and their neighboring towns. Water shortage is experienced even during normal conditions and is also a key resiliency concern. A key strength of these mountainous towns is the practice of “bayanihan” and volunteerism during disasters, as community members, even without written protocols, practice sharing of available resources, relief and rescue tasks, and even in the debris clearing of damaged roads.



DRRI Rating, Cagayan

Sources: Data Repository of the Geographic Information Support Team, EMI

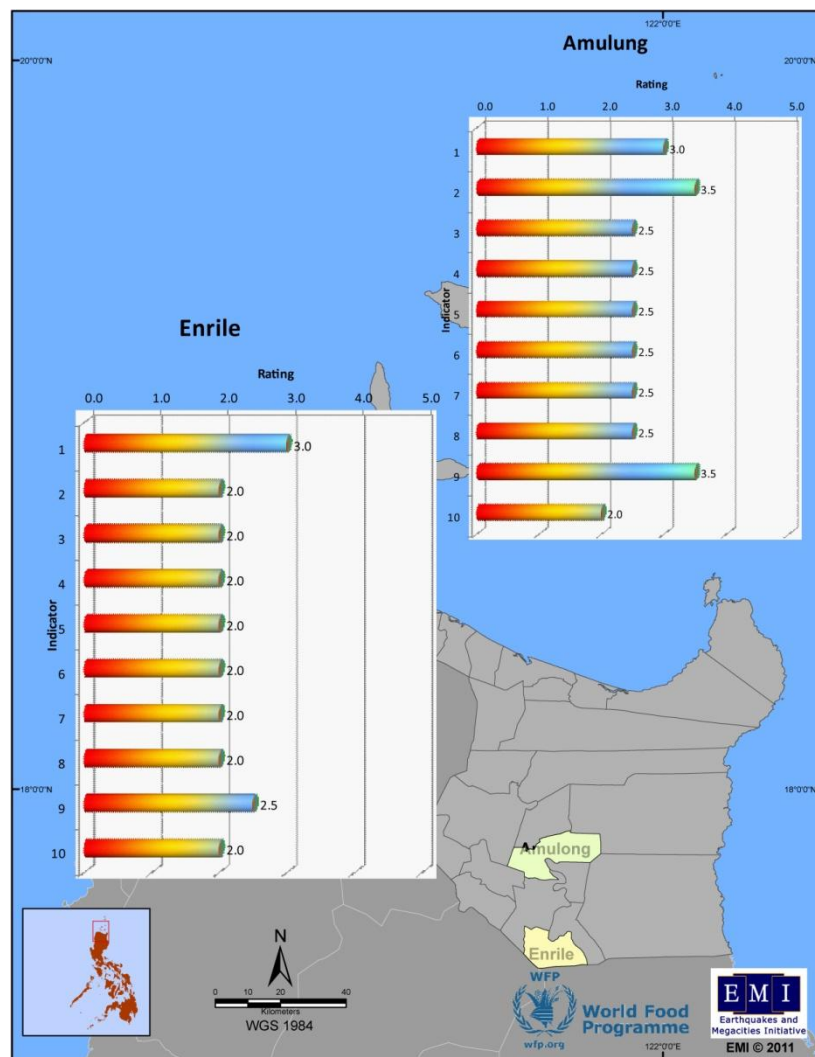
Figure 7: DRRR ratings of Cagayan Province

Cagayan Province (DRRI: 3.1)

DRRI	RATING	STRENGTHS	GAPS
1	3.7 High	Provincial DRRM Council and DRRM Office to be created, awaiting final approval from Sangguniang Panlalawigan	- Pending adoption of the ordinance creating PDRRMC and PDRRMO - Limited capacity for research, policy making and technical writing on DRM for legislative arm and PDRMMC members
2	3.7 High	- Roles and responsibilities are well defined - Active partnership with CSO, academe, church and other organizations, mostly in relief and recovery efforts - Existence of well-organized provincial and municipal rescue units	- Organizational structure is not updated in accordance with RA 10121 - Lack of policy guidelines and policy information on relief donations - No official representation from CSOs although they have programs on disasters
3	2.7 Moderate	Training on DRRM conducted among the local chief executives and barangay officials	- Lack of DRRM capacity development program - Limited resources for training and capacity building - Lack of capacity to document DRM knowledge, initiatives, best practices
4	3.0 Moderate	- DRRM IEC conducted thru drills, mostly in schools - DRRM information can be disseminated thru modern gadgets, facilities and technology.	- No DRRM IEC plan - No emergency drills for the community
5	3.3 Moderate	Health services are resilient during disasters	- Lack of sanitation in evacuation centers - Inadequate shelter, relocation program

			• Inadequate livelihood programs
6	2.7 Moderate	• Presence of reliable water, sewer and storm drainage systems	• Lack of transport vehicles for flooded, inaccessible areas and for conducting damage assessment • Lack of food storage facilities • Slow restoration of power during disasters • Lack of communication devices/equipment
7	3.3 Moderate	• Contingency plans in place • Presence of emergency responders with basic equipment • Emergency drills are conducted every quarter	• No permanent Emergency Operations Center • Insufficient training on emergency management • Emergency Operations Plan needs updating
8	3.0 Moderate	• Disaster preparedness activities conducted • Frontline agencies have emergency SOPs • Logistics is well managed; prepositioning of food supplies being done, food stocks are ready for emergency relief	• Lack of disaster-proof, child, gender, elderly, physically challenged-friendly evacuation centers • Lack of EM equipment (for fire fighting, water rescue, lifesaving kits, etc.) • Lack of manpower, funding and equipment
9	3.0 Moderate	• EWS devices installed in some areas of the province • Updating PPFP, DRR/CCA to be integrated	• Lack of HVRA capacity at barangay level • Lack of HVRA mapping capacity • Lack of early warning devices at the provincial level • Lack of feedback, monitoring and evaluation system
10	2.3 Low	• DRR initiatives undertaken such as placement of coco-fiber to prevent landslides and soil erosion	• Insufficient training on risk-sensitive development planning • Limited/lax enforcement of building codes • Small capital investments for DRR; inadequate investment in flood control. • Poor physical planning in many areas of the province

Cagayan. Cagayan has high scores (Level 4) both in its legislative framework and institutional arrangements for DRRM, and moderate scores in 7 of the 10 DRRI indicators. The Province has established the Provincial DRRM Council, and has also developed active and strategic partnerships with civil society groups in terms of DRRM activities. Cagayan has also showed advances in terms of setting up fully functioning Emergency Rescue Units in many of its municipalities. The province has reported the inadequate capacities in risk-sensitive physical planning and undertaking mitigation programs.



DRRI Rating, Amulung and Enrile

Sources: Data Repository of the Geographic Information Support Team, EMI

Figure 8: DRR ratings of Municipalities of Amulung and Enrile, Cagayan

Amulung, Cagayan (DRRI: 2.7)

	RATING	REASONS	GAPS
1	3.0 Moderate	EO No. 35 issued, creating the LDRRM Council	- No municipal ordinance on DRRM Office - Insufficient financial resources - Insufficient human resources
2	3.5 Moderate	- Duties and responsibilities from MDCC are well-defined - Presence of organized rescue unit, RESCUE 47	- No established MDRMO - Poor coordination system in some barangays - Awareness raising campaign on DRRM Act and CCA is needed
3	2.5 Low	Trainings are available, mainly for response	- Limited training for SAR and WASAR, basic life support - Inadequate personnel to document DRRM knowledge, practices - Inadequate funds for training and capacity building
4	2.5 Low	Fire and earthquake IEC materials are distributed to communities, disaster seminars conducted in schools	- Lack of DRRM IEC plan - Inadequate IEC materials - No information officer
5	2.5 Low	48 core shelter units available.	- Inadequate relocation areas and housing - Insufficient livelihood opportunities for those affected by disasters - Inadequate water supply during disasters - Lack of medical staff, equipment, supplies
6	2.5	Roads are maintained in good condition	Inadequate food storage facility.

	Low		- Silted rivers and canals - Absence of sewer and storm water drainage system.
7	2.5 Low	- Stockpiling conducted - Drills conducted in schools - EM plan to be formulated	- No EOP in place - No Emergency Operations Center - Limited stockpiling of commodities - Drills are conducted but limited to schools, not at the community level
8	2.5 Low	Existing localized contingency plan	- No Local DRRM Plan - Contingency plan needs to be updated - Insufficient funding for DRRM
9	3.5 Moderate	Moderate awareness among officials on hazards, vulnerabilities and risks	- No HVRA studies undertaken - Inadequate early warning system and devices installed - Need to identify families in high risk areas
10	2.0 Low	CLUP needs updating to integrate DRRM	- Lack of an updated CLUP - Lack of technical staff to undertake a Risk-Sensitive Land Use Plan

Enrile, Cagayan (DRRI: 2.2)

	RATING	REASONS	GAPS
1	3.0 Moderate	EO#2 -2011 issued reorganizing the Municipal DRRM Council	- Lack of knowledge on DRRM - DRRM not yet translated in local ordinances - Insufficient funds for DRRM
2	2.0 Low	- Municipal RESCUE 22 in place - Presence of disaster control units	- DRRM Office not yet established - Lack of skilled personnel for DRRM Office - Lack of coordination mechanisms - Lack of pre-disaster preparedness program
3	2.0 Low	Emergency response training available for volunteers	- Lack of DRRM capacity building program - Insufficient funds for training and capacity building - Lack of volunteers to be trained
4	2.0 Low	- IEC for emergency preparedness and response undertaken at municipal and barangay level - Priority areas alerted immediately based on flood warning/monitoring levels.	- No DRRM IEC plan - Inadequate skills on documentation and packaging of experiences and best practices
5	2.0 Low	2 designated evacuation centers -- church and school.	Lack of safe, permanent evacuation centers
6	2.0 Low	- Food storage facility under construction - Roads and transportation system in Enrile can be easily restored after disasters - Stockpiling undertaken at household level	- Potable water shortage in flooded low lying areas. - Lack of reliable storage facility
7	2.0 Low	- Fire and earthquake drills conducted - Existing local capability for relief operations and emergency services - Presence of rescue unit, RESCUE 22	- No drills for floods - Lack of emergency vehicles, gear and equipment - Insufficient number of trained responders
8	2.0 Low	Rescue and relief efforts from the community	- Absence of a Local DRRM Plan - No Emergency Operations Center - No contingency plan and SOPs in place for multi-hazards.
9	2.5 Low	- Hazard maps available - Many hazards already identified - Vulnerable groups have been identified	Lack of technical capacity to conduct HVRA
10	2.0 Low	CLUP is being updated, to integrate DRRM/CCA	Lack of technical personnel for risk- sensitive land use planning

Amulung and Enrile (Cagayan). The municipalities of Amulung and Enrile both scored at a moderate level of attainment (Level 3) in Indicator 1 (Effectiveness of legislative framework) as the Executive Order re-organizing their Local DRRM Councils are already in place. Amulung also scored at a moderate level in Indicator 2 (Effectiveness of institutional arrangements). A common strength of these two towns is the presence of functioning rescue operations units, Rescue 22 in Enrile and Rescue 47 in Amulung.

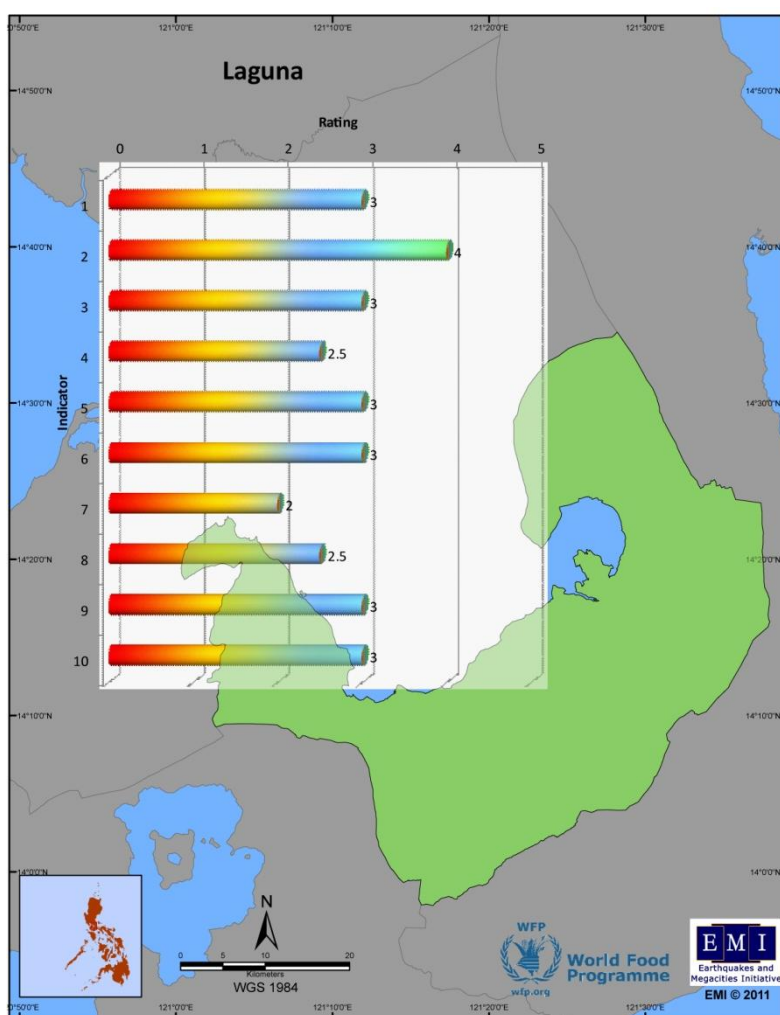


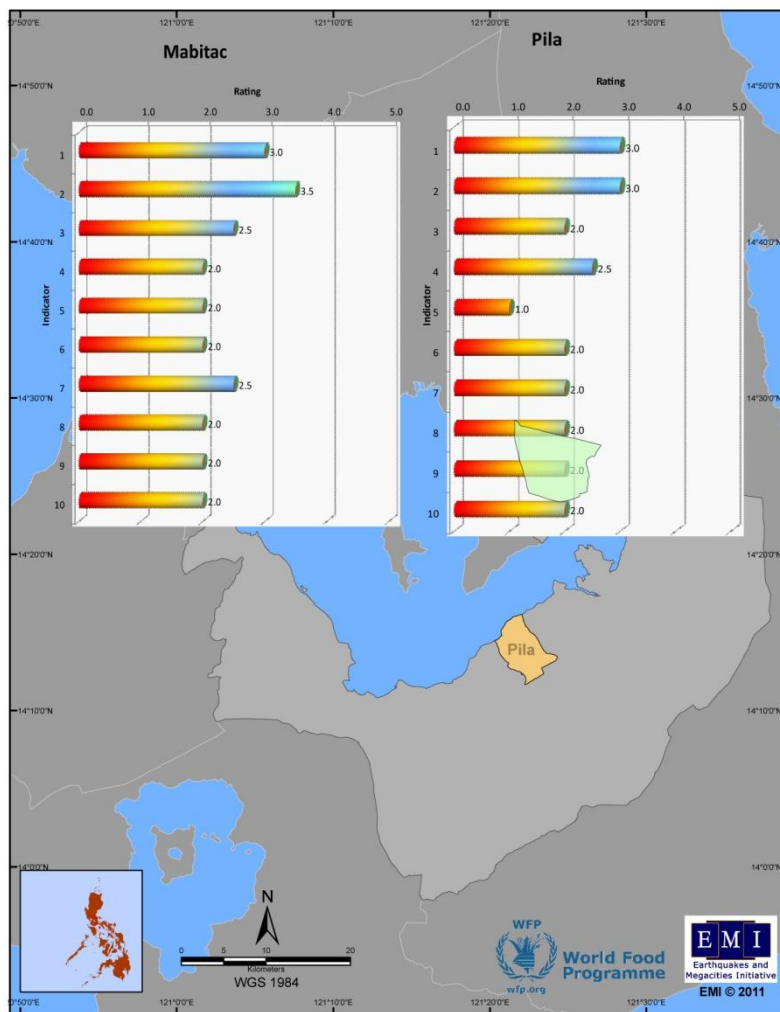
Figure 9: DRRI ratings of Laguna Province

Laguna Province (DRRI: 2.8)

	RATING	STRENGTHS	GAPS
1	3 Moderate	- Adequate laws and policies on DRRM - Existing DRR policies are adequate	- Minimal funds for DRRM, hampers full implementation of DRRM policies - EO needs to be translated into special orders for different units and departments
2	4 High	- High level of coordination - Good awareness of roles and responsibilities - Good links with CSOs and community	- DRRM Act not well disseminated at local level - Lack of communication systems among disaster-related organizations - Lack of DRRM MIS
3	3 Moderate	- Many provincial departments conduct DRR-related activities - Many agencies involved in training - Trainings specific to work specialization; personnel provided training relevant to their specific fields	- Lack of comprehensive DRRM capacity building program - Limited number of manpower trained - Lack of specialized training on relief operations and disaster preparedness - Weak in response training
4	2.5 Low	- Municipalities oriented on DRRM Act - Different departments engaged in various advocacy and communication activities - Integration of DRR into public school and college curricula	- Lack of IEC program / awareness raising campaign on DRRM - Lack of plan/ strategy to communicate DRRM information/messages
5	3 Moderate	Hospitals have disaster SOPs in place, medicines are inventoried, expiry dates are noted	- Possibility of limited supply of medicine for major disasters over extended periods - PHO lacks manpower to handle certain types of

		- The health sector has been active in the DOH's Safe Hospitals campaign - Assistance is provided to farmers during disasters through the provision of seeds, fertilizer and some cash support	- epidemics - Lacks system to assist with needs related to animals/livestock during disasters
6	3 Moderate	- Pre-disaster preparedness of sewer and drainage systems - Province has own warehouse; adequate stockpile, can be augmented when necessary - Sufficient manpower and equipment - Heavy equipment available to clear roads and restore the functionality of the road network.	- Lack of services addressing specific needs of children, elderly, pregnant/lactating mothers, and the severely ill during disasters - Need for more rational system for distribution of relief goods and donations
7	2 Low	- Contingency plans in place with sectoral responsibilities - DepEd, PNRC, BFP and other CSOs have quarterly and unannounced drills - Personnel from different provincial departments organized into a rescue unit.	- No ICS in the province - No existing first responder program. - Lack of communications system - No permanent evacuation centers - Limited EWS installed in few towns
8	2.5 Low	- Inventory of provincial and municipal DRRM resources conducted - Existing capacity to restore critical services such as food supply, water and transportation	- Lack of logistics management - Lack of emergency equipment audit; need to upgrade emergency equipment - Inadequate communication equipment in some operations centers
9	3 Moderate	- Awareness of the importance of HVRA - Capacity for damage assessment and reporting in terms of casualties and agricultural losses - Hazard maps available - Rain gauges are installed in many towns	- Limited internal capacity to carry out HVRA studies - Lack of hazard information/ hazard maps - No formal system for evacuation during landslides and flooding
10	3 Moderate	Regular maintenance of roads and bridges every month	- No structural assessment on safety of buildings - No plan on retrofitting and reinforcement of vulnerable infrastructure - Risks not mainstreamed in the land use plan

Laguna. Laguna has moderate scores (Level 3) in 6 of the 10 DRRM indicators and low scores (Level 2) in 3 indicators. The province scored high in terms of its institutional arrangements for DRRM as it reported a generally high level of coordination among various provincial departments, as well as a good level of awareness, and clear delineation of roles and responsibilities in each office and department within the provincial government. The health sector in Laguna also showed high level of readiness during emergencies. The assessment also revealed that the Province of Laguna has an efficient relief operations system in place. Key weakness of the province is in its lack of capacity to undertake DRRM IEC program at the local and community levels and inadequate rescue capacity.



DRRI Rating, Mabitac and Pila

Sources: Data Repository of the Geographic Information Support Team, EMI

Figure 10: DRRI rankings of the Municipalities of Pila and Mabitac, Laguna

Pila, Laguna (DRRI = 2.1)

	RATING	STRENGTHS	GAPS
1	3 Moderate	- Municipal DRRM Council established - Municipal Ordinance passed on DRRM preparedness and awareness	Ordinance needs to be disseminated and adopted at community/barangay level
2	3 Moderate	- Municipal Disaster Action Center in place with 3 personnel - SOPs in place, roles and responsibilities are well-defined - CSOs and private sector are involved in disaster preparedness and response operations	- Insufficient DRRM funds - No clear guidelines/direction for use of DRRM funds - Coordination sometimes affected by political and interpersonal relationships - Need to strengthen inter-agency/inter-department coordination for DRRM
3	2 Low	- Seminars/training on DRRM regularly conducted - Earthquake and fire disaster preparedness conducted - Training conducted on forecasting and disease prevention for agriculture, basic life support, water rescue, boat handling, community fire brigade, camp management, relief operations, DRM plan drafting	- Inadequate funds for DRRM training - Irregular training for MSWDO - Specialized EM training needed
4	2.5 Low	Information campaign conducted by BFP, PNP, Engineering Office and Municipal Health Unit (MHUs)	Low participation in DRRM.; some sectors/communities are not cooperative with the DRRM programs/activities

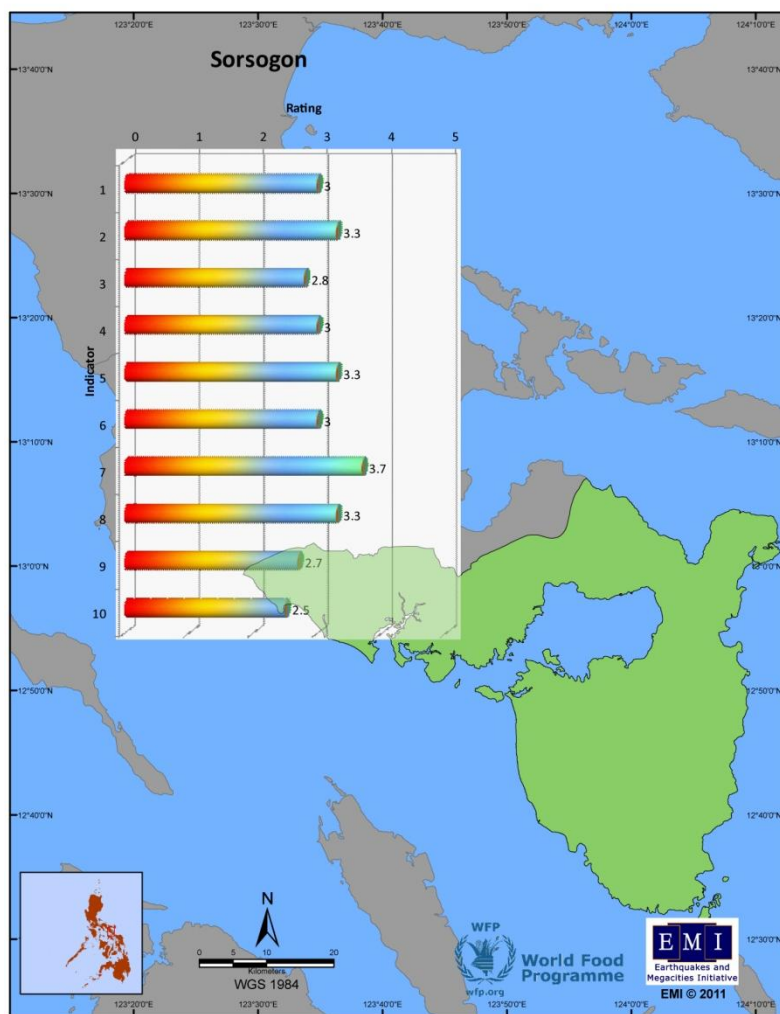
5	1 Very Low	- Resource sharing with MHUs of other towns - Relief assistance provided for loss of livelihood - Crop and livestock support provided to farmers affected by disasters	- No relocation sites for at-risk groups - Large number of informal settlers (3,000 families) at risk from flooding
6	2 Low	- System of relief distribution in place - Maintenance of irrigation canals and water impounding facility, de-clogging of drainage systems regularly undertaken	Increasing flooding problems related to siltation of Laguna Lake
7	2 Low	- Telephone, VHF radio used for emergency communications, reporting - Volunteer radio group (Deltacom) provides communications assistance - Fire protection operates 24/7	- No drills and simulations - Lack of integrated disaster reporting system
8	2 Low	- Office of the Mayor serves as 24/7 emergency action center - Has inventory of EM equipment, logistics - Existence of sectoral plans for emergencies	No Local DRRM Plan
9	2 Low	Hazard maps available	Lack of HVRA technical capacity
10	2 Low	Building codes, building permits enforced	- CLUP needs to integrate DRR - Lack of technical staff to undertake a Risk-Sensitive Land Use Plan

Mabitac, Laguna (DRRI = 2.3)

	RATING	STRENGTHS	GAPS
1	3 Moderate	- MDRRM Council established, conducts quarterly meetings - Plans on creating DRRMO and center - Availability of documents	- Moderate awareness of DRRM - DRM perspective is still reactive
2	3.5 Moderate	- Clear roles and responsibilities - Mayor commands coordination mechanism - No issues with coordination with other agencies - CSOs, private sector actively participate in relief and response - Can source assistance from national, provincial, private sector, international aid agencies,	- MDRRM Office has no personnel yet - Insufficient funds for DRRM, P1.7 million not enough
3	2.5 Moderate	Trainings for barangay officials conducted on first aid, damage assessment, earthquake preparedness, resource generation camp management, relief operations, rescue	Specialized EM trainings and capacity building needed
4	2 Low	- Existences of barangay disaster councils - Information campaigns on avian flu and FMD - Regular preparedness information drive by BFP - DRRM awareness through barangay assemblies conducted twice a year	- No DRRM IEC Plan in place - Low consciousness/ awareness of DRRM at community level
5	2 Low	- Ability to provide health care despite floods - Relocation program for highly vulnerable communities - Agriculture damage assistance provided	Insufficient livelihood opportunities for those affected by disasters
6	2 Low	- Adequate water supply system - Adequate food supply	Increasing flooding problems related to siltation of Laguna Lake and lack of proper forestry management in adjacent towns
7	2.5 Low	- Existence of contingency plans - Procedures for food distribution in place (mayor's directive) - Coordination facilitated by relative proximity of barangays - Preventive evacuation conducted in the past - Post-disaster damage assessment in place	- No Emergency Operations Plan - No Emergency Operations Center - Lack of EM equipment

8	2 Low	• EM equipment include heavy equipment, floatation devices, ropes and flashlights • Existence of PAGASA-installed rain gauges • Early warning system in place through on-site visits and communication • Contingency planning conducted	• No Local DRRM Plan
9	2 Low	• Risk identification and assessment for landslide, other hazards conducted • DSWD regional office has socio-economic data, can identify vulnerable households and families in high risk areas	• Lack of HVRA technical capacity
10	2 Low	• Annual inspection of buildings for safety • Flood mitigation includes tree planting, flood control (river wall) and dredging	• CLUP needs to integrate DRR • Lack of technical staff to undertake a Risk-Sensitive Land Use Plan • Limited implementation of building permit system

Pila and Mabitac (Laguna). The Municipalities of Pila and Mabitac both scored at a moderate level of attainment (Level 3) in Indicators 1 and 2 (Effectiveness of legislative framework and institutional arrangements) and at a low level in other indicators. The Executive Order re-organizing the Local DRRM Council is in place, there is a good level of operational coordination among departments and offices during emergencies, and there exists a strong linkage with civil society groups and the private sector for DRRM activities.



DRRI Rating, Sorsogon

Sources: Data Repository of the Geographic Information Support Team, EMI

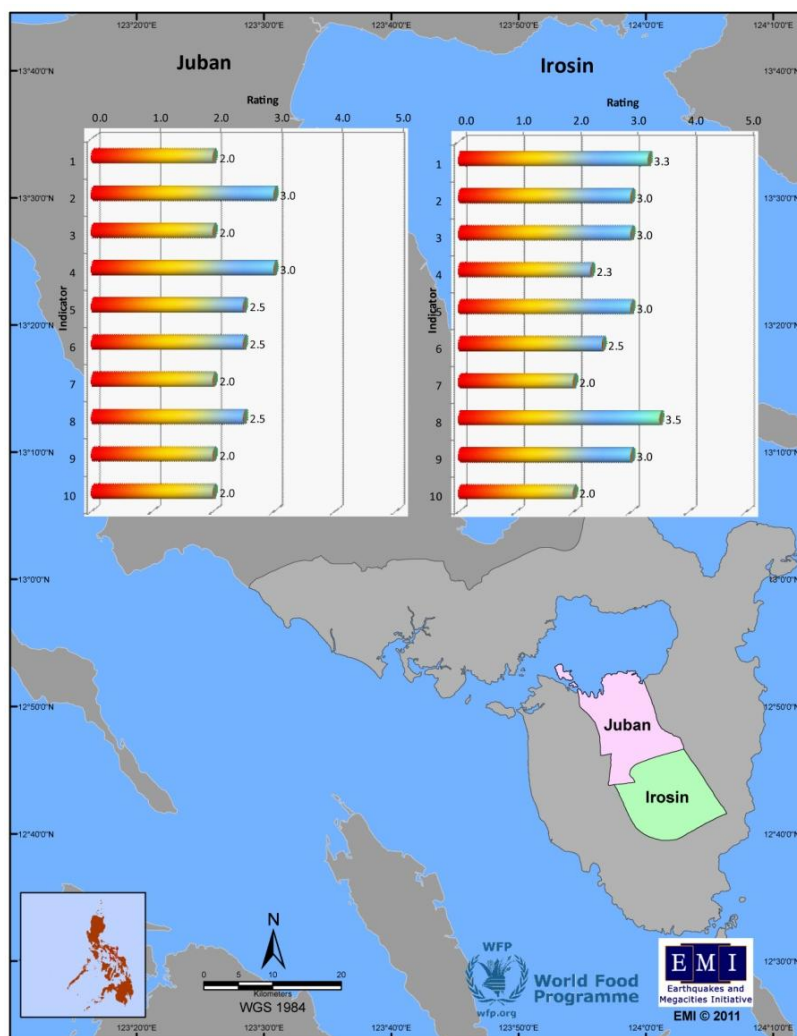
Figure 11: DRRI ratings of Sorsogon Province

Sorsogon Province (DRRI = 3.1)

	RATING	STRENGTHS	GAPS
1	3 Moderate	- Provincial DRRM Council established - Sorsogon Provincial DRRM Office (SPDRMO) in place	DPWH, PIA, DOH, NFA, NIA not members of PDRRMC.
2	3.3 Moderate	Partnerships among civil society organizations, and government agencies are well-established	- Need for improved inter-institutional coordination for DRR - Need for greater participation from various stakeholders. - Insufficient funds to cover/hire permanent personnel
3	2.8 Moderate	- Trainings/awareness seminar/orientation of PDRRMC members conducted. - Ongoing CBDRM first responders training Modules and manuals for first responders available - Several organizations assist the province in capacity building	- Local DRR funds are small/minimal, not sufficient for training activities; most trainings are dependent on external funding, NGOs - Training needed in gender and sensitivity, psychosocial training, camp management
4	3 Moderate	- Available IEC materials on DRRM and CCA, mostly for students - DRRM and CCA primers being developed and translated into local language.	- Lack of DRRM IEC Plan - Need for IEC materials for multiple hazards. - Lack of logistics, funds for producing local DRRM IEC materials

		• DRR also included in school curricula	
5	3.3 Moderate	• High risk barangays identified and prioritized • 200 housing facilities through DSWD core shelter program provided to those living in dangerous areas • Livelihood programs are available • All towns have health units and ambulances	• Vulnerable populations, communities keep returning to danger zones • Many houses made of light materials
6	3 Moderate	• Water districts in place, resilient in times of disasters • Resilient power supply system; generators are available. • Early warning systems in place	• Interrupted water supply in some areas • Lack of funds, need to resort to phased construction of sea wall • Areas surrounding Cadac-an river experienced heavy flooding during typhoons and heavy rains • Some communities inaccessible during disasters
7	3.7 High	• Emergency Operations Plan in place. • Emergency Support Functions established. • Search and rescue unit established with 15 members • Stockpiles regularly replenished and inspected; agreements with NFA and other businesses for food supply in case of disaster.	• Need for EM equipment, capacity building.
8	3.3 Moderate	• Rescue equipment available at SPDRMO • Ongoing CBDRM first responders training	• Lack of logistics (communication devices, rubber boats, stretchers, medical kits, first aid kits, handheld radios, emergency hotline, water filtration equipment, etc.)
9	2.7 Moderate	• Risk assessment conducted with assistance from external organizations • Community hazard maps available • REDAS GIS capacity in 12 municipalities, need for human resource and capacity building in GIS • Installed rain gauges per municipality provided by Oxfam	• Need for risk mapping for all types of hazards • HVRA capacity needs training • Need for HVRA equipment (GPS, GIS, etc.); request for retraining for REDAS. • Results of the risk assessments not fully disseminated
10	2.5 Low	• Provincial Physical Framework Plan integrates risk parameters • Building codes implemented • DPWH involved in infrastructure retrofitting and flood control projects	• Larger flood risks threaten Juban and Irosin. • Need for new evacuation routes during volcanic eruptions • Lack of structural assessment of critical facilities/schools/hospitals • Risk reduction investments insufficient, e.g. flood control mitigation in Juban-Irosin

Sorsogon. Among the four provinces, Sorsogon showed greatest advancement in terms of DRRM implementation. The Sorsogon Disaster Risk Reduction and Management Council is active and well established and the Sorsogon Provincial Disaster Risk Management Office (SPDRMO) has been institutionalized and fully functioning for quite some time. Sorsogon is one of the most vulnerable provinces to various hazards such as volcanic eruption, typhoons, tsunamis, flooding, and landslides, among others. Because of the Province's varied experiences dealing with different types of disasters, the province has shown several initiatives and advances in DRRM. Contingency planning for volcanic eruption and floods is regularly conducted. The Provincial Disaster Protocol is also in place establishing the roles, responsibilities, linkages and coordination mechanisms for various departments, agencies and individuals. Regular capacity building is also supported by the provincial government. The Province has also received various forms of disaster preparedness assistance from national, civil society and international institutions and organizations due to its high exposure to natural hazards.



DRRI Rating, Juban and Irosin

Sources: Data Repository of the Geographic Information Support Team, EMI

Figure 12: DRRI rankings of the Municipalities of Juban and Irosin, Sorsogon

Juban, Sorsogon (DRRI = 2.4)

	RATING	STRENGTHS	GAPS
1	2 Low	- Executive Order # 04-2010 signed creating the Juban MDRRM Council - EM policies and procedures in place to mobilize resources	- Insufficient awareness on DRRM, CCA for legislative and executive branch - Insufficient financial resources for DRRM projects
2	3 Moderate	- MDRRM Council organized, holds monthly meetings - Roles and functions of different agencies clear and well-defined - Active involvement of NGOs and civil society organizations (Green Valley, Red Cross)	- Needs to institutionalize MDRRM system - No personnel to man the DRRM Office due to insufficient funds and budget ceiling cap
3	2 Low	- Juban Emergency Response Team (JERT) conducted training on Basic Life Support - Risk mapping and assessment training conducted - Early warning system skills trainings conducted among barangay officials	- No DRRM capacity building plan - Trainings needed in: advanced and basic life support, search and rescue operations, training of trainers, community-based disaster risk management, camp management, cluster approach, psycho-social, child protection, alternative livelihood, logistics management
4	3 Moderate	- IEC through barangay assembly for community awareness - Fire and earthquake drills conducted in schools	- No DRRM IEC plan in place - Insufficient resources to produce and disseminate IEC materials
5	2.5 Low	100 DSWD core shelter units available - Livelihood and skills development program	Lack of funds for relocation sites, 200+ families need to be relocated

		- available for disaster affected families - Sufficient doctors, nurses, health workers, daycare workers, for basic medical services.	- Heavy flooding experienced at least 6 times a year - Disruption of livelihood due to heavy flooding in some barangays 13 of 25 barangays inaccessible for relief and rescue operations
6	2.5 Low	- Relief operations are continuous - Food stockpiles replenished during disaster months (June - December)	- Water pipes and roads damaged during heavy flooding - Flood control system damaged - Lack of sanitation facilities for evacuation camps
7	2 Low	- Comprehensive Juban Disaster Management Plan (2006) available - EOP for volcanic eruption in place	- Low capacity for pre-disaster and response planning - No permanent evacuation center
8	2.5 Low	- Contingency plans for flooding and volcanic eruption are in place - Emergency resources available (2 ambulances, 1 truck, 1 patrol boat, 2 stretchers, radio s, ropes, harness, flashlights) - Sufficient manpower for emergency preparedness and response, but lack in skills training.	- Insufficient logistics and equipments - Need for rescue vehicle, equipments
9	2 Low	- PHIVOLCS conducted hazard mapping - List of vulnerable groups available/updated regularly - Direct link with PAGASA for weather forecasting - Damage assessment conducted by Engineering and Agriculture Departments	- Lacks technical capacity on HVRA - Lack of forecasting and EWS at barangay level - No early warning for flooding - Some hazards in Juban may not yet have been identified
10	2 Low	- Development plan in place - Building codes and building permit system is in place, covers only commercial buildings in the poblacion. - DPWH has flood control programs in the area	- No CLUP - CDP needs updating - Juban lacks funds for flood control and slope stability projects

Irosin, Sorsogon (DRRI =2.8)

	RATING	STRENGTHS	Gaps
1	3.3 Moderate	- EO 10 signed, creating Irosin MDRRM Council - Operations Center temporarily located at the Mayor's office - DRR projects, programs and activities incorporated into the CDP	- Need to institutionalize DRRM Office - Inadequate local DRR laws and policies - Insufficient funds, only P 3.6 M available for DRRM funds.
2	3 Moderate	- Roles and responsibilities of concerned agencies clear and well-defined - NGOs, businesses, and volunteers assist and participate in relief operations	- Need for permanent DRRM Office - Non-functional BDRRMCs
3	3 Moderate	- EM team organized and trained - Training conducted on REDAS-GIS, HEMS, hazard mapping, water search and rescue, contingency planning - Conducted drills on earthquakes and fires in schools and community drills at the barangay level	Trainings needed in: advanced life support, search and rescue, camp management, first aid, CBDRM, gender sensitivity, relief operations, HVRA, psycho-social, DANA reporting at barangay level, protocol on reporting, cluster approach
4	2.5 Low	- Efficient communications system, information efficiently disseminated in case of disasters (via text messaging, calls). - Barangay assemblies used for awareness campaign on DRRM	- Lack of DRRM IEC Plan - Lack of dedicated IEC Team - Need to produce and disseminate local IEC materials. - Most barangays not reached and inadequately informed about hazards faced in their community
5	3 Moderate	- Health services said to be adequate; Irosin district hospital capable of emergency medical services (50 bed capacity, maximum of 100 patients) - National Housing Authority-assisted land development project in Brgy. Salvacion can accommodate 750 houses	- Critical infrastructure not resilient enough to withstand worst case scenario. - Lack of permanent evacuation center - Unsafe location of houses; 700+ families in danger zones - Lack of alternative livelihood program - Lack of schools, health clinics and community facilities in relocation sites
6	2.5	Stockpiling warehouse is temporarily located	Water supply problem; existing water districts are

	Low	at the Mayor's office.	inadequate to cater to the entire population, deep wells seen as an alternative water source • Need to construct flood control facilities and continuous dredging • Bridge in need of repair, affecting 2 barangays (Tondol and Gabao)
7	2 Low	• EOP for volcanic eruption in place • Frontline agencies have SOPs for disasters (PNP, MDRMC, Fire, MSWD) • Drills conducted once a year in schools	• Lack of EOP for all hazards. • Lack of Emergency Operations Center • No full time first responders, lack of barangay response teams,
8	3.5 Moderate	• Contingency plan in place • Sufficient manpower for emergency response • EM logistics available	• Insufficient EM equipment, need to upgrade communications system • Need for rescue/operations vehicle • Need for training on resource management and mobilization
9	3 Moderate	• Listing of vulnerable population in barangays updated regularly • EWS installed in selected barangays • Forecasting through Phivolcs, PAGASA in place • Damage assessment conducted	• Lack of capacity on HVRA • Need for community-based monitoring system/information collection. • No EWS in agriculture sector for CCA • Inadequate number of rain gauges
10	2 Low	• CLUP updating to incorporate DRRM and CCA • Building permits implemented	• Presence of collapsed and soon to collapse bridges • Insufficient investment in flood mitigation measures • Inadequate GIS capacity • Unsafe schools in several barangays

Juban and Irosin (Sorsogon). The towns of Juban and Irosin scored at a moderate level of attainment (Level 3) in a number of indicators suggesting a level of basic competency in DRRM implementation in both municipalities. Their local DRRM Councils are active. The plan to establish the local DRRM Offices are in place. Early warning devices are spread out in many areas. With the support of the Provincial government, these two towns regularly conduct contingency planning in preparation for the eruption of Mount Bulusan. The two towns have the capacity to evacuate thousands of residents in the volcano's danger zones within an hour's notice. A key resiliency concern in these towns is the heavy siltation of the Cadac-An River due to the lahar deposits from a recent eruption of Mt. Bulusan. The siltation, coupled with a damaged flood control structure in one major section of the river, presents a heightened level of flood hazard that threatens to flood and damage a wide expanse of agricultural land in the area.

B. Analysis of Gaps

This section presents a listing and analysis of key gaps and issues of the pilot LGUs in their implementation of DRRM. Using the DRRI scale, the institutional capacities of the 12 pilot LGUs in DRRM implementation turn out to be at low to moderate levels (Level 2 to 3). The scores of the pilot LGUs in almost all 10 indicators range between low to moderate. Very few LGUs scored exceptionally high in 2 or 3 indicators. This means that the 12 LGUs have a wide-range of capacity gaps and issues that practically covers all functional areas of DRRM. The study also shows that there are several inherent bureaucratic challenges at the local level that incapacitates or hinders the acquisition of LGU capacities for DRRM implementation. A short list of **19** key capacity issues is provided in Table 17. The long list is provided in the Field Investigation Reports in the Annexes.

Table 17: Short list of local capacity issues/gaps

KEY FUNCTIONAL AREAS	LOCAL CAPACITY GAPS
Policies and Institutional Arrangement	1. Inadequate enabling environment for DRRM implementation at the local level 2. Low prioritization of DRRM activities in local government functions 3. Highly centralized DRRM implementation 4. Lack of DRRM implementation guidelines at local level 5. Inadequate local DRRM Fund 6. Lack of human resources
Awareness and Capacity Building	7. Low to moderate knowledge and understanding of DRM/DRRM 8. Lack of DRRM IEC plan 9. Absence of DRRM capacity building plan/program
Critical Services and Infrastructure Resiliency	10. Lack of DRRM structures 11. Lack of technical expertise to identify, assess and strengthen the resiliency of critical infrastructures
Emergency Management and Response Planning	12. Lack of DRRM logistics, equipment, vehicles 13. Absence of Local DRRM Plan 14. Lack of technical capacity for local DRRM planning 15. Absence of DRRM information system at the local level 16. Low to moderate capacity in terms of emergency operations and emergency service functions at the local level
Development Planning, Regulation and Mitigation	17. Inadequate capacity to undertake, facilitate and support risk assessment, and interpret, use and disseminate risk assessment results. 18. Lack of planning expertise and lack of capacity to integrate DRRM and CCA parameters in physical and development planning at the local level 19. Limited enforcement of development control regulations at the local level

Gaps in Operations

Policies and Institutions

Local Capacity Gap 1: Inadequate enabling environment for DRRM implementation at the local level

The 12 pilot LGUs have complied with the DRRM Act in terms of re-organizing their Local Disaster Coordination Councils (DCCs) into Local DRRM Councils and also moving towards the early stages of creating their Local DRRM Offices. However, the policy-making for DRRM needs to go beyond the issuance of Executive Orders creating the Council and the Office. The DRRM Act should be localized and translated into policies that will legitimize, support and establish the necessary enabling environment for the effective DRRM implementation at the local level. This environment is necessary in creating actions that will support efforts to achieve DRRM objectives, actions such as allocating appropriate resources and assigning responsibilities throughout the LGU system²⁸. An enabling environment entails the following key elements: strong political mandate, commitment and backing, effective legislative support, political will, incentives, among other things that are necessary for DRRM programs to take shape. A supportive and enabling environment for DRRM is seen as one of the key ingredient in the successful local DRRM program in the Province of Albay.

²⁸ Brennan, Thomas. Mainstreaming Disaster Risk Management, Some Possible Steps. 22 pp. A paper presented at the International Conference on Total Disaster Risk Management sponsored by UNDP Thailand 2003

Local Capacity Gap 2: Low Prioritization of DRRM Activities in Local Government Functions

A common issue among the 12 pilot LGUs is the low level of prioritization accorded to DRRM activities in their governance functions particularly in terms of budgeting, planning, programming and staffing. Funding is limited and quite difficult to mobilize, projects for DRRM get limited support and hiring of DRRMO personnel is limited to borrowing staff from other offices and departments.

Many aspects of DRRM are also carried out on an ad hoc (as the need arises) basis and not conducted regularly and continuously. LGUs should institutionalize DRRM as a regular governance function and promote DRRM as an important LGU priority.

Local Capacity Gap 3: Highly Centralized DRRM Implementation

DRRM implementation also appears to be highly centralized. DRR policies and activities are mostly crafted by national agencies while the LGUs and local communities serve as enforcers of policies and implementers of programs and projects.²⁹ LGUs continue to depend on national agencies for policies, guidelines, and technical aid, and look towards external institutions for additional funding, technical capacity assistance, capacity-building, equipment procurement, and risk reduction programs, among other things. This is a clear gap in local DRRM implementation as many LGUs find it difficult to cope with the expanded roles and responsibilities mandated to local institutions as provided for in RA 10121.

Local Capacity Gap 4: Lack of DRRM Implementation Guidelines at Local Level

Many of the pilot LGUs complain of unclear DRRM implementation at the local level. This is caused by the lack of appropriate implementation guidelines, absence of simplified and localized DRRM tools and the poor coordination linkages among concerned national and local agencies. This problem is compounded by the seeming mismatch between the goals and objectives of the DRRM Act and the austere realities at the local level. These issues of uncertainties and lack of DRRM implementation guidelines and tools create an atmosphere of indecision, non-action and wait-and-see attitude at the local level.

Local Capacity Gap 5: Inadequate Local DRRM Fund

The most common and most persistent issue among the pilot LGUs is the lack of, or limited resources, for DRRM implementation. As 3rd, 4th and 5th class municipalities, these LGUs are mostly dependent on national funding allocation for their operations (ranges from 90-100 percent IRA-dependent). The 5% DRRM Fund turns out to be so small that it cannot support and cover all the activities and functions of LGUs as mandated by the DRRM Act. The municipality of Tublay for example has an annual DRRM Fund allocation of about P1.8 Million, whereas the damages made by Typhoon Pepeng in the municipality in 2009 were estimated to be more than PHP 60 Million.

Most of the DRRM Fund goes to run-of-the-mill type of DRRM activities such as the 30% Quick Response Fund, contingency planning, training for search and rescue, basic life support, stockpiling and the like. Risk assessment studies, risk-sensitive land use planning and infrastructure mitigation projects are naturally eased out from the annual LGU budgeting and programming as these activities entail heavy spending and capital investments.

²⁹ Cabrido, Candido. National Assessment on the State of Disaster Risk Management in the Philippines, pp. 53. ADB/UNDP/OCD Project 2008).

In the absence of locally available funds, LGUs look towards external sources for assistance in augmenting their resource requirements. The Province of Benguet can augment its DRRM Fund with supplemental budget when the Fund is not enough. The 12 pilot LGUs also turn to external sources for funding assistance but their capacity to generate external resources is limited to requesting, lobbying and in many occasions, accepting donations from various organizations. Many advanced LGUs turn to more creative strategies in generating additional resources. These include the pooling of resources, entering into mutual aid agreements, and partnering with the private sector for DRRM related activities. The Province of Sorsogon for example, entered into agreements with business establishments in case of shortages of food and non-food supplies in its stockpile. The Province of Laguna also entered into agreements with drugstores to allow the province to immediately purchase medicine and medical equipment during disasters.

Local Capacity Gap 6: Lack of human resources

The lack of human resources both in terms of number and technical competency hounds most LGUs. Several municipalities are faced with the issues of personnel ceiling cap wherein an LGU has filled-up all the available plantilla items and can no longer hire people to work for the DRRM Office. The inability to create new staff positions and hire new personnel puts off the successful institutionalization and the sustained operation of the DRRM Office. The lack of competent, available and qualified personnel to man the Local DRRM Office and trained personnel to work at the Operations Center and Rescue Unit is yet another difficulty for many LGUs at the moment. There is also a lack of full-time, qualified and well-trained emergency personnel, rescuers and first responders at the local level.

Awareness and Capacity Building

Local Capacity Gap 7: Absence of DRRM capacity building plan/program

All pilot LGUs have low to moderate level of skills and capacities in mostly all functional areas of DRRM. Capacities in the areas of relief, rescue and response operations are more noticeably cultivated among the pilot LGUs compared to other DRRM areas. The lack of capacities can be addressed through capacity building activities such as skills and knowledge acquisition through training and education, knowledge sharing, hiring of competent and skilled personnel, creating local competencies, among others. Capacity building would require investing resources on people and institutions therefore a local DRRM capacity building plan and program is necessary to ensure capacity needs and gaps are properly identified, capacity building activities are appropriate and cost-effective, properly sustained and are effectively carried out.

Critical Services and Infrastructure

Local Capacity Gap 8: Lack of necessary DRRM infrastructure

All 12 pilot LGUs have reported the need for permanent evacuation centers to prevent disrupting and defacing designated evacuation centers such as schools and churches during disaster events. Other DRRM infrastructure and infrastructure support that are either lacking or inadequate in the pilot LGUs include the lack of permanent DRRM offices, Emergency Operations Centers, stockpiling warehouses, sanitation facilities, shelter facilities and relocation sites, among others. Additional resources are needed to provide these infrastructures that are essential in strengthening DRRM implementation of these LGUs.

Local Capacity Gap 9: Lack of technical expertise to identify, assess and strengthen the resiliency of critical infrastructures

Many LGUs rely on various national agencies to ensure the resiliency of critical infrastructure in their localities. This capacity gap may be due to the lack of technical expertise at the local level to conduct infrastructure safety assessments, the hierarchical responsibilities on regulating and monitoring the construction and maintenance of infrastructures and the very high cost of reinforcing or retrofitting these structures. These problems typically result to the incapability of LGUs to ensure safety and soundness of infrastructures and subsequently the vulnerability of these structures to collapse and cause damages and losses to communities.

Emergency Management and Response Planning
Local Capacity Gap 10: Lack of DRRM Logistics, Equipment, Vehicles

The lack of equipment, logistics, and vehicles has also hampered the full implementation of DRRM at the local level. The pilot LGUs reported the difficult mobility they experience in performing DRM functions such as rescue operations, relief distribution, mass evacuation, risk assessment, damage assessment, among others and this is mainly due to the lack of appropriate vehicles. Emergency equipments are also reported to be insufficient in the pilot LGUs. There are several early warning devices installed in many localities, mostly rain gauges and flood markers but an appropriate early warning system which is established, multi-hazard, and fully functioning is absent in most of the pilot LGUs.

On the other hand, there are also reports of people-technology mismatch wherein hardware, software and devices were donated to LGUs but the expertise and manpower to use and operate these resources do not exist. The acquisition and build-up of DRRM logistics should therefore be based on a long-term plan which considers existing and future capacities, resources and conditions and the LGUs' capability to upkeep and upgrade these equipments.

Local Capacity Gap 11: Absence of Local DRRM Plan

With the exception of the Province of Laguna and the Municipality of Juban, the pilot LGUs have no local DRRM plans in place. The pilot LGUs have formulated a wide array of disaster and emergency plans such as contingency plans, emergency operations plans, response plans, rehabilitation plans, standard operations procedure and disaster protocols, but a comprehensive local DRRM plan as directed by the DRRM Act is still missing. Problems related to this capacity gap are the lack of LGU capacity to formulate and implement the plan, and the numerous plans to be formulated and implemented which tends to overwhelm many LGUs.

Local Capacity Gap 12: Lack of Technical Capacity for Local DRRM Planning

The pilot LGUs also reported the absence of local competency in DRRM planning. Sorsogon was assisted by Albay's APSEMO, NGOs, national agencies and international organizations in formulating most of its Provincial level emergency plans. The Provincial Government, in turn, assisted its component municipalities in formulating their individual municipal emergency plans. The lack of planning competency and the dependence on external expertise in DRRM planning is a primary capacity gap for most of the LGUs.

Local Capacity Gap 13: Absence of DRRM information system at the local level

The systematic collection, use and dissemination of disaster knowledge and information is practically absent at the local level. Most of the information are collected by concerned sectoral offices and are not systematically consolidated for future use. An effective system for managing and reducing risks depends on the proper use of empirical data, the lack of which may bring institutions and communities to a repeated cycle of operational failure and disaster losses. The lack of an efficient Management Information System (MIS) for disasters was reported in most of the pilot LGUs.

Local Capacity Gap 14: Low to moderate capacity in emergency management functions and operations at the local level

The pilot LGUs reported that they have basic to mid-level capacity in terms of the range of emergency management operations and functions. Although most LGUs have conducted trainings in basic relief and rescue operations, only a limited number of personnel, mostly volunteers and non-permanent staff have been trained. Many LGUs have expressed the need for capacity building in the areas of camp management, psycho-social support, gender sensitivity training, SAR and WASAR, CBDRM, basic life support, advanced life support, damage assessment, and disaster reporting, among others.

Development Planning, Regulation and Mitigation**Local Capacity Gap 15: Inadequate capacity to undertake, facilitate and support risk assessment, and interpret, use and disseminate risk assessment results**

Successful DRRM implementation requires the use of various skills and expertise, most of which are not readily available at the local level. Most LGUs do not have the technical capacity to undertake, facilitate and support the necessary technical studies such as hazard, vulnerability and risk assessment (HVRA). Practically all the HVRA studies available in the pilot LGUs were conducted by experts coming from the national government agencies such as PHIVOLCS, Mines and Geosciences Bureau (MGB), and PAGASA. A limited number of hazard maps are available in the pilot LGUs. However, another level of problem is the lack of capacity to interpret, use and disseminate these hazard information to offices, local stakeholders and communities who need these information as basis for more informed decision-making.

Local Capacity Gap 16: Lack of planning expertise and lack of capacity to integrate DRRM and CCA parameters in physical and development planning at the local level

Majority of the LGUs are in the process of updating their Comprehensive Land Use Plans (CLUPs) and Comprehensive Development Plan (CDCPs). This is the perfect opportunity to mainstream DRRM and CCA in local plans and programs. However, many LGUs do not have in-house local planning expertise as they usually subcontract or hire consultants to formulate and develop local plans for them. Many of the pilot LGUs also lack the technical capacity to integrate DRRM and CCA parameters in their physical and development planning process. Local planning capacities should be built and developed in each LGU as local planning can effectively re-arrange and re-organize policies, decisions and actions that can greatly reduce disaster risks in their localities.

Local Capacity Gap 17: Limited enforcement of development control regulations at the local level

Construction codes and building permit system are narrowly enforced in the eight pilot municipalities. In the towns of Tublay and Atok in Benguet, Irosin and Juban in Sorsogon, building permits are enforced only in built-up areas and mostly applied to commercial establishments. The poor implementation of construction codes and standards in hazard-prone areas may result to potential dangers in the future.

Gaps in Participation

Awareness and Capacity Building

Local Capacity Gap 18: Low to Moderate knowledge and understanding of DRM/DRRM

The LGUs are now being briefed and sensitized by the DILG and OCD to the new DRRM Law as they prepare to take on expanded roles and functions in implementing DRRM programs in their locality. However, most LGUs appear to be operating under the vestiges of the old DM Law (PD 1566) which is reactive and response-oriented. This partiality towards post-disaster actions is manifested through the greater allocation of funds for relief operations and the prioritization of activities for relief and response. This gap may also be caused in part by the low level of understanding of LGU officials, policy-makers and decision-makers on the scope and spirit of DRM particularly the need to invest resources on pro-active components of DRRM such as mitigation, prevention and preparedness.

Local Capacity Gap 19: Lack of DRRM IEC plan

Information, Education and Communication (IEC) of disaster knowledge and information is essential in raising people's level of awareness on disaster issues and in introducing communities to the culture of resiliency and disaster risk reduction. Public awareness-raising on disasters is mostly conducted through emergency drills, community assemblies, and on a limited level, through various media. Earthquake and fire drills mostly in schools but community drills are non-existent. Community assemblies are used to disseminate disaster preparedness information. Efforts to produce and distribute DRRM IEC materials to communities are usually confronted with the lack of competency in developing effective IEC contents and lack of funds. All the LGUs reported the lack of a comprehensive DRRM IEC program in their locality.

VII. Summary of Gaps and Recommendations

A. Recommendations (National Level)

i. Policy and Institutional

Addressing Gaps in Operations

Policy and Institutional Gap 1: Inadequate understanding of the provisions of the law by the government agencies concerned and how to implement them

Recommendation: Conduct of information, education and communication programs to national agencies and local government units on the provisions of the law and their respective roles with respect to the law

Experience has shown in the case of other earlier legislation that there is generally an absence of detailed understanding of any new legislation. At present, there is no common level of understanding of the new DRRM system among the various Council members and LGU officials, many of whom have confessed to their ignorance of some of the more important provisions of the law. They have not familiarized themselves with the law which they believe is basic and a preparatory activity to implementing it. They still have to understand their respective roles and how these relate to those of the other member-agencies, in view of the expanded concerns and membership of the Council under the new law.

Actions to implement recommendation 1: The immediate action needed is introducing the details of the law to the decision makers to guide them in their policy making and program and project implementation. The various sectoral agencies should conduct separate orientation or familiarization seminars involving their decision makers and implementers, after which a plenary session involving all of these agencies could be held where respective roles will be delineated and areas of coordination explained and possible conflicts threshed out.

Policy and Institutional Gap 2: Confusion caused by the fact that many of the sectoral agencies are still operating under the old law

Recommendation: Convene the NDRRMC to establish ground rules and set out as a regular body with policy-making, coordination, integration, supervision, monitoring and evaluation functions

Still another problem related to the transition stage is that these national and local government officials are caught midstream in the performance of their functions under the old law. This is understandable because they had been operating under the provisions of the old law for the past three decades. It has not been easy for them to transit to the new legal and institutional environment, more particularly because this now covers not only the DRRM law but its companion legislation, the Climate Change Act.

Many of the plans, programs and activities undertaken by the concerned agencies are under authority of the old law. Related to this is that by the time the new law and its IRRs were ready for implementation, not only the national agencies but also the LGUs had appropriated their funds and committed them for operation in 2011. There is need, therefore, for implementing regulations to guide funding arrangements.

Actions to implement recommendation 2: Convening the NDRRMC to establish more detailed policy directions and specific ground rules appear be critical to the three NGAs. DSWD has been liaising with OCD closely over the last months. DILG has remarkably programmed an orientation on the new NDRRM system for DILG regional officers and staff. Understandably, DILG is in a state of flux, similar to the situation of DSWD. The situation should be a temporary one as the mechanism that existed through the old NDCC needs to be revived at the high level; this is somehow augmented by the pre-existing Technical Management Group of the NDRRMC (A. Fernandez).

Policy and Institutional Gap 3: Absence of broad Framework and detailed Guidelines to assist the government officials and other stakeholders in law enforcement

Recommendation: Finalize and disseminate the DRRM Framework and Plan

A serious implication of the above predicament is that many officials have developed a “wait and see” attitude until all the guidelines are issued by the Council or their sectoral departments. This attitude is particularly obvious in situations which require incurring expenditures where the applicable rules are not yet clear. These officials are particularly worried about the possibility that they may face charges for non compliance or erroneous implementation of the law, fully aware that their actions are subject review by the Commission on Audit.

Actions to implement recommendation 3: Give this project top priority. Initial efforts toward completion of these documents have been started and OCD, which is on top of this, has delegated portions of the work to other council member-agencies. There is a need to review other relevant framework plans such as those of HUDCC and the Climate Change Commission. The CCA Framework has the advantage of having detailed guidelines in its charter. Other framework plans have also been completed. These would serve as reliable models for the completion of the DRRM Framework and Plan. For this purpose also, c) Utilize related sectoral policies and plans may be incorporated into the framework.

Policy and Institutional Gap 4: Difficulties in the preparation of Guidelines

Recommendation: Support OCD with additional technical resources to prepare the Guidelines

Related to the above is that it will not be easy to develop all the guidelines required by the new law, and it will take some time before this happens. Very basic to this is making the determination of what form these details of implementation will take, aside from the regular Implementing Rules and Regulations, For instance, there is already clamor from some sectors to introduce additional legislation for what has been identified as weaknesses and gaps in the law although realistically, these gaps may be filled by mere executive orders, Memorandum Circular, etc.

Actions to implement recommendation 4: The above functions belong primarily to the Office of Civil Defense (OCD) which is experiencing some technical, administrative and financial constraints. Increased budgetary allocation will be necessary. It may be possible also to harness voluntary researchers from other member agencies to assist the OCD in their program implementation. In fact, this appears to be happening, where the concerned agencies are lending research support or actually preparing some of the required documents. This calls for effective delegation of functions where the various tasks of OCD could be delegated to the most qualified sectoral agencies or to those which have already undertaken similar activities.

Policy and Institutional Gap 5: Difficulties of creating the prescribed new local offices

Recommendation: Consider alternative approaches to creating the new DRRM offices

At the LGU level, the interviews revealed that the most challenging part of implementing the new law in so far as they were concerned was the requirement for LGUs to create an office with its staff and budgetary requirements. While the Local Government Code allows LGUs to create new offices necessary for the performance of their function, the problem is that this requires corresponding increase in actual funding support. The only source under the new law is the 5 percent of the LGUs internal revenue allotment (IRA) which also constitutes its calamity fund.

Action to implement recommendation 5: Multi tasking and detailing of staff from member agencies or related offices could offer the solution. Joint undertaking of projects could also help solve financial and administrative problems.

Policy and Institutional Gap 6: Inordinate number of still to be organized policies

Recommendation: Setting-up of a “clearinghouse” to systematize these policies and provide coherence and clarification for implementation

While appearing to be useful and beneficial, the inordinate number of policies on the various aspects of DRRM calls for a new scenario for operation. This calls for installing a system characterized by tighter and more purposeful supervisory and coordinative arrangements, prioritization and reconciliation of possible conflict of interests and concerns among the sectors involved, and the determination of how weighty issues could be resolved. Policy formulation and implementation are not the exclusive prerogative of the NDRRMC, the designated central agency for DRRM. Although it has the primary responsibility for DRRM policy and program formulation, coordination, and evaluation, these responsibilities are, to a large extent, shared with other sectoral government agencies, sub-national levels of government and a wide array of stakeholders. It will be noted that the latter have their own official agenda, budgetary priorities and manpower, financial and other limitations which should be considered.

Actions to implement recommendation 6: A clearinghouse to organize and systematize these policies and provide some coherence and a clarification issued to their implementers could help solve the problem. There are a number of documents which will need to accompany the secondary

review of the laws to make a reliable analysis possible. Among these documents are the Implementing Rules and Regulations which, while already complete, do not carry enough details to allow such a review. The National Disaster Risk Reduction and Management Framework is also still being prepared by the OCD, with the assistance of a number of other agencies. The Framework will be the basis of the Plan whose preparation is expected to follow as soon as the guidelines expected to be provided in the Framework are available.

Policy and Institutional Gap 7: Difficulties with the mainstreaming function

Recommendation: Provide technical assistance to mainstream DRR into national and local government systems and processes

Although, through “out of the box thinking,” mainstreaming DRR/CC into national and local government systems and processes would not have to entail heavy expenditure, the fact remains that to do this would require extension of technical assistance, to the officers concerned, which also consumes time and attention. These translate into producing some kind of framework on how to undertake the mainstreaming process. As earlier mentioned, the preparation of this framework is only one of the many documents that are awaiting attention and resources, in view of the many outputs required by the law and its Implementing Rules and Regulations.

Actions to implement recommendation 7: Multitasking among concerned agencies could be resorted to produce this mainstreaming approach. Each sectoral agency, without waiting for inputs from the various councils, could initiate the work. There are already many research documents on this topic which could be utilized, modified and adjusted to the needs of the concerned agencies. In the first instance, the focus should be at building the capacity of OCD at the national level and the DRRM Offices at the local level on DRR mainstreaming to be able to operationalize it within their systems and functions.

Addressing Gaps in Coordination

Policy and Institutional Gap 8: A huge and potentially unwieldy organization

Recommendation: Review and streamline current organizational set up of the DRRM Council

Among the problems not related to the transition stage, but inherent in the law is that the DRRM structure is a huge organization. Its membership is not just confined to the entire bureaucracy, but includes additional offices and institutions which are not part of the cabinet of the President. The DRRM Council has a membership of 39 which includes not only all the members of the President’s cabinet but also encompasses the various associations of local governments and other stakeholders such as the private sector and quasi –private organization, the Philippine National Red Cross. As if this is not big enough, the law includes a provision allowing the inclusion of other offices. Thus, the Councils at the region, namely the regular Regional and the Special Regional organizations are authorized to invite other concerned institutions, organizations, agencies and instrumentalities in the private and public sector when deemed necessary to perform their mandate . This will require

huge cost because for, among others, the additional personnel needed in the regions and the construction of regional offices and training institutes which will happen concurrently

Actions to implement recommendation 8: An effective and efficient system of coordination, supervision, monitoring will have to be put in place. Clustering is the present system but this might need to be complemented by other management tools such as the creation of an Executive Working Group consisting of smaller number of member agencies which could take care of decision making where the entire council might be difficult to convene.

ii. Capacity Building Recommendations

Legal and Institutional Processes

National Capacity Gap: Difficulties by some agencies in utilizing horizontal and vertical linkages for DRR

Recommendation: Strengthen or enhance linkages (or coordination)

Actions/Strategies

The goals of DRR and CCA are similar. With recent laws dealing with DRRM and CC, the convergence of DRR and CCA has recently been legally recognized. As a concrete step to realize the intentions of both laws, the signing of a memorandum of agreement between the OCD and the Climate Change Commission signaled a new advent of managing risks. However, many NGAs are unable, as yet, to utilize horizontal and vertical linkages to attain the reduction of disaster losses. Some linkages have not gone past articulation and little meaningful action has been done. These linkages apply to the various phases of disaster management (i.e., prevention/mitigation, response, rehabilitation/reconstruction, and preparedness).

The need for coordination is even more critical in times of emergency. At the national level, the NDRRMC has a broad mandate to coordinate as well as monitor DRR processes and activities. Strengthening the NDRRMC is of paramount concern especially as the country is transitioning to the new law. The FGD interviewees suggest the urgent need for the NDRRMC to convene immediately to discuss and formulate guidelines for its member agencies and organizations. In so doing, the provisions of the law can be applied, leading to reducing disaster losses and benefits ultimately redounding to society. The NDRMMC shall then meet regularly to undertake its mandated functions and operate as designed by the law.

The NDRRMC by itself is a mechanism for policy making and implementation. As done previously, a technical management group that deals with more specific technical concerns will need to keep a strong feedback loop with the Council itself. In order to interact more positively with the various sectors of society, holding multi-stakeholder dialogues can strengthen information exchanges and ultimately the networks required in a fully operational DRRM system under the new law. While guidelines for the NDRRMC members are made available, the members themselves shall utilize its vertical structure so that LGUs are led properly. Feedback from the local level must then also be transmitted back to the national level, and to the NDRRMC for any adjustments or clarifications required.

Another pre-existing mechanism is the Cluster approach that has been institutionalized in the country. Some Cluster Teams are active even during normal times, although these were created in

the context of humanitarian relief coordination. The new NDRRMC needs to recognize their contributions to the DRR efforts and encourage its members to engage in activities of common concern in a regular manner.

Awareness and Capacity Building

National Capacity Gap: Lack of systematic documentation and dissemination of sound DRRM practices

Recommendation: Adopt knowledge management

Actions/Strategies

Prior to the adoption of the HFA, some areas in the Philippines, particularly the provinces of Quezon and Aurora experienced heavy rainfall that brought about flash floods and landslides. The disaster impacts were tremendous in terms of human casualties, property damage, and loss of crops. During the rehabilitation and recovery process, a new set of initiatives took place. This has brought to the fore lessons learned and new knowledge – a different way of doing things based on collaborative partnerships and scientific knowledge. A case in point is Infanta, Quezon where a community had to redefine farming because of the changed landscape.³⁰ Scientists helped barangay residents to retool with new knowledge and skills as they learned coping strategies by knowing about the soil and the type of crops that will grow.

Since then a number of good practices have come to notice, some of which have been recognized through the Gawad KALASAG awards for excellence in disaster risk management and humanitarian assistance given by the government. Information about these awardees have not been systematically analyzed and documented for the benefit of the wider audience of local chief executives, local government officials, NGO workers, volunteers and students.

DRM has only recently become acceptable as an academic field of study. Similar to the environmental field in the 1970s, DRM is multi-disciplinary, cutting across engineering, natural and social sciences. The demand for systematizing available knowledge resources is high locally as it is globally. The knowledge built over the years need to be transmitted in an appropriate manner to present and future generations so that the country's development process can be supported by capable people.

Through a project with the ADPC, the Department of Education has documented exemplars of DRR practice; a limited number of copies were published as teaching materials in secondary schools used in pilot municipalities. However, there is no funding for printing the materials for other schools. There is a need to augment the unavailability of teaching materials for schools in the rest of the country.

It is therefore necessary for ensure that budgets are provided for teaching such as teaching aids and books to help diffuse knowledge not only to school children but also to adults, particularly those who work in the areas relevant to DRR.

³⁰ Garcia, Arnel, 2008 A Changed Landscape Redefines Farming, in Gaerlan, Kristina (ed.), Building Resilient Communities: Good Practices in Disaster Risk Management in the Philippines, Oxfam Great Britain, pp.74-87.

Critical Services and Infrastructure Resiliency

National Capacity Gap: Limited resources for DRRM

Recommendation: Enhance capacity for resource mobilization/ promote strategic use of funds

Actions/Strategies

Investment programs and projects included in the CDP are an essential part of the development planning process of LGUs. True mainstreaming must ensure the integration of risks from natural hazards in development policy formulation, planning and in the design of programs and projects.

With limited funds available to poorer LGUs, there is a need to find ways and means to accomplish DRR without putting excessive additional burden on the financial coffers. In a flood-prone municipality, there are needs that can be met by building structural mitigation for floods, acquiring search and rescue equipment and vehicles (including boats). These are 'hardware', but some measures do not need much capital investment. Training and networking are forms of capacity building that encourage collaboration, which is a necessary component of mainstreaming. There are others means such as developing formal and informal mechanisms such as pooling resources, and developing mutual aid agreements with neighboring LGUs.

Emergency Preparedness, Response and Recovery Planning

National Capacity Gap: Lack of available resources during emergencies

Recommendation: Establish rational system for DRRM resource allocation

Actions/Strategies

Recognizing that development gains have been jeopardized by past disasters and that there is a need to avoid potential losses, the national government has, through its policy, put DRR as a national priority. The government has borne the cost of disasters every year. A calamity fund has been provided (disaster risk reduction and management fund, in the new law) to deal not only with response but with all other aspects such as preparedness and mitigation.

At the local level, a local disaster risk reduction and management fund which is five percent of the internal revenue of the LGU can be used by the LGU also in a similar way, i.e., for all aspects of DRRM. In the past, there has been misuse of such local funds that OCD lobbied for penal provisions in the new law, which it now contains.

The behavior of local chief executives has often been reactive. Disaster preparedness is often not a local priority and therefore very little has been done, more so to reduce disaster risk through prevention and mitigation. This leads to a worrisome situation in case a real catastrophe affects even a small part of the country.

The amount of material, financial, and human resources for response alone has not been clearly understood by each LGU. However, there are basic requirements which need to be put in place. Emergency preparedness has a range of components that need to integrate with the rest of the LGU's functions. Contiguous LGUs may need to formally agree to cooperate with each other and pool resources through mutual aid agreements, if such an arrangement will ensure disaster loss reduction.

Rationalizing resource allocation for disaster risk reduction was initiated during the SNAP formulation process. It was necessary to identify which budget lines in each national government agency address DRR. The NGA representatives understood which in the Government Appropriations Act (GAA) already address DRR. The process of rationalizing budget allocation should be continued to become part of regular operations. Likewise, human resource needs and material requirements would need to be identified, especially for disaster response and relief.

Development Planning, Regulation and Risk Mitigation

National Capacity Gap: Lack of scientific data/information for DRRM decision-making

Recommendation: Scale up use of scientific data/ information on which to base decisions

Actions/Strategies

Understanding risks and their distribution over space essentially helps planners. Risk is best understood in terms of the hazards identified by scientists. Information for development planning is further improved when the elements at risk and vulnerabilities are taken into account. As development proceeds, the elements in space are dynamically changing. This then requires tools such as GIS that allow spatial information to be stored and manipulated.

Scientists study particular natural hazards such as earthquakes and typhoons in order to explain observable phenomena based on scientific knowledge developed over time. They also generate possible hazard scenarios which can then be “overlaid” with the elements at risk, allowing for damage or loss estimates in terms of human lives, destroyed infrastructure, etc.

Planners, politicians, businessmen, investors, homeowners, contractor, builders and other decision makers need guidance on where to put their resources. Thus, hazard and risk maps will assist them decide on matters like locating a house, a building or infrastructure. The application of such scientific data/information will help integrate risk factors in to physical planning and environmental management. Scientific knowledge then is necessary to do risk-sensitive land use planning and avoid or reduce disaster losses in the process.

Similarly, mitigation objectives can be strengthened in the country by appropriate contingency and operational plans that take into account scientific information when devising early warning systems. Well-designed early warning systems take into account safe evacuation routes and safe location of evacuation centers and temporary shelters.

Human Resources Management

National Capacity Gap: Need for comprehensive DRRM capacity building program

Recommendation: Develop human resources and conduct leadership training

The country needs a capacity building program that considers the needs of various stakeholders. The main activities are training interventions in a variety of topics so that appropriate skills, knowledge and attitudes of different target groups are developed. A key target group consists of the local chief executives who are the chief political decision makers in LGUs. They are pivotal in determining priorities for their respective LGUs, and where resources will be allocated. They must be influenced in order to make DRR a local priority.

According to the law, a national training institute to build human resource capacity in DRR is to be established. A feasibility study must be undertaken. Meanwhile, training needs assessment must be

conducted first. Consequently, a training program should be designed and training activities prioritized. Resources are then obtained. To maximize resources, a training of trainers and a comprehensive capacity building program for LCEs should be given priority.

iii. Specific Capacity Building Recommendations to UNWFP

Legal and Institutional Processes

Promoting a grouping or technical working group for food in the context of disaster relief operations in support of Cluster Team

(Note: Similar groupings may also be useful in the Cluster Teams for Logistics and Telecommunications which UNWFP leads.)

UNWFP is the designated international lead for Cluster Teams in the areas of Food, Logistics and Telecommunications. Recent major disasters have tested the capacity of the teams in handling emergencies. While past experience has highlighted the strengths of each of the team members, the high degree of uncertainty in the nature of future risks, particularly from the impact of climate change, necessitates a higher degree of preparedness based on closer collaboration in areas such as knowledge and information sharing.

There is a need to share knowledge and information about technologies, tools, equipment and such devices that can be used before, during and after disasters. In the area of food, a significant problem arises in locating warehouses for stockpiling and transporting relief goods to disaster-affected areas, then ensuring that these reach the disaster victims.

New telecommunication technologies can facilitate communication and information transmission. Coupled with clear communication channels, these technologies will help fill the information gaps during critical times of emergencies and may help prevent transmission inconsistent data/information

Therefore, as a first step, forming a technical working group (TWG) which can review past disaster experiences, cull lessons, and study options can be an effective support even prior to disaster response and relief. An inventory of currently available tools in the Philippines can be made. After such inventory is made, then specific weak areas can be identified. Technical staff can learn from each other on what is the latest technology. The TWG may then study the feasibility of the technical options while also considering the social, economic, financial and institutional aspects of adopting such technology.

UNWFP has drawn EMI's attention to its interest to utilize GIS in warehouse location planning. While this specialized field is beyond the scope of this study, it should be useful to point out that the use of GIS in the country, particularly in LGUs, has had mixed results. Much investment has been made in both hardware and software, however, often the supposed benefits of GIS have not accrued to the LGU, much more to society. There are existing HLURB guidelines for LGUs and new techniques are being developed as part of mainstreaming projects implemented by NEDA. The PHIVOLCS has been disseminating the REDAS software and training LGU personnel in the READY provinces. This locally-developed software has had mixed impacts in the LGUs. The robustness and utility of the software has been proven in a few municipalities where particularly progressive local chief executives have encouraged their staff in using the technology.

The TWG may then explore the use of such locally-developed technologies which have already taken root in some LGUs. It may also exert influence on key national and local stakeholders with which they interact in ensuring capacity building relevant to optimal and sustained utilization of appropriate technologies and tools.

Awareness and Capacity Building

Documenting good practices, especially the Hall of Famers from the winners of the Gawad KALASAG awards

There is a dearth of materials for learning in the field of DRM. Many local government staff are eager to know how to deal with the many aspects of DRR. Thus, UNWFP can assist in the area of documenting good practices.

Clearly, the models for good practice are the LGUs that have won the Gawad KALASAG awards for five times (called Hall of Famers). However, a few lessons learned from experiences as the case of Infanta, Quezon mentioned above, relate to food security, an area which UNWFP and FAO would be interested. Many other experiences which have relevance to UNWFP's mandate can be written and documented in print or electronic (DVD) form. Such materials can be used to familiarize a broad range of actors – both national and local – with ways and means to deal with the relevant aspects of DRM.

Current engagements of UNWFP in the four provinces may also be documented and packaged as training material in future pre-disaster interventions. This can help capacity building efforts not only by UNWFP but also other agencies/organizations which conduct similar training interventions.

Critical Services and Infrastructure Resiliency

Technical assistance by supporting communities to identify projects for disaster preparedness and response

LGUs are not confident on how to accomplish DRR goals with the present resources that they have. Therefore, they need technical assistance so that community residents could understand the range of options they have in terms of what projects for disaster preparedness and response can be done to make their communities resilient. A pilot community or communities may be selected. A community development approach reminiscent of community-based disaster risk management is applied wherein residents participate. The focus is on the priorities of the community relevant to food security and livelihood.

Contingency funding at village level

Vulnerable poor households are in constant need of means to sustain their livelihoods. As climate risks worsen, some measures that will provide security to families must be put in place. Contingency funding and risk transfer at micro level is an option. Insurance-like instruments that enhance certainty, adequacy and timeliness of compensation can be developed and supported in order to transfer risk away from the beneficiary to public or private risk-takers.

Emergency Preparedness, Response and Recovery Planning**Improving socio-economic resilience of households through Cash for Work and similar programs**

The basic needs of disaster-affected populations include shelter, clothing, water, sanitation, nutrition, and livelihood. Of all these, livelihood can potentially alleviate the situation of an individual and his household by providing means for post-disaster subsistence and reducing dependence on relief assistance. It is thus recommended that the means for economic resilience be provided. By rebuilding livelihoods, communities can be revived.

UNWFP's activities have included Cash for Work as well as Food for Work and Cash for Training. All of these serve specific needs of communities. The appropriate programs are selected after a thorough situational assessment. Cooperating with the DSWD has been the mode of operation, which has worked well. This type of assistance may be most appropriate to the lower class municipalities where the capacity of LGUs to provide assistance is expected to be low.

Technical assistance in emergency telecommunications

Logistical support to enhance emergency response and relief is essential for whatever scale of operation. Emergency telecommunications is an area which UNWFP may provide support in order to enable the transmission of comprehensive information and telecommunications services. The desired approach is one which is rapid and capable of supporting large-scale emergencies.

Technical assistance in contingency planning

Contingency planning for different hazards is a necessity for the country and the different LGUs. Many LGUs have insufficiently developed contingency plans, or need updating. There is a need for a strategic process that links early warning information with early action, using disaster scenarios that are generated by scientific and technical studies.

Development Planning, Regulation and Risk Mitigation**Capacity building of NDRMCC in the area of logistics planning**

NDRMCC is in the forefront of national emergency operations. In the area of relief and recovery, mechanisms for aid coordination and stockpiling are key concerns as disasters in regions far from the National Capital Region are dealt with. There are insufficient tools to be able to pinpoint the stockpiles and distribution networks during times of emergency. Thus, apart from logistics planning, appropriate tools may need to be developed to help relief teams. A GIS-based system using locally available software can be devised. This can be done in collaboration with the mapping agencies – NAMRIA, PHIVOLCS, PAGASA and MGB.

Human Resources Management**Capacity building of staff particularly subject matter specialists in the OCD**

The OCD is expected to perform multifarious tasks. However, the current human resources are not equipped with the appropriate skills and knowledge to perform all tasks. There is a need to determine which particular areas (subject areas) need human resources. Intuitively, all support provided by UNWFP to the Philippine government may need a component that specifically addresses

any human resources need at the OCD so that effective vertical and horizontal coordination happens.

B. Recommendations (Local Level)

Table 18: Common Local Capacity Gaps and Issues

LOCAL CAPACITY GAPS	RECOMMENDATIONS
Policies and Institutional Arrangements	
1. Inadequate enabling environment for DRRM implementation at the local level	• Develop the appropriate enabling environment for local DRRM implementation • Formulate local policies, issuances and ordinances to support and strengthen DRRM at the provincial and municipal level • Document and share sound practices in developing enabling environments for local DRRM implementation. • Legislative and Executive Briefing on DRM/DRRM Act • Petition for political commitments on DRRM among local policy and decision makers • Identify, build and support local DRRM champions
2. Low prioritization of DRRM activities in local government functions	• Ensure that DRRM is a local priority • Formulate policies to support, strengthen and prioritize local DRRM implementation
3. Highly centralized DRRM implementation	• Adopt and localize the DRRM Act and formulate local policies and issuances to support and strengthen local DRRM programs • Develop mechanisms to effectively work with various national agencies in effectively localizing DRRM
4. Lack of DRRM implementation guidelines at local level	• Develop an authoritative and comprehensive DRRM Primer/Guidebook/Cookbook for Local Government Units • Coordinate and work with national agencies to formulate, finalize and facilitate the necessary DRR implementation guidelines at the local level
5. Inadequate local DRRM Fund	• Develop local capacities to generate additional funding for DRRM • Implement known and effective resource leveraging strategies at the local level e.g. resource pooling, mutual aid agreements, etc.
6. Lack of human resources	• Develop human resource base on DRRM • Develop/improve capacities of DRRM office, LGU departments and personnel, local communities and households on DRRM • Document and replicate sound practices and strategies in developing human resources for DRRM
Awareness and Capacity Building	
7. Low to moderate knowledge and understanding of DRM/DRRM	• Developing Multi-Audience IEC Strategies for DRM/DRRM Awareness • Documentation of sound practices on DRRM • DRRM Caravan
8. Lack of DRRM IEC plan	• Formulate and implement Local DRRM IEC Plan/Program
9. Absence of DRRM capacity building plan/program	• Develop an appropriate DRRM capacity building strategy for each LGU • Support for the creation of regional DRRM training center. • Support for the conduct of DRRM training needs assessment at local level • Develop appropriate training modules for DRRM Capacity Building at local level. • Conduct of regular, continuous and sustained competencies and skills training for different DRRM functions as local conditions and

	capacities require.
Critical Services and Infrastructure Resiliency	
10. Lack of DRRM structures	Develop strategies e.g. Private Public Partnerships, in order to generate resources to build and maintain the necessary DRRM infrastructures
11. Lack of technical expertise to identify, assess and strengthen the resiliency of critical infrastructures	- Build local capacity on infrastructure safety assessments - Build local capacity in reinforcing and strengthening critical infrastructures
Emergency Management and Response Planning	
12. Lack of DRRM logistics, equipment, vehicles	- Develop long-term plan for DRRM resources/ equipment build-up including needs assessment, capacity needs, use protocols, sustainability mechanisms and upgrade strategies. - Promote use of appropriate, cost-effective technologies for DRRM. - Acquisition of logistics, equipment and vehicles through purchase or request from national agencies and other organizations
13. Absence of Local DRRM Plan	Formulation of a Pilot Local DRRM Plan which should properly integrate sections on: Emergency Operations Plan (EOP), Contingency Plans (CP), Standard Operations Procedure (SOP), Recovery/Rehabilitation Plans, among others.
14. Lack of technical capacity for local DRRM planning	Capacity building program on local DRRM planning
15. Absence of DRRM information system at the local level	Develop local DRRM Management Information System
16. Low to moderate capacity in terms of emergency operations and emergency service functions at the local level	- Develop capacities on emergency operations and functions through trainings and capacity building - Develop a pool of skilled personnel and volunteers in each of the specialized emergency management functions and operations
Development Planning, Regulation and Mitigation	
17. Inadequate capacity to undertake, facilitate and support risk assessment, and interpret, use and disseminate risk assessment results.	- Capacity building on HVRA - Acquisition of appropriate and reliable technologies in undertaking HVRA - Develop simplified tools in conducting HVRA and interpreting HVRA data - Develop strategies in effectively disseminating HVRA results to LGU offices, stakeholders and communities
18. Lack of planning expertise and lack of capacity to integrate DRRM and CCA parameters in physical and development planning at the local level	Develop guidelines and tools to integrate DRRM and CCA parameters in physical and development planning at the local level
19. Limited enforcement of development control regulations at the local level	Ensure effective implementation of development control regulations

Addressing Gaps in Operations

Policies and Institutional Arrangements

Local Capacity Gap 1: Inadequate enabling environment for DRRM implementation at the local level

Recommendation: Develop the appropriate enabling environment for local DRRM implementation

Strategies and Actions

- Support to creating an enabling environment for DRRM implementation at the local level
- Formulate local policies, issuances and ordinances to support and strengthen DRRM at the provincial and municipal level
- Document and share sound practices in developing enabling environments for local DRRM implementation.
- Legislative and Executive Briefing on DRM/DRRM Act
- Petition for political commitments on DRRM among local policy and decision makers
- Identify, build and support local DRRM champions

An enabling local environment needs to be developed in each LGU in order to support DRRM initiatives at the local level. This is one of the key foundational requirements of a successful DRRM implementation and requires essential elements such as strong political support, effective legislative and institutional arrangements and incentives. To develop the appropriate enabling environment for local DRRM implementation, LGUs need to formulate local policies, issuances and ordinances to support and strengthen DRRM at the provincial and municipal level. A supportive local policy will facilitate the allocation and movement of important resources and designate formal lines of responsibilities and accountabilities in the LGU system.

There have been several success stories in other LGUs on how to develop this enabling environment for DRRM. Documenting, sharing and replicating these sound practices in developing enabling environments for local DRRM implementation can help the pilot LGUs gain knowledge on how to move forward by looking at how other LGUs do it. Legislative and Executive Briefings on DRM/DRRM Act are needed in order to gain the political commitment and support of Local Chief Executives and Legislative Council. The briefing should present the roles and responsibilities of local policy and decision makers in DRRM implementation and highlight their fundamental role in developing this enabling environment. The presence of DRRM champion/s to be the voice, the face and the advocate of DRRM at the local level was also identified as a sound practice in successfully implementing DRRM programs.

Local Capacity Gap 2: Low prioritization of DRRM Activities in local government functions

Recommendation: Ensure that DRRM is a local priority

Strategies/Actions

- Formulate policies to support, strengthen and prioritize local DRRM implementation
- Mainstream DRRM in all local governance functions

LGUs are swamped with several competing priorities and DRRM unfortunately is one of lower priority concerns among them. LGUs should ensure that DRRM becomes an important LGU concern and formulating supportive policies and ordinances assigning high priority to it. DRRM should also

be institutionalized and mainstreamed in all government functions especially in terms of budgeting, planning, programming and staffing.

Local Capacity Gap 3: Highly centralized DRRM implementation

Recommendation: *Adopt and localize the DRRM Act and formulate local policies and issuances to support and strengthen local DRRM programs*

Strategies/Actions

- Formulate local policies and issuances to support and strengthen local DRRM programs
- Develop mechanisms to effectively work with concerned national agencies in effectively localizing DRRM

LGUs continue to be dependent on national agencies for policies, programs, guidelines, and technical aid. LGUs should be seen as equal and able partners in localizing DRRM. DRRM implementation should be decentralized by giving opportunities, access and powers to LGUs on crafting, formulating and influencing policies and programs for DRRM implementation. Some national government regulations in terms of budgeting, resource generation and hiring of DRRM Office personnel have also been restrictive to LGUs. Some degree of flexibility or window of alternatives should be developed to allow LGUs to be creative in addressing concerns on local DRRM implementation.

Local Capacity Gap 4: Lack of DRRM implementation guidelines at local level

Recommendation: *Develop an authoritative and comprehensive DRRM Primer/Guidebook for Local Government Units*

Strategies/Actions

- Develop an authoritative DRRM Primer for Local Government Units
- Coordinate and work with national agencies to formulate, finalize and facilitate the necessary DRR implementation guidelines at the local level

Many LGUs are waiting for guidelines for local DRRM implementation from various national government agencies to move forward in DRRM implementation. The lack of guidelines creates an atmosphere of indecision and non-action. A mechanism where LGUs can participate and work with concerned national agencies to formulate, finalize and facilitate local DRRM implementation guidelines should be established. This will ensure the guidelines are attainable and realistic given the limited resources and capacities at the local level.

An authoritative and comprehensive DRRM Primer/Guidebook/Cookbook presenting all the essential elements and information that LGUs need to know about DRRM and its implementation can also effectively address the need for DRRM guidelines. This Primer should be simplified for local use, providing easy to use tools, cost-effective strategies and helpful tips for local institutions to consult when needed.

Local Capacity Gap 5: Inadequate Local DRRM Fund***Recommendation: Develop local capacities to generate additional funding for DRRM******Strategies/Actions***

- Implement known and effective resource leveraging strategies at the local level e.g. resource pooling, mutual aid agreements, etc.

Financial resources provide the means to undertake DRRM activities, the absence of which usually hinders action by local institutions. There are numerous resources needed to fully implement DRRM actions at the local level, but the list of resources should be properly evaluated and matched with the set goals and realistic needs of the locality. Most LGUs do not have minimal funding for DRRM and usually request external assistance. In view of the underlying DRRM principle of building self-reliance among individuals and institutions, LGUs should develop their capacity to generate their funds and resources through alternative ways. Some LGUs can easily augment their local DRRM fund from supplemental budget when the fund is not enough. Many advanced LGUs turn to more creative strategies in generating additional resources e.g. the pooling of resources with contiguous LGUs, entering into mutual aid agreements, and partnering with the private sector and civil society organizations to finance or assist in DRRM related activities. LGUs should develop their capacities in leveraging their sources of funding for DRRM.

Local Capacity Gap 6: Lack of human resources***Recommendation: Develop human resource base on DRRM******Strategies/Actions***

- Develop/improve capacities of DRRM office, LGU departments and personnel, local communities and households on DRRM
- Document and replicate sound practices and strategies in developing human resources for DRRM

There is currently a lack of human resources for DRRM in most LGUs. There is a lack of full-time, qualified and well-trained emergency personnel, rescuers and first responders, as well as technically competent personnel to undertake DRRM programs and projects at the local level. A capacity building program geared towards building and developing an appropriate size of human resource base for DRRM is necessary. This requires continuous training of full-time and part-time personnel, municipal and barangay volunteers, designated representatives from communities, zones and households. Hiring of personnel, supporting advance education, and providing recognition and incentives can also strengthen human resources. Mexico City, as an example, mandated all its 10,000 city personnel to serve and train as rescue responders in times of emergencies. Other practices and strategies in developing human resources for DRRM should be documented, shared and replicated if possible.

Awareness and Capacity Building**Local Capacity Gap 7: Absence of DRRM capacity building plan/program*****Recommendation: Develop long-term local level DRRM capacity building program******Strategies/Actions***

- Develop an appropriate DRRM capacity building strategy/plan/program for each LGU
- Support for the creation of regional DRRM training center

- Support for the conduct of DRRM training needs assessment at local level
- Develop appropriate training modules for DRRM capacity building at local level
- Conduct of regular, continuous and sustained competencies and skills training for different DRRM functions as local conditions and capacities require

DRRM capacities of the pilot LGUs are relatively weak to moderate in several functional areas. The lack of DRRM capacities at the local level can be addressed through various capacity building activities such as skills and knowledge acquisition through training and education, knowledge sharing, hiring of competent and skilled personnel, creating local competencies, among others. Capacity building requires considerable amount of resources, therefore a local DRRM capacity building plan and program is necessary to ensure capacity needs and gaps are properly identified, capacity building activities are appropriate and cost-effective, properly sustained and are effectively carried out.

DRRM competencies cannot be effectively acquired through 2 or 3 days trainings, therefore a long-term DRRM education and capacity building curriculum is proposed. If resources allow, it is also recommended to create a region-wide DRRM training center/institute to offer this program. The DRRM training institute should provide the necessary environment, expertise and sustainability mechanism to support long-term training and capacity building for LGUs.

Critical Services and Infrastructure

Local Capacity Gap 8: Lack of necessary DRRM infrastructure

Recommendation: Develop strategies e.g. Private Public Partnerships, in order to generate resources, build and maintain the necessary local DRRM infrastructures

Local DRRM implementation would require permanent evacuation centers, DRRM offices, Emergency Operations Centers, stockpiling warehouses, sanitation facilities, shelter facilities and relocation sites, among others. These requirements entail heavy amount of resources which the pilot LGUs cannot readily provide. LGUs can devise creative means of building these infrastructures such as entering into Private-Public Partnerships if applicable, or engaging interested groups, organizations and businesses in financing, cost-sharing, donating or assisting construction and maintenance of these structures. The permanent evacuation center for example, can be designed as a multi-functional structure, some sections of the center can be used for commercial or business activities that can create and attract business interests, interests that can provide funding for its construction and maintenance.

Local Capacity Gap 9: Lack of technical expertise to identify, assess and strengthen the resiliency of critical infrastructures

Recommendation: Build local capacity to ensure safety and resiliency of local infrastructure

Strategies/Actions

- Build local capacity on infrastructure safety assessments
- Build local capacity in reinforcing and strengthening critical infrastructures

Many infrastructures in local communities are damaged because of the lack of capacity to assess their condition and the lack of capacity and funding to reinforce and strengthen them. LGUs should build capacities of their engineers to develop an inventory of critical infrastructure, regularly assess them and find the means to repair and retrofit these structures in order to prevent bigger losses in

the future. A team of municipal engineers should undergo intensive training to develop such capabilities.

Emergency Management and Response Planning

Local Capacity Gap 10: Lack of DRRM logistics, equipment, vehicles

Recommendation: Develop long-term plan for DRRM resources and equipment build-up

Strategies/Actions

- Develop long-term plan for DRRM resources and equipment build-up including needs assessment, capacity needs, use protocols, sustainability mechanisms and upgrade strategies.
- Promote use of appropriate, cost-effective technologies for DRRM.
- Acquisition of logistics, equipment and vehicles through purchase or request from national agencies and other organizations

The lack of equipment, logistics, and vehicles hamper the full implementation of DRRM at the local level. LGUs can easily purchase small-ticket items such as gadgets and devices while rely heavily on donations for expensive items such as vehicles, rescue equipments, communications system, etc. This situation is expected to continue as long as DRRM resources remain small and inadequate. An important consideration however is the need for a long-term plan for DRRM resources and equipment build-up to which the equipment acquisition and requests for donations should be identified and programmed. This plan should include an equipment needs study, corresponding capacity building needs, use protocols, sustainability mechanisms and upgrading strategies. The use of appropriate and cost-effective DRRM technologies should also be promoted.

Local Capacity Gap 11: Absence of Local DRRM Plan

Local Capacity Gap 12: Lack of technical capacity for local DRRM planning

Recommendation: Support to the formulation of a Local DRRM Plan

Strategies/Actions

- Formulation of a Pilot Local DRRM Plan which should properly integrate sections on: Emergency Operations Plan (EOP), Contingency Plan (CP), Standard Operations Procedure (SOP), Recovery/Rehabilitation Plans, Risk Reduction strategies, among others.
- Capacity building program on local DRRM planning

As provided for by the DRRM Act, each Local DRRM Office should prepare and implement a Local DRRM Plan. Most LGUs however do not have the technical expertise to formulate a DRRM plan. As such, a pilot initiative to develop a template for Local DRRM Plan should be supported.

Local Capacity Gap 13: Absence of DRRM information system at the local level

Recommendation: Support to the creation of local DRRM Management Information System (MIS)

An effective system for managing and reducing risks depends on the proper use of empirical data, the lack of which may bring institutions and communities to a repeated cycle of operational failure and disaster losses. LGUs should set up their DRRM management information system (MIS) to collect, process, use and disseminate disaster information to communities.

Local Capacity Gap 14: Low to moderate capacity in emergency service functions and operations at

the local level

Recommendation: Develop adequate capacities on emergency operations and functions through trainings and capacity building

Strategies/Actions

- Develop capacities on emergency operations and functions through trainings and capacity building
- Develop a pool of skilled personnel and volunteers in each of the specialized emergency management functions and operations

Most LGUs have conducted skills trainings in relief and rescue operations, however specialized trainings are still needed to build a pool of competent and skilled personnel in the areas of camp management, psycho-social support, gender sensitivity training, SAR and WASAR, CBDRM, basic life support, advanced life support, damage assessment, and disaster reporting, among others. These capacity building activities should be institutionalized, conducted regularly and at the same time fits with the capacity-building program of the LGU. Support for these trainings usually come from national government agencies and non-government organizations but these trainings should be included as among the core competencies offered in the regional DRRM training center if created.

Development Planning, Regulation and Mitigation

Local Capacity Gap 15: Inadequate capacity to undertake, facilitate and support risk assessment, and interpret, use and disseminate risk assessment results

Recommendation: Capacity building on undertaking, facilitating and supporting risk assessments

Strategies/Actions

- Capacity building on HVRA
- Acquisition of appropriate and reliable technologies (GIS, Early Warning System, Climate Calendar, etc.) in undertaking HVRA
- Develop simplified tools in conducting HVRA and interpreting HVRA data
- Develop strategies in effectively disseminating HVRA results to LGU offices, stakeholders and communities

One of the important for disaster risk reduction and risk management is the sound information provided by reliable risk assessments. There are simple, easy to do HVRA methods which LGUs can use to provide useful information for sound decision making but caution is also needed especially in information where technical expertise is crucial. LGUs should develop simple HVRA capacities where applicable and be capable of working with or accessing/requesting technical expertise from the government and academe when necessary. Another capacity needs of LGUs is using and interpreting risk information which needs to be developed especially among policy and decision-makers, local planners, zoning officials, building inspectors and engineers. These risk data should also be translated into useful information and disseminated to key stakeholders and communities for them to create more informed decisions on these risks.

Local Capacity Gap 16: Lack of planning expertise and lack of capacity to integrate DRRM and CCA parameters in physical and development planning at the local level

Recommendation: *Develop guidelines and tools to integrate DRRM and CCA parameters in physical and development planning at the local level*

Planning expertise is lacking in most LGUs and integrating DRRM and CCA in local physical and development plans is yet an added level of difficulty for them. Guidelines on how to mainstream DRRM and CCA in local plans should be developed. LGUs should also be supported in formulating their DRRM and CCA-sensitive plans and in building their capacities to effectively implement the plan. A longer term goal is to develop LGU capacities in risk-sensitizing their local plans, programs and activities.

Local Capacity Gap 17: Limited enforcement of development control regulations at the local level

Recommendation: *Ensure effective implementation of development control regulations*

Construction codes and building permit systems are narrowly enforced in the pilot municipalities which may result to potential dangers in the future. LGUs should strictly enforce these regulations as much as possible. In cases of informal and non-engineered housing which tend to veer away from formal regulations, LGUs should provide guidelines, checklist and if possible, training to non-formal house builders and masons to ensure these structures conform to minimum standards and does not endanger lives and properties.

Addressing Gaps in Participation

Awareness and Capacity Building

Local Capacity Gap 18: Low to moderate knowledge and understanding of DRM/DRRM

Local Capacity Gap 19: Lack of DRRM IEC plan/program

Recommendation: *Developing multi-audience IEC strategies for DRM/DRRM awareness*

Strategies/Actions

- Formulate and implement Local DRRM IEC Plan/Program
- Documentation of sound practices on DRRM
- Legislative and Executive Briefing on DRM/DRRM Act
- DRRM LGU Caravan

The low level of understanding of local stakeholders on DRM/DRRM has prevented the effective implementation of DRRM programs at the local level. A comprehensive DRRM IEC plan and program should be formulated and implemented to address this concern. The IEC plan should target a wide range of possible audiences in order to raise people's awareness of DRRM and at the same time elicit broad political and sectoral support for DRRM. Various stakeholders should be engaged from the local chief executives, legislative council members, municipal department heads and personnel, NGOs, CSOs, barangay officials, communities and households. A wide range of IEC strategies and approaches must be developed.

VIII. Strategic Plan and Implementation Process

A. General Approach

Developing a strategic plan and its implementation process should be anchored on an analysis of the results of the CNA and the interpretation of the results in the context of each level of government and stakeholders, considering their relevant mandates, concerns, experience, resources and needs. The strategic plan should link to the objectives and deliverables of the UNWFP-DSWD-DILG-OCD Memorandum of Understanding (MoU) because these represent institutional obligations for UNWFP. Further, it needs to be anchored on the general disaster risk reduction and management (DRRM) practice in order to correlate it with specific expertise, and thus, enable implementation.

The development of the strategic plan and its implementation process will follow a four-step analytical process:

Step 1: Analysis and interpretation of the local level CNA results (i.e., stakeholders' input) to establish the stakeholders' concerns and priorities

Step 2: Analysis and interpretation the national CNA results (i.e., stakeholders' input) to establish policy framework and the stakeholders' concerns and priorities

Step 3: Cross-reference and re-structuring of the outcomes of Steps 1 and 2 along conventional DRRM practices (i.e., response/recovery, preparedness/advocacy, mitigation/mainstreaming, and evaluation/monitoring) to facilitate implementation

Step 4: Alignment of the deliverables of the UNWFP-DSWD-DILG-OCD MoU along the DRRM practices

Essentially, the process consists of rationalizing the stakeholders' input along conventional DRRM practices and correlating these to the objectives and deliverables of the UNWFP-DSWD-DILG-OCD MoU. It remains that the proposed strategic plan must be subjected to one more round of validation by the stakeholders to match the one undertaken by the experts. More than one validation data point should be done in order to take into consideration the interests and constraints of the various stakeholders.

B. Step 1: Analysis and Interpretation of CNA Results (Local Level)

Local-Level Analysis

The local level CNA investigations used three approaches: The Disaster Risk Reduction Indicators (DRRI), focus group discussions, and key informant interviews. The first approach is intended to obtain a quantitative assessment through a coherent methodology, whereas the last two approaches are meant to gather assessment through opinions (i.e., qualitative). Note that the two approaches should theoretically converge around the same key findings.

i. Municipality Level DRRI Analysis and Interpretation

Table 19 provides an ordering of the ten indicators using the average of the stakeholders' scoring, combined for all the municipalities. As explained earlier in the report, the scale varies from 1 to 5 where 1 is the lowest score and 5 is the highest score, and where a score greater than 3 means a positive outlook. The results are then organized into three groups that reflect the level of concern/ranking by the stakeholders: "Higher Concerns", or the indicators with the lowest scores; "Moderate Concerns", those with scores in the middle range; and "Lower Concerns", or those indicators with the highest scores. The grouping is done by ordering the results with respect to the average score. The standard deviation provides an understanding of the spread (or variability) in the responses. A small standard deviation value indicates close agreement among the stakeholders. The results are shown in Table 19, together with the standard deviations.

The outcome of the Municipality level analysis indicates the following local-level perspective:

- There is recognition that mitigation and the mainstreaming of disaster risk management in development are not taking place.
- The major concerns of the stakeholders are about responders' skills and tools (i.e., emergency management, public awareness and resource management).
- There are lesser concerns over legal and institutional arrangements.

Table 19: DRRI Scoring and Ranking for eight Municipalities

Ranking		Indicator	Mean	StdDev
Higher Concerns	1	Emergency Management	2.16	0.35
	2	RSLUP - Mitigation	2.18	0.38
	4	Resiliency of Critical Services	2.22	0.63
	3	Advocacy, Communication and Public Awareness	2.28	0.45
Moderate Concerns	5	Resiliency of Infrastructure	2.30	0.50
	6	Resource Mgmt, logistics & Contingency Planning	2.30	0.66
	7	Training and Capacity Building	2.38	0.62
Lower Concerns	8	Hazard, Vulnerability and Risk Assessment	2.44	0.6
	9	Institutional Arrangements	2.72	0.63
	10	Effectiveness of legislative Framework	2.76	0.46

ii. Provincial Level Analysis

The analysis of the DRRI results at the Provincial level and the grouping of stakeholders' input by category of concern are shown in Table 20. This indicates the following Provincial-Level perspective:

- There is recognition that mitigation and the mainstreaming of disaster risk management in development are not taking place.
- The major concerns are about technical capacity and competence.
- There is moderate concern over resiliency of critical infrastructure and services.
- There are less concerns about legal and institutional arrangements.

Table 20: DRRI Scoring and Ranking for Four Provinces

Ranking		Indicator	Mean	StdDev
Higher Concerns	1	RSLUP - Mitigation	2.38	0.69
	2	Hazard, Vulnerability and Risk Assessment	2.65	0.58
	3	Training and Capacity Building	2.66	0.58
	4	Advocacy, Communication and Public Awareness	2.69	0.7
Moderate Concerns	5	Resiliency of Infrastructure	2.75	0.89
	6	Resource Mgmt, logistics & Contingency Planning	2.85	0.41
	7	Resiliency of Critical Services	3.04	0.76
Lower Concerns	8	Emergency Management	3.03	0.68
	9	Effectiveness of legislative Framework	3.25	0.71
	10	Institutional Arrangements	3.47	0.77

iii. Local-Level Qualitative Assessment

The outcome of the focus group discussions, interviews, and structured consultations with the local stakeholders can be summarized by six major concerns/gaps:

- Low to moderate understanding of DRM/DRRM
- Inadequate enabling environment for DRRM implementation at the local level
- Inadequate funding and resources
- Absence of DRRM information collection, utilization and dissemination systems at the local level
- Lack of DRRM plans/Absence of technical capacity for DRRM planning, and
- Inadequate capacities in several functional areas of DRRM implementation

These qualitative assessments join many aspects of the more quantitative DRRI results indicated in Table 19 and Table 20 above.

C. Step 2: Analysis and Interpretation of CNA Results (National Level)

Trainer Expert Findings

The outcome of the CNA undertaken by Mr. James Buika from the perspective of an expert in disaster/emergency management training, across three national level agencies (i.e., OCD, DLIG and DSWD), can be characterized by the gaps listed in Table 21. Note that there is no ranking in terms of the priorities or concerns because the approach for information collection was not quantitative. The table indicates the combined findings of the three agencies but eliminates duplicates (i.e., recommendations falling into similar categories).

Table 21: Gaps from Three National Level Institutions (DILG, DSWD, OCD)

1	Structure and Competency of Local DRRM Offices
2	Guidelines to standardize the LGU Emergency Operations Plans:
3	Damage Assessment and Monitoring
4	Early recovery and post-disaster needs assessments
5	Family and Community Preparedness training materials
6	Selection and Qualification of Evacuation Centers
7	Information and Communication Protocols and Processes
8	Monitor and evaluate disaster risk reduction components of existing plans
9	Monitor and evaluate the progress of LGUs in meeting the provisions of the DRRM law

Organizational Perspective

The outcome of the CNA undertaken by Dr. Antonio Fernandez involved three national level agencies (i.e., OCD, DLIG and DSWD) and two local government organizations (i.e., the League of Cities and the Union of Local Authorities). The approach used the 10 indicators of the DRRM but in a qualitative manner only (i.e., the stakeholders were not asked for a score). The results are summarized in Table 22 and represent the overlap between the gaps indicated by all the involved institutions.

Table 22: Gaps from three National Agencies and Two Local Government Organization using DRRM

Area	Recommendation
LIA	1 Promoting a technical working group for food, Logistics and Telecommunications
Awareness	2 Documenting good practices, (e.g. winners of the Gawad KALASAG)
Infrastructure Resiliency	3 Supporting communities to identify projects for preparedness and response
	4 Contingency funding at village level
Emergency Management	5 Improving economic resilience of households through Cash for Work
	6 Technical assistance in emergency telecommunications
	7 Technical assistance in contingency planning
	8 Logistical preparation and post-disaster rapid needs assessment
	9 Contingency planning that links early warning information with response
Development Planning	10 Capacity building of NDRMCC in the area of logistics planning mapping agencies
	11 Capacity building of staff particularly subject matter specialists in the OCD
	12 Contingency funding at micro and macro levels.

Policy and Institutional Environment

The Policy and Institutional Environment analysis undertaken by Dean Asteya Santiago identified eight major gaps, namely:

- Gap No. 1** Inadequate understanding of the provisions of the new law by government agencies, LGUs and other stakeholders concerned, more particularly on how their respective roles relate to, complement and reinforce those of the others
- Gap No. 2** Confusion caused by the fact that many of the sectoral agencies are still operating under the old law
- Gap No. 3** Absence of broad Framework and detailed Guidelines to assist the government officials and other stakeholders in policy formulation and law implementation
- Gap No. 4** Difficulties in the preparation of Guidelines
- Gap No. 5** A huge and potentially unwieldy organization
- Gap No. 6** Difficulties of creating the prescribed new local offices
- Gap No. 7** Inordinate number of disorganized policies
- Gap No. 8** Difficulties in introducing the mainstreaming process in plans, programs and projects

The identification of the gaps provides a policy framework for the CNA results, and must be taken into consideration in developing the strategic plan.

D. Step 3: Re-Structuring the Results of the CNA in Standard DRRM Practices

The cross referencing exercise is intended to identify the common areas of concern and to link these to relevant disaster risk management practices (i.e., response/recovery, preparedness/advocacy, mitigation/mainstreaming, and monitoring/evaluation). The linkage is necessary in order to facilitate the implementation process of the CNA results; in other terms, the implementation can only be done effectively if the activities are structured along particular DRRM practices and each one is associated with a known expertise.

The initial step is to “aggregate” the CNA results at the national level. In particular, to reformulate the results shown in Table 21 and in Table 22 in a single set of activities, and to associate these activities to typical DRRM practices. The results of the exercise are shown in Table 23. The table also shows the typical level of implementation (i.e., local versus national).

Table 23: Integration of National Level Analysis into DRRM Practices

ID	DRRM Practice	Associated DRRM Activities	Level
1	Structure and Competency of Local DRRM Offices	Guidelines to standardize the LGU Emergency Operations Plans	LDRRM Office; PDRRM Offices
		Technical assistance in contingency planning	
		Contingency planning that links early warning information with response	
		Promoting a technical working group for food, Logistics and Telecommunications	

ID	DRRM Practice	Associated DRRM Activities	Level
2	Logistical preparation & post-disaster rapid needs assessment	Damage Assessment and Monitoring	LDRRM Office; PDRRM Offices
		Early recovery and post-disaster needs assessments	
		Technical assistance in emergency telecommunications	
		Selection and Qualification of Evacuation Centers	
3	Family and Community Preparedness and Awareness	Identify community-based projects for preparedness and response	LDRRM Office; PDRRM Offices
		Contingency funding at village level	
		Improving economic resilience of households through Cash for Work	
4	National Level Capacity Building and Mainstreaming	Monitoring DRR components of existing plans (i.e. mainstreaming)	National Level
		Monitor and evaluate the progress of LGUs versus DRRM law	
		Targeted training and documentation of good practices	
		Advocacy and Public Awareness	

Note that the above structuring of the national level completely encompasses the outcomes of the local results. Each of the activities of the local assessment can be integrated in one of the activities of Table 23.

Thus, the outcomes of the CNA analysis can be grouped into four DRRM practice areas

DRRM Practice Area 1: Reinforcing the Structure and Competency of Local DRRM Offices

DRRM Practice Area 2: Reinforcing Logistics Preparedness and Post-Disaster Rapid Needs Assessment

DRRM Practice Area 3: Undertaking Community and Family Preparedness and Awareness

DRRM Practice Area 4: National Level Capacity Building and Mainstreaming

Each activity identified by the CNA can be associated with one of the four DRRM practices as indicated in Table 23.

E. Step 4: Aligning the WFP-DSWD-DILG-OCD MoU Deliverables with the DRRM Practices

In this step the restructured CNA activities (Table 23) are aligned with the objectives of the UNWFP-DSWD-DILG-OCD MoU to ensure that the institutional requirements of UNWFP are met. The MoU provides the following objectives:

- a) To support the disaster response capacity of the DSWD, and
- b) To support the institutional capacity building of the DILG and OCD at the LGU level, particularly in their disaster preparedness and response management efforts.

It also prescribes three deliverables:

- 4) Enhance disaster response capacity of DSWD in logistics, vulnerability assessment and mapping, community preparedness, and small-scale community projects
- 5) Enhance LGU/PDRRMC institutional capacities through specific hardware/financial support and build resiliency of targeted Localities
- 6) Enhanced institutional capacity of selected DSWD, DILG, and OCD personnel at the national, Regional and LGU level through trainings on international best practices and simulation exercises

The three deliverables are restructured into similar DRRM activities. This is done in order to correlate them with the re-structured CNA activities (see Table 23). The results of this analysis are reproduced in Table 24. The deliverables are now organized into four (4) activities and sub-activities as indicated in the table.

Table 24: Re-Structuring of WFP-DSWD-DILG-OCD MoU Deliverables

	WFP-DSWD-DILG-OCD Deliverables	Re-Structured WFP-DSWD-DILG-OCD Deliverables
1	Enhance disaster response capacity of DSWD in logistics, vulnerability assessment and mapping, community preparedness, and small-scale community projects	1-a) Enhance disaster response capacity 1-b) Enhance disaster response logistics and communication
2	Enhance LGU/PDRRMC institutional capacities through specific hardware/financial support and build resiliency of targeted Localities	2) Enhance LGU/PDRRMC institutional capacities through specific hardware/financial support 3-a) Build the resilience of communities in targeted localities 3-b) Undertake small-scale Demonstration Projects
3	Enhanced institutional capacity of selected DSWD, DILG, and OCD personnel at the national, Regional and LGU level through trainings on international best practices and simulation exercises	4-a) Enhance national capacity of selected DSWD, DILG, OCD Personnel 4-b) Disseminate sound practices 4-c) Undertake scenarios and simulation exercises

F. Strategic Plan

The last part of the analysis is to align the (restructured) deliverables of the UNWFP-DSWD-DILG-OCD (i.e., column 3 of Table 24) with the CNA activities and practices (i.e., Table 23). The results of this last exercise are shown in Table 25.

Table 25, together with the details of Table 23 encapsulates a **strategic plan** that accomplishes the following:

- Organizes and structures the CNA results and findings into standard DRRM practices that can more easily and effectively be implemented;
- Formulates the deliverables of the UNWFP-DSWD-DILG-OCD MoU in a structure that is compatible with the CNA results;

- Integrates the objectives and deliverables of the UNWFP-DSWD-DILG-OCD MoU with the findings and results of the CNA;
- Ensures that priorities and concerns of the stakeholders are fully integrated and represented in the recommended activities;
- Conforms to the general DRRM concepts and practice.

Table 25: Alignment of WFP-DSWD-DILG-OCD MoU Deliverables with CNA Outputs and Practices

ID	Re-Structured Deliverables	WFP-DSWG-DILG-OCD	Matched DRRM Activity from CNA (See details in Table 5)	DRM Practice (Table 5)
1	a) Enhance disaster response capacity		Structure and Competency of Local DRRM Offices	1
	b) Enhance disaster response logistics and communication		Logistical Preparation and Post-disaster Rapid Needs Assessment	2
2	Enhance LGU/PDRRMC institutional capacities through specific hardware/financial support		Structure and Competency of Local DRRM Offices	1
3	a) Build the resilience of communities in targeted localities; Improve Community Preparedness;		Family and Community Preparedness and Awareness	3
	b) Undertake small-scale demonstration Projects			
4	a) Enhance National Capacity of selected DSWD, DILG, OCD Personnel		National Level Capacity Building and Mainstreaming	4
	b) Disseminate sound practices			
	c) Undertake scenarios and simulation exercises			
Note: See Table 23 for details of activities related to each DRM Practice				

G. Validation, Prioritization and Implementation Process

Strategic Plan Validation and Prioritization

The CNA results have been structured into DRRM practices and the activities associated with each of these practices as indicated in Table 23. Further, the UNWFP-DSWD-DILG-OCD objectives and deliverables have been matched with the same DRRM practices as indicated in Table 25. This produces a logical and strategic framework for implementation of UNWFP's DRRM program for the Philippines that reflects the stakeholders' concerns and input.

The first phase of the WFP program is for one year only. Thus, not all activities suggested by the CNA can be undertaken in such a short time. A validation and prioritization process will need to be undertaken. The validation and prioritization process has two perspectives: 1) Stakeholders' Validation; and b) Experts' Validation.

UNWFP has indicated that it intends to carry the recommendations of this project to the stakeholders for a validation and prioritization process. This step is necessary.

It is proposed that the Experts' validation be based on the priorities formulated by the local stakeholders, and particularly the LGUs, since the UNWFP program is intended to primarily serve the LGUs. Going back to Table 19, the LGUs have indicated four areas of higher concerns:

- Area of Higher Concern 1: Emergency Management, Response and Recovery
- Area of Higher Concern 2: Risk-Sensitive Land Use Planning, mitigation and mainstreaming
- Area of Higher Concern 3: Resiliency of Critical Services and Mainstreaming
- Area of Higher Concern 4: Advocacy, Communication and Public Awareness

One should note that Area of Concern 2 related to mainstreaming has been recognized by all stakeholders at all levels and thus is systemic.

EMI experience globally has shown that one of the key impediments to implementing disaster risk reduction and management at the local level pertains to the lack of an effective Disaster Risk Management system at the LGU level. Such a system should be anchored on:

- a) Detailed and evidence-based response and recovery planning following international standards for emergency management;³¹
- b) Structured inter-institutional communication and coordination protocols;
- c) Competent resources; and
- d) Advocacy and awareness-raising.

Matching these recognized impediments with the practices identified by the CNA provides guidance that the WFP DRR program could benefit significantly from by focusing its efforts on the first area of concern, which is "Enhancing the structures and competencies for Disaster/Emergency Management at the local level." The cross-cutting nature of such action could bring fundamental change into the capacity of LGUs and provinces to engage effectively and sustainably into disaster risk reduction and support national-level policies and mandate. This will also match the objective of UNWFP and its agreement with its partners. With this in mind, and based on expert opinion, a prioritization of UNWFP's resource allocations is indicated in Table 26.

Table 26: Suggested Priorities for Allocation of Resources

DRRM Area of Practice	Match Activity from CAN (See details in Table 23)	Priority for Resources
DRRM Area of Practice 1	Enhance the Structure and Competency of Local DRRM Offices	1
DRRM Area of Practice 2	Enhance logistical preparation and post-disaster rapid needs assessment	3
DRRM Area of Practice 3	Undertake Family and Community Preparedness	2
DRRM Area of Practice 4	Reinforce Capacity for Mainstreaming and Monitoring at the National Level	4

³¹ Emergency management is taken here as its total concept of not only dealing with response and recovery but also with preparedness, mitigation and monitoring.

The strategy is to put most efforts in the strengthening of the structures and competencies of the LGUs and Provinces for disaster risk management by aligning them with international standards such as the Emergency Management Accreditation Program (EMAP www.emaponline.org), and to support such structural interventions with specialized training, local-level community pilot projects, and community-level awareness and participatory activities (i.e., non-structural interventions). The details of such a strategic plan will need to be further developed but can be anchored on the ones provided in Table 23.

Pre-Project Implementation Process

A 5-stage process is suggested for the implementation process as indicated in Table 27. The steps overlap with each other. The timeline for the next phase of the project suggests an initial phase of one year to put in place the above stages.

Table 27: Five-Stage Implementation Process

STAGE 1: Internal Review of the EMI Deliverables and Understanding of the Content This is UNWFP's internal detailed review of the findings, analyses, and recommendations to ensure that these elements are completely understood within the institution and also an opportunity to obtain any clarifications from EMI.
STAGE 2: Stakeholders' Validation and Prioritization It is suggested that UNWFP undertake a validation of the findings and recommendations by the stakeholders as well as by UNWFP's partners so that there is complete consensus and, as well as the development of a solid base for undertaking the next phase of the project. Preferably more than one validation point should be established.
STAGE 3: Detailing the Proposed Activities into a Capacity Development Plan This is the purpose of the next phase of the project, where the recommendations are turned into well-defined activities.
STAGE 4: Developing the Terms of Reference, Timelines and Budgets This is a further refinement to Stage 3, where the project activities are related to specific timelines and budget, and where terms of reference are written to further clarify the role of each stakeholder.
STAGE 5: Developing Partnerships and Moving Forward The UNWFP-DILG-DSWD-OCD partnership moves fully into local implementation of the project.

The following structure is suggested for the implementation of the next stage of the UNWFP DRRM program.

- Structure a Project Implementation Team (PIT), which will be composed of UNWFP's project team and the experts and specialists of the implementing agency/agencies. The PIT will be in charge of all day-to-day activities, coordination, planning and decision making under assigned project managers and project directors from each side. The project directors should be delegated to make decisions on the project. The PIT should meet weekly.
- An Advisory Committee should be constituted, which should have a broad representation of the stakeholders (i.e., national and local representatives, local government organizations representatives, and community representatives). The role of the Advisory Committee is to coordinate at the policy level, inform, guide and advise on the implementation process. Its

role is also to carry the instructions back to the relevant institutions and to raise awareness and advocate for DRR. This is an essential function in mainstreaming. The Advisory Committee should meet monthly.

- The true implementers are the stakeholders. Ownership building mechanisms through participatory processes should be established through the creation of Focus Groups. In the focus groups, the stakeholders are organized according to their institutional responsibilities and professional expertise. They should be provided a meaningful role in the implementation process. This is critical to building sustainability. The focus group members report back to their constituencies to enable meaningful participation and push for change. They interact closely with the PIT and meet regularly to undertake the tasks that are assigned to them by the PIT.
- A monitoring process, through indicators, should be put in place to measure progress and to make necessary adjustments.

The benefits of the program will be in the longer term. It will require institutional commitment, detailed planning, significant investments, and adequate competencies

IX. Bibliography

(ADRC), Asian Disaster Reduction Center. "Concept Note for Training of Trainers on Disaster Risk Management under the ASEAN Cooperation Project: Capacity Building of Local Government Officials on Disaster Management." 2008.

(ADRC), Asian Disaster Reduction Center. "Participant List: Training of Trainers Program of "Capacity Building of Local Government Officials on Disaster Management." 2010.

(APSEMO), Albay Public Safety and Emergency Management Office. "Disaster Risk Reduction in the Provincial Level: A Case Study on the Institutionalization of the Albay Public Safety and Emergency Management Office (APSEMO)". Date Unknown (2010 estimated).

(APSEMO), Albay Public Safety and Emergency Management Office. "Institutionalization of a Disaster Risk Management Office: The APSEMO Experience." Date Unknown (2010 estimated).

(CDP), Center for Disaster Preparedness. "Training and Course Development." Date Unknown (2010 estimated).

(DILG), Department of Interior and Local Government. "Assessing LGU Readiness for Disaster Risk Reduction and Management." Date Unknown.

(DILG), Department of Interior and Local Government. "Consultation-Diagnostic Workshops on LGU Quick Response and Recovery, Addressing Climate Change and DRRM -An Activity Design." Date Unknown (estimated 2010).

(DILG), Department of Interior and Local Government. "Integrating Disaster Risk Reduction and Management and Climate Change Adaptation into Local Government Systems and Processes: Establishing a DRRM-Compliant Planning Structure." Date Unknown (estimated 2010).

(DILG), Department of Interior and Local Government. "Organizational Structure of Department of Interior and Local Government (DILG)." Date Unknown (accurate for 2011).

(DSWD), Department of Social Welfare and Development. "Current Initiatives and Activities on Disaster Risk Reduction (DRR)." Date Unknown.

(DSWD), Department of Social Welfare and Development. "Enhanced Guidelines for the Management of Emergency Shelter/Evacuation Center." 2010.

(DSWD), Department of Social Welfare and Development. "Enhanced Guidelines on Camp Coordination and Camp Management." Date Unknown (2010 estimated).

(DSWD), Department of Social Welfare and Development. "Psychosocial Support Training Manual." 2010.

(DSWD), Department of Social Welfare and Development. "Social Welfare And Development (SWAD) Provincial Level Roles." Date Unknown.

Cruz, Susana M. "Good Practices in Disaster Risk Management in the National Capital Region: Training of Trainers on Disaster Risk Management." Pasig City: Office of Civil Defense (OCD), National Capital Region, Philippines, 2010 March .

Duque, Priscilla. "The Philippine DRRM System Under the New Legal Framework on DRRM." 2010.

Fernandez, Tony. "Capacity Assessment Report on Key Disaster Risk Reduction Stakeholders (Ver. 2 Draft)." 2008.

Javier, Alwynn C. "The State of Disaster Risk Reduction in the Philippines." Office of Civil Defense (OCD), Philippines, 2008.

Manahan, Noralyn. "Contingency Plan: "Oplan Sagip Baha" (Plan to Save from Flood) for Banna, Ilocos Norte." Date Unknown.

OXFAM. "Building Resilient Communities: Good Practices in Disaster Risk Management in the Philippines." 2008.

Serote, Prof. Ernesto M. "Framework for Making Local Government Systems and Processes DRM-compliant." Department of the Interior and Local Government (DILG) Project under WB-GFDRR , Date Unknown (estimated 2010).