PHILIPPINES

To prepare this Country DRM Note, consultations were undertaken with members of the World Bank Philippines Country Team, the National Disaster Coordinating Council of the Philippines, the Department of Budget Management, and the Department of Interior and Local Government. The report builds on the Strategic National Action Plan (2009-2019) for Strengthening Disaster Risk Reduction in the Philippines, which the Philippine government and a broad base of stakeholders are finalizing to support the Hyogo Framework for Action.

1. DISASTER RISK PROFILE

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The Philippines is considered one of the most disaster-prone countries in the world. Its location makes it vulnerable to a variety of natural disasters. Lying on the western rim of the pacific and along the circum-pacific seismic belt, it is subject to storms, typhoons, earthquakes, floods, volcanic eruptions, droughts and faces other natural hazards. Disasters are a serious threat to people and economic assets, particularly in densely populated areas. At least 60 percent of the total land area of the country is exposed to multiple hazards, and as a result 74 percent of its population is vulnerable.

With 268 recorded disaster events over the last three decades, the Philippines ranks 8th according to World Bank's Natural Disaster Hotspot list of countries most exposed to multiple hazards (Table 1). Almost 30 percent of the disasters that occurred in Southeast Asia for the period 1990-2009 (Table 2) occurred in the Philippines.

Table 1

COUNTRIES MOST EXPOSED TO NATURAL HAZARDS FROM MULTIPLE HAZARDS (Top 60 based on land area with 2 or more hazards)
1. St. Kitts and Nevis
2. Macau, China
4. Hong Kong, China
6. Vanuatu
7. Vosta Rica
8. Philippines
9. Nepal
10. Guatemala
12. Ecuador
13. Reunion
15. Somalia
16. South Africa
17. Japan
19. Bangaldesh
26. Solomon Islands

Table 2

TOTAL NUMBER OF DISASTERS IN SOUTHEAST ASIA 1990–2009*

Country	Number	Sample %
Cambodia	15	1.9
East Timor	19	2.4
Indonesia	223	27.6
Lao PDR	22	2.7
Malaysia	52	6.4
Myanmar	21	2.6
Philippines	237	29.4
Singapore	3	0.4
Thailand	89	11.0
Timor-Leste	2	0.2
Vietnam	124	15.4
Total	807	100.0

Source: EM-DAT: The OFDA/CRED International Disaster Database www.embat.be – Université Catholique Louvain – Brussels – Belgium.
*as of data generated on April 2009.

Historic Overview of Disasters

Earthquakes: The U.S. Geological Survey lists 168 significant (with a magnitude of 6.5+ on the Richter scale) earthquakes in the Philippines since 1959, equivalent to an event every 2.5 years. The Philippine Institute of Volcanology and Seismology (PhiVOLCS) has recorded 12 destructive earthquakes in the last 40 years; the most damaging of which were the 1976 Mindanao Earthquake, which killed approximately 6,000 and caused about US $400 million (in present value) in damage, and the 1990 Central Luzon Earthquake, which killed over 1,000 people and caused damages of about US $400 million (in present value).

A comprehensive seismic hazard analysis for the Philippines has not been prepared. However, more recent studies shows that accelerations in the Metro Manila area are about 0.4g, comparable to those in San Francisco, Tokyo and other high-seismic areas.

Volcanoes: Out of 220 volcanoes in the archipelago, 22 are classified as active. The most active volcanoes in the Philippines are Bulusan, Mayon, Canlaon and Taal. The most recent major eruption in the country is the Mount Pinatubo eruption in June 1991. PHIVOLCS forecast of the event saved at least 5,000 lives and US $250 million worth of property and infrastructure.

A review of historic record indicates that central and southern Luzon are likely to experience a significant eruption about once every three years, with a major eruption perhaps every few decades. Mayon and Taal are the most active of these volcanoes.

Tropical cyclones: The climate of the Philippines is tropical and is strongly affected by monsoon (rain-bearing) winds, which blow from the southwest from approximately May to October and from the northeast from November to February. From June to December, an average of twenty typhoons hits the country accompanied by strong winds, intense rainfall and flooding. Five to seven of which are expected to be destructive. Most storms come from the southeast, with their frequency generally increasing from south to north. Luzon has significantly higher risk than the southern part of the country, where typhoons are heaviest in Samar, Leyte, eastern Quezon Province and the Batanes Islands.

Flooding: Floods are usually triggered by typhoons, tropical depression and continuing heavy rains. They are also triggered by man-made causes such as dam failures, blockage of water ways by garbage and improper design of street drainage.

Exposure and Vulnerability

The average annual damage caused by disasters amounts to Pesos 19.7 billion in the past two decades, equivalent to an average of 0.5 percent of GDP each year. In addition, agricultural damage is estimated at Pesos 12 billion per annum, and an average of 1,008 people are killed annually by natural disasters. Typhoons are the most frequent and the most damaging of all natural disasters in the Philippines. The poor are the most vulnerable to the damage caused by natural disasters as they are the ones left homeless and whose livelihoods are destroyed by the vagaries of the weather. Since almost one-third of the country's employment is based on agriculture, natural disasters have contributed to the increasing incidence of poverty, especially in the rural areas.

In urban areas, those living in calamity-prone areas such as riverbanks and estuaries are vulnerable to natural and man-made disasters. Those in flood-prone areas, along the coast and on steep slopes in upland areas are also at risk. Natural disasters increase their vulnerability and perpetuate deprivation and marginalization.[1]

1 National Assessment on the State of Disaster Risk Management of the Philippines. Final Report (October 2008).

The scale and significance of disasters is illustrated by the impact on lives and livelihoods illustrated in Table 3 below. As a result of 121 disasters that struck the country from 2000 to 2008, more than 36 million people were affected, 8,177 lives were lost, 374,798 became homeless and 6,261 were injured

Table 3

IMPACT OF DISASTERS 1990–2008

Disaster type	Number	Death	Affected	Homeless	Injured
Drought	2	0	–	0	0
Earthquake	1	15	73,351	0	100
Epidemic	3	35	774	0	0
Flood	35	434	2,996,037	56,750	108
Mass movement (dry)	1	11	–	0	0
Mas movement (wet)	7	1693	235,341	0	142
Storm	67	5,989	32,898,135	318,048	5,911
Volcano	5	0	209,532	0	0
Total	121	8,177	36,413,170	374,798	6,261

Source: Emergency Events Database (EMDAT)

Determinants of Vulnerability to Natural Disasters in the Philippines[2]

Urbanization: Rapid urbanization in the country has led to urban squalor and the proliferation of unplanned, informal and overcrowded settlements, often in hazard-prone areas. As of 2002, the country had about 1.2 million families of informal settlers who were vulnerable to typhoons and flooding. Demographic growth and urbanization have also affected provision of basic services, resulting in deteriorating solid waste management and siltation of rivers and drainage channels. These poor urban practices are aggravating flooding in urban areas for the past years and are expected to make the situation more severe in the future.

Environmental degradation: Environmental degradation has hugely contributed to increasing natural disaster occurrence in the Philippines. Demographic growth and poor land-use planning have led to the massive depletion of natural resources and destruction of the environment. Flash flooding, landslides and drought have increased in the past two decades as a result of declining forest cover. Certain areas that have substantially lost their forest cover are also more exposed to typhoons.

Climate change: Risks from global climate change are further exacerbating the country's vulnerability to natural hazards. In the last 15 years alone, the country has recorded the strongest typhoon, the most destructive typhoons, the deadliest storm and the typhoon with the highest 24-hour rainfall. These climate trends seem to fit the scientific evidence that rising sea surface temperatures enhance the destructiveness of tropical cyclones. The Philippines is expected to experience substantial rise in sea levels, making 70 percent of the 1,500 municipalities located along the coast vulnerable to this phenomenon. The country is also witnessing longer episodes of drought or El Niño, causing a large drop in the volume of agricultural production and sharp declines in GDP.

2 Sourced from the Joint Study of World Bank and the National Disaster Coordinating Council, "Natural Disaster Risk in the Philippines: Enhancing Poverty Alleviation Through Disaster Reduction" pp.20-23.

The mandate for overall policy and coordination of disaster risk management (DRM) efforts in the Philippines is enshrined in Presidential Decree Nos. 1 (1972) and 1566 (1978), which led to the creation of

the National Disaster Coordinating Council (NDCC). These laws: (a) adopt a Comprehensive Disaster Management Framework that divides DRM into four phases: mitigation, preparedness, response and rehabilitation; (b) call for the preparation of a National Calamity and Disaster Preparedness Plan; and (c) allow for the utilization of the Calamity Fund for activities related to DRM.

The NDCC is an inter-agency council responsible for disaster preparedness, prevention and mitigation. It is chaired by the Secretary of National Defense with the heads of 18 departments as members. In the discharge of its functions, the NDCC utilizes the facilities and services of the Office of Civil Defence as its operating arm. It serves as the President's adviser on disaster preparedness programs, disaster operations and rehabilitation efforts undertaken by the government and the private sector. NDCC is a policy and coordinating agency and does not implement activities related to DRM. It operates through member agencies and its local networks (i.e., the regional and local disaster coordinating councils), which are responsible for planning, implementing, funding and carrying out specific activities related to DRM. The NDCC adopted a Disaster Management Framework to address the different stages of disaster management.

2. ACTIVITIES UNDER THE HYOGO FRAMEWORK OF ACTION

HFA Priority #1: Ensure that disaster risk reduction is a national and a local priority with a strong institutional basis for implementation

THE NATIONAL DISASTER RISK MANAGEMENT AGENCY

The NDCC has been working towards strengthening decentralization of DRR in different sectoral agencies and LGUs. A more timely and responsive national DRM framework, along with the SNAP, are being prepared through a consultative process to improve DRM at the national and local levels. The SNAP and the National Framework for DRM will be the basis for creating a national platform for DRR.

At the sub-national level, local governments are expected to take the lead in DRM through local Disaster Coordinating Councils (DCCs) that they create (i.e., Provincial , City , Municipal and Barangay DCCs). The enactment of the Local Government Code in 1991 amplified the role of local governments in ensuring the overall security of their constituents and in assuming the role of first responders in time of emergency. For this purpose, local governments are allowed by law to set aside a portion of their income to fund expenditures related to post-disaster relief, rehabilitation, reconstruction and mitigation services in connection with a disaster/calamity.

LEGISLATIVE FRAMEWORK

There is a general recognition that DRM related policies in the country are outdated and need to be revisited in the context of emerging challenges (e.g., climate change). Efforts are ongoing to improve the policy framework, including the enactment of new laws. Discussions are ongoing to build consensus on issues and directions among stakeholders, especially among lawmakers and implementers.

The adoption by the Philippines of the 2005 Hyogo Framework of Action provides additional impetus for improving DRM. The NDCC spearheaded the formulation of the Strategic National Action Plan for Strengthening Disaster Risk Reduction. The SNAP, as it is called, will serve as the road map indicating strategic

objectives and vision for the next 10 years in pursuing the strategic goals of the HFA at the country level. Under the SNAP, priority actions are clustered into 5 strategic objectives, as described in the preceding section.

DISASTER RISK MANAGEMENT IN THE POVERTY REDUCTION STRATEGY AND COUNTRY DEVELOPMENT PLANS

The Medium Term Philippine Development Plan (MTPDP) has integrated DRR issues and investment projects in the Medium Term Development Plan (MTPDP) 2004–2010. DRR is also incorporated into the National Physical Framework Plan (NPFP), which is yet to fully mainstreamed at the local level. The National Economic and Development Authority (NEDA) hopes to address this problem by developing and rolling out guidelines for the mainstreaming of DRR in LGU development plans. These guidelines will incorporate DRM considerations into the comprehensive land use, and development and budget plans of the local governments. Concerned line agencies are also encouraged to include a DRR component in their mandate, such as on infrastructure projects undertaken by the Department of Public Works and Highways (DPWH).

The NDCC recognizes the need to shift its paradigm from disaster preparedness and response to disaster risk reduction strategies as well as engaging different sectors of the society in this effort. A national multi-sectoral platform for disaster risk reduction is being institutionalized. As a result, the private sector, civil society and academia are beginning to actively take part in NDCC activities, consultations and workshops. Although not yet comprehensive, institutional commitments of sectoral leaders have been attained.

Climate Change and Disaster Risk Management

HFA Priority #2: Identify, assess and monitor disaster risks and enhance early warning

NATIONAL, REGIONAL, LOCAL AND SECTOR RISK ASSESSMENTS

The NDCC is undertaking a multi-hazard mapping and assessment project in partnership with key government agencies such as, PHIVOLCS, PAG-ASA, MGB, NAMRIA, and others government agencies. The project called "Hazards Mapping and Assessment for Effective Community-Based Disaster Risk Management Project" (or READY) is being prepared to cover 27 provinces mostly located along the eastern part of the Philippines. This is funded by a US $1.9 million grant from the AusAID with technical assistance from UNDP. The project has helped established hazard maps and community-based early warning systems. Under the project, PHIVOLCS has also introduced the use of hazard and risk assessment software called Rapid Earthquake Damage Assessment System (REDAS). The software includes dynamic evaluation of earthquake hazards and information of at risk elements at the community.

The data and information generated are used for disaster risk management and development planning by sectoral agencies and LGUs. Many of the LGUs, however, are technically constrained in terms of data interpretation and use. Thus, the national disaster agencies need to closely work with them to maximize the use of hazard and vulnerability maps and help them integrate these data in their DRM programs. Early warning systems are being installed and an intensive education campaign is undertaken in disaster-prone communities to equip them in handling disaster risks.

NDCC and other government and private organizations had been documenting disasters and their impacts in the country. However, there is no systematic effort to coordinate, consolidate and establish a common or shared database among the organizations undertaking this task. Furthermore, the task of monitoring, recording and documenting disasters had been taken by national agencies. LGUs, NGOs and communities are constrained to contribute more substantially to the development of a database of disasters and impacts, especially as capacities are limited at this level.

Community participation in hazard and vulnerability mapping is essential, and there is significant emphasis on developing community-based disaster risk management capacity. Their own experience with disasters had taught communities to know the signs and indications of impending disasters such as volcanic eruption, earthquakes and even typhoons. However, this wealth of knowledge is not properly documented, published or disseminated. PHIVOLCS reported that it is closely working with communities for geological and modeling information. Local knowledge has been tapped and even used and efforts on documenting these have been explored. Tools for identifying signs of disasters at the community level have been designed by PAG-ASA to promote self-reliance of communities.

EARLY WARNING SYSTEMS

The government is strengthening on early warning systems for all major hazards. PHIVOLCS and PAGASA are expanding facilities and equipment and training of personnel to enhance monitoring and forecasting capabilities. National government's early warning system had improved with the acquisition of new Doppler radars of PAG-ASA which enable it to give accurate local weather forecasts in five regional centers in the country.

LGUs still vary in their capacity for early warning systems. While some LGUs already have their own warning systems for typhoons and flooding, many still do not have the technical capacity and lack access to equipment and facilities. For these LGUs, mass media is an important source of information during disasters.

The government takes account of regional and transboundary risks, with a view to promote regional cooperation on risk reduction. The government has linked up with international agencies in monitoring and increasing alertness level on natural and biological disasters. Through ASEAN and UN support, appropriate tools and models for disaster risk reduction are being shared. Although the government does not have adequate funding for engaging in regional and transboundary risk management, it receives support and assistance from international and bilateral donor organizations.

HFA Priority # 3: Use knowledge, innovation and education to build a culture of safety and resilience at all levels

Information on disaster risk management is available but is often not widely or properly disseminated. While much of this information is available online in the NDCC members' websites, many people and communities - especially in the rural areas - do not have access to computers and internet connection, and cannot access this information.

NGOs, private and civic organizations and government agencies at both the national and local levels undertake public awareness and information campaigns on disaster risks in many vulnerable areas. However, oftentimes, these campaigns are not systematic and coordinated. There are also instances when vulnerable communities that had been already advised to evacuate refused to move out due to inadequate transportation, facilities in the evacuation centers, and availability of food and medicines.

There is no countrywide public awareness program on DRR. The media thru television and radio broadcasting has helped in disseminating information on different types of disasters, risks and adopting safeguards on disasters. Their scope, however, does not fully cover all disaster-prone areas.

Schools are integrating DRR concepts in their curricula. The Department of Education (DepEd) is working on including DRR in elementary and secondary curricula. The teachers are also educated in DRR by including the concepts in Teacher's Education Curriculum. At present, education in DRR is still limited in scope and education materials are still inadequate. NDCC and DepEd, in partnership with ADPC, undertook a project to develop DRM modules for integration

into the secondary school curriculum. The module includes information on disaster preparedness, prevention and mitigation of hazards and risks of natural events to vulnerable communities and areas. Disaster awareness has formed part of the learning core competencies under the Science and Social studies subjects in public elementary and high schools. Private schools, however, are not required to include these in their curriculum.

Programs such as Hospital Preparedness for Emergencies (HOPE) under the Program for Enhancement of Emergency Response (PEER) has been organized by NDCC, along with concerned government agencies and supported by NZET and USAID. Awareness-campaign programs and DRM-relevant courses are also through programs hosted by the World Bank Institute, Earthquakes and Megacities Initiatives (EMI) and NDCC. Technological and scientific institutions like PAGASA and PHIVOLCS provide knowledge building for NGOs, schools and the media. NGOs and professional organizations also provide trainings on DRR focusing on mitigation and preparedness.

Research methods and tools for multi-risk assessments and cost benefit analysis are under development. The National Science and Technology Plan for 2002-2020 prepared by the DOST has given some attention to DRM. The plan includes natural disaster mitigation under the Environment in the National Program for Basic Research. Some assessment tools have been developed or used by DOST and the Department of Environment and Natural Resources (DENR). A study of the vulnerability of critical sectors to climate change was initiated using the Millennium Development Goals Achievement Fund of the Spanish government.

HFA Priority #4: Reduction of the underlying risk factors

RISK FINANCING FRAMEWORK

Funding for DRR in the country is inadequate as national and local calamity funds are primarily used for response, relief operations and rehabilitation of damaged infrastructure. This has made the government rely on donor support to promote DRR policies and programs. Domestic funding for DRR activities is incidental in the plans and budgets of national agencies. Utilization of the national calamity fund is difficult to track and monitor as they are lost in existing categories prescribed in budget reports.

LGUs are mandated to allocate five percent of their estimated revenues from regular sources as Local Calamity Fund (LCF), which can only be used upon declaration of a "state of calamity" by the local legislative body. In 2003, a Joint Memorandum Circular issued by the Department of Budget and Management (DBM) and the Department of Interior and Local Government (DILG) permits the use of the LCF for disaster preparedness and other pre-disaster activities. However, many local officials find this instruction unclear because it is perceive to focus only on man-made disasters. Moreover, LGUs are not obligated to submit reports on the utilization of the calamity funds to NDCC or DBM, hence it is difficult to evaluate how efficiently the funds are used.

ENVIRONMENTAL AND NATURAL RESOURCE MANAGEMENT

While laws on sound environmental management and regulation (*e.g.,* mining, forestry, protected areas, agriculture and fisheries, wildlife resources, toxic substances, hazardous and nuclear wastes and pollution control) exist, most of these laws are not explicit about any disaster risk plan or response.

LAND USE PLANNING

In addition, some laws and policies for disaster risk reduction are present but enforcement has been weak. Poor enforcement of easement zone regulations contributed to the burgeoning of informal settlers along riverbanks and near coastlines. Many structures do not fully comply with the safeguards required under their Environmental Compliance Certificates (ECCs) and building codes. In some cities and municipalities, appropriate building codes and standards

are set aside to reduce construction costs, and in some cases zoning regulations are poorly enforced and/or blatantly violated by some building and housing developers. Poor regulation in the construction of buildings and other physical establishments in disaster-prone areas contribute to the risks in these communities.

NEDA is actively building awareness and capacity to mainstream DRR in land use and physical framework plans. The National Land Use Committee prepared the National Framework for Physical Planning which indicated hazard-prone areas for future land use and physical plans. Some progress is foreseen as capacities of regional and local level development councils are strengthened to implement risk-sensitive planning.
On a broader scale, NEDA is implementing a project entitled "Strengthening the Philippines' Institutional Capacity to Adapt to Climate Change" that also fosters understanding of the linkage between DRM and climate change adaptation.

Social development policies and plans are being implemented to reduce the vulnerability of populations at risk. The government has implemented policies and programs such as housing for informal settlers, livelihood projects and health care that will reduce the vulnerability of people to disasters. However, many LGUs lack the resources to sustain these programs. In many cases, informal settlers do not easily leave their homes even if they know that they are at risk in the absence of means to available and feasible resettlement areas. The government is currently working towards the establishment of a conditional cash transfer system that will help to cushion shocks experienced by poor households. Special focus for those adversely affected by disasters is likewise being considered.

Economic and productive sectoral policies and plans to reduce the vulnerability of economic activities exist, but need to be strengthened. In February 2008, the Government Service Insurance System (GSIS) called on all government agencies to insure government properties. Despite existing legal mandate, local governments, have not internalized a system of protecting economic activities and productive sectors, with the exception of first income class local governments. . Crop insurance for palay and high value crops and livestock insurance through the Philippine Crop Insurance Corporation (PCIC) are available but many farmers do not subscribe or are not aware that such an insurance exists. Existing legal frameworks do not encourage the development of insurance schemes particularly for the poor.

DRR measures are integrated into post-disaster recovery and rehabilitation processes. Rehabilitation measures include the construction of infrastructure such as flood control, drainage, dikes and levees to minimize flooding and the devastating effects of strong typhoons in areas frequently hit by disasters. More typhoon resistant schools are being built and safe evacuation centers are being established or designated. Although many build back better programs are being undertaken both by national and local governments, the construction of infrastructure projects to mitigate the impacts of natural disasters is limited due to financial resources constraints they face.

HFA Priority #5: Strengthen disaster preparedness for effective response at all levels

The government is intensifying efforts to institutionalize DRR at the national, regional and local levels. This needs a lot of effort considering the challenges in vertical and horizontal coordination and weak and poorly-funded institutions at the national and local levels that would implement DRR. Nonetheless, steps had been undertaken in the form of preparation and contingency plans crafted by DCC and implemented in 50 provinces.

EMERGENCY MANAGEMENT
Disaster preparedness and contingency plans are in place at all administrative levels and regular training drills and rehearsals are held to test and develop disaster response programs. The NDCC has been assisting local DCCs in preparing and implementing contingency plans through training programs.

3. KEY DONOR AND INTERNATIONAL FINANCIAL INSTITUTION ENGAGEMENTS IN DISASTER RISK MANAGEMENT

Existing Projects with Donor and International Financial Institutions	Funding Agency/Local and International Partners	HFA Activity Area (s)
Case Study on the Institutionalization of Albay Provincial Safety and Emergency Management Office	OXFAM-GB, Development Academy of the Philippines (DAP) and PDCC-Albay	1
ASEAN Agreement on Disaster and Emergency Response (AADMER)		1
Hazard Mapping and Assessment for Effective Community-Based Disaster Risk Management (READY)	AUSAID; UNDP; PHIVOLCS, PAG-ASA; Mines and Geosciences Bureau-DENR, NAMRIA and the OCD.	2
Improvement of Methodologies for Assessing the Socio-economic Impact of Hydro-meteorological Disasters	UN-ESCAP; UN-ECLAC ; UNDP	2
Emergency Response Network (ERN)	IBM International Foundational (ERN Sahana Philippines)	2
Mainstreaming Disaster Risk Reduction in the Education Sector	ADPC	3
Web-based Event Data Base (CALAMIDAT.PH)	ADRC	3
Disaster Preparedness through Educational Multi-Media	DEPED	3
Simultaneous Nationwide Earthquake Drills and the Nationwide Water Search and Rescue (WASAR) Training and the Program for Enhancement of Emergency Response (PEER)	Miami Dade Fire Rescue Department; USAID, ADPC	3
Contingency Planning Manual	UN High Commissioner for Refugees	3
Online Natural Disaster Risk Management Program	World Bank Institute (WBI); Hazard Management Unit and ProVention Consortium	3
Mainstreaming DRR in Development Plans particularly on Land Use and Physical Framework Plans	NEDA; DEPED	4
2nd Phase of the Mainstreaming Disaster Risk Reduction into the Infrastructure Sector	ADPC, DPWH	4
National Geohazards Mapping and Assessment	DENR; PHIVOLCS, PAG-ASA	4
Construction of Hazard Resilient School Buildings	DEPED	4
Construction of Innovative Buildings	United Architects Philippines; Private Sector Disaster Management Network	4
Community-based Disaster Preparedness: Development of Information and Education Campaign Materials (2nd component of the READY project)	AUSAID; UNDP; PHIVOLCS, PAG-ASA; Mines and Geosciences Bureau-DENR, NAMRIA and the OCD.	5
Search for Excellence in Disaster Management (Gawad KALASAG) 2007	NDCC	5
Upgrading the forecasting capability of the Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA) and the Philippine Institute of Volcanology and Seismology (PHIVOLCS)	Japanese Grant Aid Program, JICA, MMDA	5
Enhancing the capabilities of local chief executives and their DCCs	LGUs	5
Housing and Livelihood Support to Disaster Victims	DSWD	5

OPPORTUNITIES FOR ACTION

The groundwork to mainstream Disaster Risk Reduction has already been laid out in the Philippines. The country is committed to include the HFA 2005-2015 in its long term development agenda as evidenced by the various initiatives conducted. There is recognition from all sectors of society that knowledge, capacities, and awareness on DRR have to be improved and mainstreamed. But many actions require reforms in policies and resource allocation and distribution.

The existing GFDRR funding is supporting the government to identify local governments at risk based on historical information and develop a program for building local government capacities for DRM. As a result of this exercise, 23 provinces identified to be at risk to impacts of disasters. Five provinces and select component municipalities and/or cities will be initially supported with the existing funds to conduct risk identification assessments and developed strategic actions to reduce risk over time.

Consultations with the government have indicated the desire to expand support to local governments initiated under the ongoing GFDRR program. This will allow the government to reach out to the remaining 18 provinces identified in the risk assessment. Another high priority of national government is to carry out a separate activity for Metro Manila aimed at addressing the potential risk posed by an earthquake, based on the Metro Manila Earthquake Impact Scenario (MMEIRS).

The work will be continued with the Department of Interior and Local Government, which is expected to play a bigger role in DRM once the enabling law has been in place. The Department has committed to translate the lessons learned from the pilot into concrete policy instruments to mainstream and institutionalize DRM in local governance in the Philippines. The Bank will complement the plans with funding instruments that are being discussed with the national government (*e.g., CAT DDO, LGU DRM sub-loans, and catastrophe pool for LGUs).*

Funding options for DRM are currently being assessed in the context of a broad risk finance strategy, which is also being developed with support from existing GFDRR funds. This strategy will cover not only LGUs but the key segments of the population, including households and public utilities. Weaknesses in policies related to catastrophe risk financing, such as disincentives to the private sector and institutional constraints, are proposed to be addressed with additional funds from GFDRR. The results are expected to guide the government to determine appropriate reforms and strategies that can be taken in the short, medium, and long-term planning horizon. Additional funds from GFDRR can likewise be used to design concrete instruments for implementation as identified and agreed with the Philippine Government

Improvements in risk finance will be complemented by the parallel development of better tracking and monitoring capacity at all levels. For example, strengthening capacity to track damages and losses, and record corresponding receipts and expenditure, is a high priority for several national agencies to promote efficiency, transparency, and accountability of fiscal and other resources for DRM

Indicative Program for GFDRR Funding *(Projects and engagement areas)*	**Implementing Agency / International Partners**	**Indicative Budget (Years Covered)**	**HFA Activity Area(s)**
Expanding support for high risk Local Government Capacity to Manage Natural Disasters Risk in the Philippines (Capacity building for the 23 most vulnerable LGUs in the Philippines) *Priority activities:* - Strengthen capacity in target LGUs and disaster-prone areas in risk financing and transfer options - Strengthen tools that will upgrade and enhance planning and early warning systems for DRM in select LGUs or national government agencies	NDCC/DILG	2009-2011 US $3.5million	1, 5
Improving systems for tracking/monitoring damage, losses and corresponding receipts and expenditure for disaster management *Priority activities:* - Support for training to enhance transparency and accountability, efficiency and effectiveness on the use of DRM funds, especially at the local level	NDCC/DBM	2009 -2011 US $250,000	1
Support for hotspots analysis and preparedness and mitigation planning for the Metro Manila Earthquake Impact Scenario.	NDCC/MMDA	2009 -2011 US $250,000	1,5
Training for LGUs and NGAs for integrating DRM in urban/ economic and physical planning	NDCC/DILG	2009 -2011 US $5000,000	1,5
Support the national government to develop itsrisk finance strategy	NDCC/DOF	2009 -2011 US $5000,000	5
Total Budget Requested			**US $5 million**

4. BIBLIOGRAPHY

Interim Report on Progress in Implementation of the Hyogo Framework for Action (HFA) in the Philippines, 2007-2008 (NDCC).

National Disaster Coordinating Council website (http://ndcc.gov.ph).

National Disaster Coordinating Council (NDCC), Asian Development Bank (ADB) and UNDP. *National Assessment on the State of Disaster Risk Management in the Philippines-Final Report (October 2008).*

The World Bank and National Disaster Coordinating Council. *Natural Disaster Risk Management in the Philippines: Enhancing Poverty Alleviation through Disaster Risk Reduction*.

International Emergency Disaster Database (http://www.emdat.be/).