The United Nations Development Programme Country: Philippines in partnership with the National Disaster Risk Reduction Management Council and the Australian Agency for International Development

Project Document

Project Title: Enhancing Greater Metro Manila's Institutional Capacities for Effective Disaster/Climate Risk Management towards Sustainable Development (herein referred to as GMMA READY Project¹)

UNDAF Outcome(s): Increased capacity of stakeholders to protect/enhance the quality of the environment and sustainably manage natural resources, with the poor and vulnerable groups, especially women and children, enabled to prepare for and cope with the impacts of environmental emergencies.

Expected CP Outcome(s): Key stakeholders are better able to manage the country's environment and natural resources, develop and use sustainable energy sources, cope with the impacts of environmental emergencies and maintain sustainable development.

Expected Output(s):

- 1. Disaster/climate risk vulnerabilities of GMMA assessed;
- 2. Priority disaster/climate risk mitigation actions for GMMA implemented;
- 3. Competencies of GMMA local government units and key partners on integrating DRM/CRM into local development planning and regulatory processes enhanced;
- 4. DRM/CRM mainstreaming in local land use/development plan(s) and regulatory processes of selected GMMA local government units (LGUs) demonstrated;
- 5. DRM/CRM Knowledge Management System/ Community of Practice established.

Donor Partner: Australian Government through the Australian Agency for International Development (AusAID)

Implementing Partner: National Disaster Risk Reduction and Management Council (NDRRMC) - Office of Civil Defense

Responsible Partners:

- Collective Strengthening of Community Awareness on Natural Disasters (CSCAND)
 Agencies
 - Mines and Geosciences Bureau (MGB)
 - National Mapping and Resource Information Authority (NAMRIA)
 - o Office of Civil Defense (OCD)
 - o Philippine Atmospheric, Geosciences and Astronomical Services Administration (PAGASA)
 - Philippine Institute of Volcanology and Seismology (PHIVOLCS)
- 2. Metro Manila Development Authority (MMDA)
- 3. Housing and Land Use Regulatory Board (HLURB)
- 4. Climate Change Commission (CCC)
- 5. National Economic Development Authority (NEDA)

¹ READY Project refers to the "Hazards Mapping and Assessment for Effective Community Based Disaster Risk Management, Phase II" project implemented by NDRRMC-CSCAND, administered by UNDP and funded by AusAID.

Brief Description

The Project Enhancing Greater Metro Manila's Institutional Capacities for Effective Disaster/Climate Risk Management towards Sustainable Development (herein referred as the GMMA READY Project) aims to decrease the vulnerability of the Greater Metro Manila Area (GMMA) to natural hazards and increase its resilience, by strengthening the institutional capacities of the local government units, concerned national government agencies, academic institutions and civil society organizations to manage disaster and climate change risks. It will attempt to achieve this outcome by: a.) assessing the GMMA's vulnerabilities to disaster and climate change risks; b.) developing and implementing priority disaster/climate risk mitigation actions for GMMA such as formulation and testing of an integrated contingency plan and establishment of early warning systems; 3.) enhancing the competencies of GMMA LGUs and critical partners to mainstream DRM/CRM into local planning and regulatory processes;4.) demonstrating the mainstreaming of DRM/CRM into local land use/development plan(s) and regulatory processes of Metro Manila and selected GMMA LGUs; and 5.) establishing a knowledge management system, including a vigorous Community of Practice, on Disaster/Climate Risk Management. The project is envisioned to achieve all the results over a period of three (3) years and expected to improve mechanisms and protocols on DRM/CRM. The project covers Metro Manila and the provinces of Rizal and Bulacan.

Programme Period: 2010-2013

Key Result Area (Strategic Plan): Enhancing conflict and disaster risk management capabilities and Addressing the increasing threats from climate change.

Atlas Award ID:

Start date: March 2011 End Date: June 2013

PAC Meeting Date:

Management Arrangements: National Execution

Total resources required US\$2,020,000.00

Total allocated resources:

Regular

Other:

Australian Government AUS\$ 2,500,000.00

Unfunded budget:

In-kind Contributions

(GOP Counterpart) US\$ 200,000.00

Agreed by (Government) ROLANDO TUNGPALAN, JR.

Agreed by (Executing Entity): BENITO S. RAMOS

Agreed by (United Nations Development Programme): RENAUD MEYER

I. SITUATION AND PROBLEM ANALYSIS

As a country situated in the Pacific Ring of Fire, the Philippines is prone to the impacts of natural hazards. Its metropolitan centers (e.g. Metro-Manila, Metro-Cebu, Metro-Davao) with their dense and increasing population and associated problems like increasing unsafe settlements and infrastructure, are considered to be increasingly vulnerable to the threat of natural disasters. Typhoons, which visit the Philippines at an average of 20 times a year, cause considerable damage to properties and injury to many people in the country's urban centers like Metro Manila. Increasing construction and informal settlements, including organic, uncontrolled growth and development near hazardous areas, have also made the mega-cities like Metro Manila highly vulnerable to natural disasters. The country's vulnerability to natural hazards has been recognized in the 2004 UN Common Country Assessment (CCA) for the Philippines, which was subsequently translated into specific outcomes and response measures in the 2005-2009 UN Development Assistance Framework (UNDAF) and the 2005-2009 United Nations Development Programme's

Country Programme Action Plan (CPAP)². The risk of meteorological disasters is expected to increase even more with the onset of climate change. Tropical Storm Ketsana (TS Ondoy) simply underscored this fact when it brought rains which caused massive flooding and unprecedented damage. The climate scenario(s) generated by PAGASA for 2020 and 2050 also seem to indicate the probability of increased precipitation compared to baseline (2000).³

Metropolitan Manila, with its population of about 12 million in its 636 square kilometer land area is considered the most vulnerable among the country's metropolis to multi-hazards⁴, including flooding.⁵ As one of the largest and most complex urban regions in Southeast Asia, it is the center of political, economic and cultural activities in the country and host to major government agencies, educational institutions and cultural centers. Through the years, Metro Manila has grown to an agglomeration of 16 cities and one municipality. And, as is true of many other cities in developing nations, Metro Manila has undergone a steady trend of urbanization

The recent typhoon "Ondoy" which traversed Metro Manila and nearby localities was not strong by conventional standards but managed to cause devastation at levels that have never been seen in the Philippines for a long, long time. It caught Metro Manila by surprise and underscored the vulnerability of the Metropolis and surrounding environs to disaster risks, especially those spawned by meteorological hazards like typhoons. It also emphasized the gaps in terms of disaster risk management, especially mitigating measures such as early warning systems, an operational integrated contingency plan and functional disaster coordinating mechanisms from the barangay to the metropolitan region level.

At the same time, PAGASA's weather forecasting accuracy is severely constrained by limited instrumentation such as the very small number of doppler radars throughout the country including Metro Manila. The Ondoy experience showed that an early lead time for the forecast and an appropriate severe weather event monitoring system that provides up to date data could have forestalled the catastrophe which hit Metro Manila.

Also, the pronounced absence of timely and effective response simply showcased the severe lack of preparedness by the local government units, including the Metro Manila Development Authority (MMDA), to deal with large scale natural hazards such as TS Ondoy and forestall disasters. On the community side, the local populace didn't seem to have been informed, much less trained, to cope with this kind of situation or event. There was confusion and even panic when the flood waters started to rise and spread because of the continuous rains.

With other natural disaster threats such as earthquakes⁷ looming in the horizon, Metro Manila cannot continue the "business as usual" practice of not factoring disaster risks into its planning, programming and implementation activities. It is very critical for the capacities of the various development and risk management actors in the metropolis and surrounding environs to be enhanced immediately to forestall future catastrophes, especially with the projected impacts of climate change. Corollary, the capacities of national government agencies such as PAGASA and PHIVOLCS, among others, should likewise be enhanced to enable them to supply the needed risk information and technical advice to these local actors in a timely manner for informed and rational decisions in times of emergencies.

² Currently under extension until 2011, awaiting the new Medium Term Philippine Development Plan (MTPDP) to be issued by the new Aquino administration.

³ Future planning, including the contemplated reconstruction measures, post-Ondoy, should now consider these scenarios to forestall further costs of disasters.

⁴ Seismic risk, according to the Metropolitan Manila Earthquake Impact Reduction Study (MMEIRs), threatens to generate the most damage in terms of loss of lives, injuries and economic costs.

⁵ Localized urban disasters such as flash floods and land (trash) slides have been known to occur even before the Ondoy disaster.

⁶ Parts of Rizal, Laguna, Cavite and Bulacan which also contribute to the disaster risks and are, in turn, affected, constitute what is now referred to as "Greater Metro Manila."

⁷ Metro Manila is threatened by several earthquake generators such as the West Valley Fault System, the Philippine Fault, the Philippine Trench and the Manila Trench.

In the medium to long term, there is a need to deal decisively with factors which aggravate the risks from multi-hazards like Metro Manila's rapidly deteriorating environmental condition, especially air and water pollution and solid wastes, among others. Socioeconomic related problems like the proliferation of informal settlements in danger zones and the poverty situation which generally increase vulnerabilities to the impacts of natural hazards, should be re-examined and strategies drawn up as part of a comprehensive approach to Metro Manila's re-development. This can be undertaken in the context of preparing for coping with climate change impacts, solidly anchored on a vulnerability and adaptation analysis and disaster/climate risk management measures mainstreamed into the LGUs' comprehensive land use and development plans and regulatory processes.

Rationale for AusAID Involvement

Australian Government (GOA) on disaster risk management (DRM) and the climate change agenda. The agency is currently developing a DRM and climate change strategy for the Philippines to better guide its development support to the country. Furthermore, AusAID Philippines Program and UNDP Philippines Country Office have long-standing partnership on DRM including climate change adaptation (CCA) through the implementation of the READY Project, and Project on Integrating DRR and CCA in Local Planning and Decision-Making Processes. More significantly, the Government of the Philippines (GOP) through the National Disaster Coordinating Council (now the NDRRMC) – CSCAND and GOA through AusAID signed a Memorandum of Subsidiary Arrangement on supporting the requirements of the government on natural hazard risk analysis.

II. STRATEGY

The Project will address the capacity gaps identified above, both at the institutional and individual levels of key players on disaster risk management/climate risk management (DRM/CRM) in the GMMA. By addressing policy development, planning and programming requirements of the concerned institutions and improving the competencies on disaster/climate risk management of the concerned individuals, including community leaders, the Project is expected to put in place a GMMA wide institutional network which is able to address the risks posed by the multi-hazards, including those from climate change. The following policies further underpin the implementation of the Project:

- 1. Medium Term Philippines Development Plan (MTPDP) 2004-2010⁸: Effective mitigation and preparedness prior to, and response and rehabilitation following, natural disasters are key priorities for the Government of the Philippines. This is reflected in the MTPDP which outlines the importance of emergency assistance and disaster mitigation projects and a Geohazard Assessment Program to reduce risks to agriculture. Furthermore, geohazard mapping is outlined as key for guiding development plans on settlements, industry and production areas.
- 2. National Framework for Physical Planning (NFPP) 2000-2030. Protected areas including hazard and disaster prone areas should be identified and delineated and use as basis for delineating areas that could be used for production, settlement and infrastructure purposes. Permanent hazard areas should not be used for any development activities.
- 3. The Philippine Strategic National Action Plan (SNAP) on DRR: The document provides action points to implement the HFA. A key action area of SNAP is to identify, assess and

⁸ A new MTPDP for 2012-2017 is currently being formulated, the guidelines for which, provides for the incorporation of DRR/CCA considerations in the relevant chapters.

monitor disaster risks and enhance early warning, as well as integrate DRM (including CCA) in development planning and decision-making processes.

4. The Philippines Disaster Risk Reduction and Management Act and Climate Change Act. These laws highlight the need to harmonize disaster risk management and climate change adaptation and mainstream these in development sectors.

The Project is aligned with the Philippines-Australia Development Assistance Strategy (DAS) for 2007-2011. The theme 'national stability and human security' highlights the importance of effective emergency and disaster management to better prepare and protect the population from natural disasters. Furthermore, one of the key risks identified in the implementation of the Strategy is 'natural disasters and shocks that set back development prospects, change development priorities, and interrupt implementation of aid programs.'

The Project will also contribute to the relevant outcome(s) identified in the current United Nations Development Assistance Framework (UNDAF)⁹ and the UNDP Country Programme Action Plan (CPAP) by contributing to reduced vulnerabilities of affected population and sectors through enhanced regional (GMMA) and national capacities on disaster/climate risk management. Furthermore, being consistent with the country's development needs and priorities, including its commitment to achieve the Millennium Development Goal on the empowerment of women, the Project will ensure the incorporation of gender perspectives in its various outputs and activities by giving emphasis on gender-sensitive concerns especially in the capacity-building and protection of women, including the children and the elderly, in the event of disasters and other emergency situations.

The Project will attempt to attain the Outcome "Increased institutional capacities of key local and national risk management actors towards a disaster/climate resilient GMMA." This is envisioned to be accomplished through the systematic and integrated attainment of the outputs described below.

- Output 1: Disaster/climate risk vulnerabilities of GMMA assessed.
- Output 2: Priority disaster/climate risk mitigation actions for GMMA developed and implemented.
- **Output 3:** Competencies of GMMA LGUs and critical partners (NGAs, academe, professional associations) to mainstream DRM/CRM into local planning and regulatory processes enhanced.
- **Output 4:** DRM/CRM mainstreaming demonstrated in local land use/development plan(s) and regulatory processes of Metro Manila and other select GMMA LGUs.
- Output 5: DRM/CRM Knowledge Management System/ Community of Practice established

The outcome and outputs, the indicative resources needed to produce these, as well as, the baseline information and indicators are contained in **Table 1** reflecting the Project's Results Framework.

Output 1 will provide a characterization of the physical hazards¹⁰ and risks¹¹ faced by the localities of the Greater Metro Manila Area within one year. It will give an indication of the physical

⁹ Formulation currently in progress.

¹⁰ The hazard maps to be produced for the GMMA areas will use the methodologies adopted in the READY project. However, for purposes of immediately starting a first iteration of the integrated GMMA contingency plan, currently available data and information that can be immediately culled and serve to provide a solid empirical basis for those needing to take urgent management decisions that will save lives and forestall the economic costs of disasters, especially the metereologically induced/related ones.

¹¹ A quantitative risk assessment tool has already been developed and continues to be refined in another complementary project funded by AusAID, the "Integrating DRR/CCA.." which can be used by the GMMA project.

and socioeconomic vulnerabilities of the region's population and socio-economic support systems, to geologic/seismic and meteorological threats, including those brought on by climate change.

Under this output, the project will conduct a Vulnerability &Adaptation (V &A) assessment of the GMMA areas using climate scenarios. For example, it will do a V&A analysis which is risk-based, for 2020 and 2050. The Philippines has identified climate change adaptation as a major priority and is taking an anticipatory stance, which would require systematic interventions by the GoP. A re-examination of all land use, development and sectoral investment plans, including for Metro Manila and immediate environs, will be undertaken.

The hazard and risk maps that will be produced for the GMMA areas will use the methodologies adopted in the READY project. The quantitative risk assessment tool has already been developed and continues to be refined in other complementary projects. The imperative for Metro Manila and surrounding environs to produce the risk analysis because of Ondoy and the more recent typhoons; as well as the new President's directive to fast track the process, becomes even more urgent. The country's planners and decision-makers working within the or with jurisdiction over the GMMA areas, need to have information on the multi-hazards, including the incremental metereological dangers from climate change. Climate change scenarios will be obtained from the Spanish-funded MDGF Joint UN Programme on Climate Change Adaptation project.

Even if considered less than perfect information, currently available data and information that can be immediately culled plus those that can be produced from the risk assessment/Vulnerability & Adaptation (V&A) process, can serve to provide a solid empirical basis for those needing to take urgent management decisions that will save lives and forestall the economic costs of disasters, especially the metereologically induced/related ones.

The project shall do V&A assessment of the GMMA areas using climate scenarios. For example, it will do a V&A analysis which is risk-based, for 2020 and 2050. The Philippines has identified climate change adaptation as a major priority and is taking an anticipatory stance, which would require systematic interventions by the GoP. A re-exmination of all land use, development and sectoral investment plans, including for Metro Manila and immediate environs will be undertaken.

In the context of **Output 3**, the possible impacts and probability of occurrence of these risks in targeted future scenarios, are important to determine. Hence, the vulnerability analysis to be produced by this Output will take into consideration the climate change projections for 2020 and 2050 resulting from PAGASA's downscaling of the results of the global circulation models.

Risk maps involving the multi-hazards will be produced and user friendly documentation (e.g. Handbook on the Valley Fault System) will also be generated for use in achieving **Output 2**. The Rapid Earthquake Damage Assessment System (REDAS) will be further developed and used as an integrating risk assessment tool.

The short term goal is to use REDAS as a tool for enabling a more scientifically based contingency planning for Metro Manila and to immediately enable the mainstreaming of hazard data into land use and development planning. The medium term goal is to transform REDAS into a tool that would enable probabilistic risk assessment for disaster risk reduction and climate change adaptation purposes. REDAS is not being depended on for doing the vulnerability assessment for this Project. The data, however, and the risk assessment process, which will also look at and use simple impact models, will be used for enhancing REDAS to enable it to become a risk assessment tool by the end of the project. The preference for REDAS as a tool to mainstream hazard and risk data in the planning process is because it is already being used by LGUs subjected to multi-hazard mapping under the READY Project. The multi-hazard maps are already

¹² Climate scenarios downscaled from the global circulationmodels have been produced at national and provincial levels for baseline, 2020 and 2050.

being incorporated into it, as a platform for hosting hazard and risk maps required of a multihazard risk assessment tool. Spatial parameters needed for the analysis, no matter what the hazard, will already be in one place, i.e. REDAS. The other advantage is, it is locally developed by national experts and can be further developed using local expertise, ensuring sustainability. The exposure database within REDAS is being developed in a manner that it can also be used for other hazards. At the same time, there is already a significant number of REDAS users (and still growing) in many Philippine provinces and institutions. As the development will be modular and incremental, the development process will necessarily be integration, with the different hazards having their own data bases and impact models factored into the system.

Output 1 will also be the basis for generating systematically, the disaster/climate risk reduction/management measures for GMMA, the top two indicative actions (Contingency Planning and Strengthening of the regional DRM Coordinating Mechanism) of which will already be produced under **Output 2.**

In view of the highly unexpected Ondoy flooding experience, the Metro Manila LGUs clamoured for assistance in enhancing their preparedness capacities to forestall the disastrous effects of natural hazards through such measures as early warning systems and contingency planning. **Output 2** is, therefore, the response to that demand by helping GMMA LGUs and their constituencies, enhance their capacities to develop and implement priority mitigating measures such as community-based early warning systems; individual and integrated contingency plan(s) and their implementing protocols; intensive information, education and communication (IEC) campaigns to increase awareness and know-how of the general GMMA populace; and, enhancement/ strengthening of structures as result of rapid structural assessments, especially in the context of the MMEIRS recommendations.¹³

The CBEWS will be piloted¹⁴ in strategic areas throughout GMMA for floods/flashfloods¹⁵, landslides¹⁶ and tsunami¹⁷. Intensive IEC) campaign, including drills and rapid assessments of the integrity of structures¹⁸ to withstand the earthquake scenarios produced under the Metro Manila Earthquake Impact ReductionReduction Study (MMEIRS) will also be components of this output. Noting the apparent inadequacy in coordinating capacities in times of emergencies such as in the case of Ondoy, this ProjectProject will also work for the strengthening of capacities (including standard operating procedures) of the designated GMMA DRM Coordinating body.¹⁹

Similar to the READY Project, the early warning systems to be established are not cost intensive and will not require sophisticated, costly instrumentation. Simple and even home grown monitoring instruments will be used such as rain gauges. A criterion for selecting pilot sites for CBEWS is the willingness of the LGU and community to host and maintain the system. The concerned LGU will have overall accountability for the CBEWS while operation and maintenance will be the responsibility of the host community. The national agency with corresponding mandate for the hazard, e.g. PHIVOLCS for earthquake and tsunami, PAGASA for flooding and typhoons and MGB for rain induced landslides, will provide technical assistance for the establishment of the

¹³ This process will be iterative, with the design and implementation strategies to be further refined when the detailed results of the V&A study in Output 1 becomes available. In doing these, the Project will work not only with mandated agencies but with relevant professional associations and civil society organizations.

¹⁴ Project will only be able to defray the cost of piloting in a few priority areas but will encourage/assist LGUs which already want to put in place their own CBEWS. It will also take into consideration plans of other projects like the KOIKA supported EWS project.

¹⁵ In river systems such as the San Juan River Basin, Las Pinas-Paranaque River System, Taguig-Pateros River System, Navotas-Malabon -Valenzuela River system, Pasig River System, and the Marikina River system.

¹⁶ e.g. for Rizal and Bulacan.

¹⁷ In pilot sites in Metro Manila.

¹⁸ Optional; dependent on budget availability. Implementation strategy will also be dependent on who will undertake the assessments, i.e.

¹⁹ Currently the Metro Manila Disaster Coordinating Council (MMDCC). This will be changed to Metro Manila Disaster Risk Reduction and Management Council (MMDRRMC) with the operationalization of RA 10121 - the new National Disaster Risk Reduction and Management law.

systems, including training for those who will operate these. The maintenance plans for CBEWS will be drawn up by LGUs with technical assistance from relevant CSCAND agencies. A Memorandum of Agreement (MOA) between the relevant CSCAND agency and the host local government will be forged to bind them to this responsibility.

Output 3 will be a showcase of the enhanced competencies of key players (LGU planners and disaster risk managers, representatives of concerned professional associations, academics, civil society organizations, community leaders) on DRM/CRM, especially mainstreaming in local planning and regulatory processes by systematically conducting a capacity assessment, developing and implementing a competency development programme and ensuring that the elements of this programme are mainstreamed into the formal education sector as well as, taken up by capacity development programmes of concerned training institutions and professional associations for sustainability. This will be undertaken by engaging with the Department of Education, academic institutions associations, and training institutions towards influencing curriculum and developing training modules on disaster and climate risks management.

Output 4 will be a demonstration of the application of the competencies developed under output 3 by catalyzing the development of DRM/CRM enhanced local land use and development plan(s) at the LGU and regional (GMMA) level. It will also showcase regulatory processes (e.g. EIA/development permitting) with enhanced DRM/CRM features.

Output 4, together with Output 2, will additionally be the hub for policy development where Outputs 1 and 3 will be considered and deliberated for translation into policy instruments (policy issuances like guidelines, rules and regulations, local ordinance, etc..)

Output 5 will set up a system of capturing information and knowledge on DRM/CRM from which stakeholders can draw and contribute evolving climate adaptation and risk reduction options, to be complemented by a dynamic Community of Practice to continually enrich the process of knowledge sharing.

Ensuring Complementation, Establishing Linkages & Developing Synergies

Pursuant to the Accra Agenda on donor harmonization, the CSCAND-GMMA DRM Project will work closely with and complement other related initiatives in the GMMA. Any overlaps will be avoided and possible duplication adequately addressed. A system of complementation has been drawn up such that the resources for both are maximized for developing the coping capacities of Metro-Manila and immediate environs to disaster, including climate change risks.

- 1. Pilot urban reconstruction program of AusAID Special attention will be provided to the program being designed by the Australian Government and being explored with the City Government of Taguig on pilot urban reconstruction. The program's components on risk analysis, comprehensive land use planning, and community-based disaster risk management are relevant to the CSCAND-GMMA DRM Project. Complementation should therefore be ensured.
 - a. Risk Analysis Project This activity focuses on enhancing knowledge and skills of NDRRMC-CSCAND on earthquake, flood, and tropical cyclone severe wind risk analysis. This will generate light detection and ranging (LiDAR) survey/dataset for GMMA; develop exposure and vulnerability information; and undertake information, education and communication (IEC) activities for LGUs and communities on use risk information for their comprehensive land use and contingency plans. The outputs of this activity will be available after three years, and therefore would be useful in the next iteration of local plans. The GMMA READY Project responds to the directive of President Aquino for updated information on hazards and revised comprehensive land use and disaster action plans. Using the READY Project methodology, currently

available hazard information and climate scenarios²⁰, this project will undertake vulnerability assessment and identify climate change adaptation options for the updating of comprehensive land use and contingency plans. Hazard characterization and mapping will be prioritized for Taguig City.

- b. Comprehensive land use planning This activity and the GMMA READY Project will draw on the methodology and results of the AusAID-NEDA-UNDP Project "Integrating DRR-CCA into Local Development Planning and Decision-Making Processes." Under the GMMA READY Project, development planners of Taguig City will be included in technical assistance for Metro Manila LGUs in preparing comprehensive land use plan (CLUP). The comprehensive land use planning activity of AusAID and Taguig City will recommend improvements and provide capacity building for the City Planning and Development Office to better prepare the city for the next iteration of CLUP using risk analysis information generated under the Risk Analysis Project.
- c. Community-based disaster risk management –This activity will be implemented by the Philippines Red Cross and Taguig City in collaboration with NDRRMC-Office of Civil Defense. It will reinforce the "auxiliary to the government" mandate of PRC by bringing together efforts of PRC and NDRRMC at the community level. This activity will cover communities located in hazard areas which are hosting families that are potential beneficiaries of the proposed socialized housing activity of AusAID. The GMMA READY Project tackles the broader need of the government and Metro Manila on early warning, and will support GMMA LGUs in preparing contingency plans. The Project will collaborate with PRC in ensuring support to Taguig City are complementary.
- 2. Collaboration with the Australia-Philippines Technical Linkages Program, and Enhancing Risk Analysis Capacities of Philippine Technical Agencies, will be encouraged, as appropriate. Australian agencies have capacities on natural hazard risk analysis, cyclone forecasting, vulnerability assessment, and climate change scenario, among others, which could be shared with the Philippines. In the same way, Philippine agencies can also share with Australian agencies innovations and lessons from the implementation of key DRM and climate change initiatives, as well as experiences in forging innovative partnerships.
- 3. There will be complementation with the Canadian International Development Assistance (CIDA)-UNDP project "Building Community Resilience and Strengthening Local Government Capacities for Recovery and Disaster Risk Management." This project aims to incorporate disaster risk reduction concerns into the overall governance regime of Metro-Manila, particularly in the cities of Marikina and Pasig and the municipality of Cainta. It will focus on social mobilization to better prepare these LGUS to participate to the GMMA READY Project. Activities supported through CIDA are: (i) capacity assessment on community-based vulnerability assessment; (ii) development and conduct of customized training modules; (ii) collection of data for hazard mapping, and (iii) conduct of study tours and workshops (i.e., on gender-responsive DRM, policy development and planning).
- 4. The World Bank is also preparing a Master Plan on Flood Control Mitigation for Metro Manila, which will include an analysis of the early warning system for Metro Manila. The GMMA READY Project will consider, as appropriate, relevant recommendations (as discussed with GOP) arising from the master plan.
- 5. The GMMA READY Project will also work with other projects which may come on stream such as the KOIKA-supported early warning system, which will establish: (i) seven automatic weather stations; (ii) five water level gauging stations with video monitors for rainfall and flood forecasting system including control; (iii) 20 warning posts along the Marikina River; and (iv) maintain c.) a maintenance program of vehicles and patrol cars.

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²⁰ Spanish Government - UN Millennium Development Goals Fund supported project on Strengthening Institutional Capacity on Mainstreaming Climate Change Adaptation in Development Planning.

Employing the national execution modality through a network of national and regional/local implementers and in tandem with partners like AusAID, project results are envisioned to be mainstreamed in a more systematic and sustainable manner into the relevant national and local processes.

AusAID was specifically sought as a partner given the established partnership with GOP agencies (i.e., NDRRMC-CSCAND, NEDA and CCC among others) in the implementation of key DRM activities and the potential technical contribution (i.e., on natural hazard risk analysis, cyclone forecasting, vulnerability assessment and climate change scenarios, among others) that Australian government (through Australian technical agencies like Bureau of Meteorology and Geosciences Australia) could share with the country.

III. RESULTS AND RESOURCES FRAMEWORK

Intended Outcome as stated in the Country Programme Results and Resource Framework:

Key stakeholders are better able to manage environmental and natural resources and maintain sustainable development.

Outcome indicators as stated in the Country Programme Results and Resources Framework, including baseline and targets:

of ENR issues resolved/addressed favourably with consensus in shortened period of time vs. baseline; Development plans at national/local levels with enhanced ENR/sustainable energy/sustainable development focus.

Applicable Key Result Area (from 2008-11 Strategic Plan): Enhancing conflict and disaster risk management capabilities; Address increasing threats from climate change

Partnership Strategy: This project will be implemented in partnership with the Philippine Government (OCD/NDCC with PHIVOLCS, PAGASA,MGB,NAMRIA, CCC) and regional (subnational) (MMDA) and GMMA local government units (17 Metro-Manila LGUs, and the provincial governments of Rizal, Bulacan), the CSOs (e.g. Disaster Risk Reduction (DRR) NET, Philippine Network on Climate Change (PNCC)) and interested donors like AusAID, CIDA and professional organizations like Philippine Institute of Civil Engineers (PICE).

Project title and ID (ATLAS Award ID):

| INTENDED OUTPUTS | OUTPUT TARGETS FOR (YEARS) | INDICATIVE ACTIVITIES | RESPONSIBLE PARTIES | INPUTS |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Output 1: Disaster/climate risk vulnerabilities of GMMA assessed. Baseline: MMEIRS Study; Initial National Communication on Climate Change Indicators: # of risk maps and V and A reports produced for GMMA. | Targets (year 1) 1.1. Consolidated multi-hazard data/information, climate scenarios (baseline,2020,2050) and disaggregated socio-economic data sets for GMMA 1.2. Flood, landslide and storm surge hazard/risk maps for GMMA 1.3 Updated seismic risk map(s) for GMMA 1.3 Initial Vulnerability Assessment report for GMMA. 1.4. Geomorphic Impact models (Floods, LS and SS) developed for GMMA | Assessment of disaster/climate risk vulnerabilities of GMMA Consolidate multi-hazard data/information, climate scenarios (baseline, 2020, 2050) and disaggregated socio-economic data sets for GMMA Prepare flood, landslide and storm surge hazard/risk maps for GMMA Prepare updated seismic risk map(s) Conduct vulnerability assessment Develop flood, LS,SS impact models Develop Handbook on the Valley Fault System (1:10k) Develop REDAS as a risk assessment software | OCD, CSCAND agencies | Sub-contracts/ Consultants Additional (Contractor) Surveyors/ Data Encoders Mapping Supplies Transport Equipment Travel Costs Printing Costs Consultation/Meeting Miscellaneous |

²¹ In the course of this development work, consideration of risk data produced from the Risk Analysis Project will be made, to be reflected in a possible options paper, noting that the vulnerability and adaptation analysis to be done under this project will use future climate scenarios generated by the PAGASA

| INTENDED OUTPUTS | OUTPUT TARGETS FOR (YEARS) | INDICATIVE ACTIVITIES | RESPONSIBLE PARTIES | INPUTS |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|
| Output 2: Priority disaster/climate risk mitigation actions for GMMA developed and implemented. Baseline: FCOS ²² in place. Indicators: % increase over baseline in # of CBEWS established and operational in priority sites% increase over baseline in preparedness capacity of GMMA by end of project. | Targets (year 2) 1.5 Handbook on the Valley Fault System (1:10k) Targets (year3) 1.6 REDAS developed and adopted as a risk assessment tool by the concerned users.) ²¹ 1.5 Transition Paper outlining options on complementing the CSCAND-GMMA data with the GA risk analysis data. Early Warning Systems Targets (year 1) 2.1.Community based early warning systems (CBEWS) for FF ²³ ,LS, established in priority sites and corresponding monitoring teams trained. 2.3 New advisory system for flooding designed and tested Targets (year 2) 2.4 CBEWS for tsunami and SS established and monitoring teams trained. 2.5 Piloted advisory system for flooding evaluated and results submitted to national/regional coordinating mechanisms, for consideration. | 2. Development of Priority disaster/climate risk mitigation actions for GMMA Develop CBEWS for FF,LS, tsunami and SS in priority sites Train and mobilize CBEWS monitoring and maintenance teams Design and test a national advisory system for flooding Establish and operationalize GMMA Coordination mechanism for disaster preparedness and response Formulate, test and adopt GMMA Integrated Contingency Plan Formulate, test and adopt individual Contingency Plan(s) for 17 GMMA LGUs | OCD, CSCAND agencies ²⁴ , MMDA, GMMA LGUs, | Sub-contracts/ Consultants Supplies Equipment Travel Costs Printing Costs Consultation/Training/ Meeting Miscellaneous |

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²² Refers to "Effective Flood Control Operation System" which was set up to mitigate flooding of the Pasig-Marikina River since 1993.

Will be coordinated and harmonized closely with the work and target(s) of the KOIKA-supported project and AusAID community-based disaster risk management activity with PRC in Taguig City.

²⁴ PHIVOLCS, PAGASA, NAMRIA, MGB. Other agencies will be brought in as RP(s), as the need arises.

| INTENDED OUTPUTS | OUTPUT TARGETS FOR (YEARS) | INDICATIVE ACTIVITIES | RESPONSIBLE PARTIES | INPUTS |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| | Contingency Planning Targets (year 1) 2.6 GMMA Coordination mechanism for disaster preparedness and response established 2.7 Draft GMMA Integrated Contingency Plan formulated and tested 2.8 Individual Contingency Plan(s) for 50% of the GMMA LGUs formulated. Targets (year 2) 2.9 Contingency Plan(s) for the remaining 50% of the GMMA LGUs formulated. 2. 10 All CPs of all GMMA LGUs tested 2.11 Final GMMA Integrated Contingency Plan adopted incl. protocols for updating and conduct of drills | | | |
| Output 3: Competencies of GMMA LGUs and critical partners (NGAs ²⁵ , academe, professional associations) to mainstream DRM/CRM into local planning and regulatory processes enhanced. Baseline: Some LGUs with competency on preparedness and response but not on DRR in general. | Targets (Year 1) 3.1 Capacity assessment report 3.2 Competency development programme for GMMA LGUs, partner academic/training institutions and professional associations (e.g. PICE) designed and tested. ²⁶ | 3. Competency Development for GMMA LGUs and critical partners (academe, professional associations) to mainstream DRM/CRM into local planning and regulatory processes. • Conduct capacity assessment of concerned sectors and institutions • Develop and implement the DRM/CRM competency development programme for GMMA | OCD and CSCAND agencies, CCC, Select academic and training institution(s) ²⁸ and professional associations, e.g. PICE | Sub-contracts/ Consultants Supplies Equipment Travel Costs Printing Costs Consultation/Training/ |

²⁵ Concerned sectoral agencies represented at the GMMA level plus CSCAND agencies like PAGASA, PHIVOLCS, MGB, NAMRIA
²⁶ Will take into consideration the CD program developed under the MDGF UN Joint programme on climate change adaptation

| INTENDED OUTPUTS | OUTPUT TARGETS FOR (YEARS) | | INDICATIVE ACTIVITIES | RESPONSIBLE PARTIES | INPUTS |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|------------------------------------------------------------------------------------------------------------------------|
| Indicators: % increase over baseline competency of LGUsand partners(including sectoral and risk agencies) on mainstreaming DRM/CRM into GMMA planning and regulatory processes. | Targets (Year 2) 3.3 120 ²⁷ LGU planners, academic professionals, professional association representatives trained on DRM/CRM mainstreaming Targets (Year 3) 3.4 120 LGU planners, academic professionals, representatives of relevant professional associations trained on DRM/CRM mainstreaming | • | Evaluate implementation of the DRM/CRM competency development programme for GMMA | | Meeting Miscellaneous |
| Output 4: DRM/CRM mainstreaming demonstrated in local land use/development plan(s) and regulatory processes of Metro Manila and other select GMMA LGUs. Baseline: Existing land use/development plans do not reflect disaster/climate risks and risk management options. Indicator(s): % increase over baseline of plans/regulatory processes exhibiting risk based strategies. | Targets (Year 1) 4.1 Review of existing land use and development plans and relevant regulatory processes for Metro Manila, including relevant planning guidelines. 4.2 Criteria set and LGU pilot sites for DRM/CRM mainstreaming selected. Targets (Year 2) 4.2 Baseline plans and existing regulatory processes DRM/CRM enhanced using the V&A results of output 1. Targets (Year 3) 4.3 DRM/CRM enhanced plans and regulatory processes adopted through relevant policy issuances. | in | Demonstration of DRM/CRM mainstreaming plans/regulatory processes of Metro Manila d select GMMA LGUs. Criteria setting and site selection of pilot LGUs for mainstreaming. Enhancement of plans and regulatory processes of selected LGUs and Metro Manila using the V&A results of Output 1. Development and passage of policy issuances adopting enhanced plans and regulatory processes. | MMDA, HLURB, Select GMMA LGUs, LLDA, EMB | Sub-contracts/ Consultants Supplies Equipment Travel Costs Printing Costs Consultation/Training/ Meeting Miscellaneous |

²⁷ 2 representatives for each target group; 4 training per year Will be tapped to conduct the trainings.

| INTENDED OUTPUTS | OUTPUT TARGETS FOR (YEARS) | INDICATIVE ACTIVITIES | RESPONSIBLE PARTIES | INPUTS |
|------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|---------------------------------------------------------------------------|
| Output 5 D/CRM Knowledge Management System/ Community of Practice established Baseline: Integrated disaster/climate risk management and andCoP non- | Target (Year 1) 5.1 KM/CoP Design(s) Target (Year 2) 5.2 KM/CoP piloted | Design of a DRM/CRM knowledge management platform/system and Community of Practice Piloting of the KM/CoP Institutionalizing the KM/CoP. | CCC, Select academic institution(s) | Sub-contracts/ Consultants Supplies Equipment Travel Costs Printing Costs |
| existent for GMMA. Indicator(s): Integrated disaster/climate risk management and CoP in place and operational by end of project. | Target (year 3) 5.3 KM/CoP fully operational and institutionalized. | | | Consultation/Training/ Meeting Miscellaneous |

IV. ANNUAL WORK PLAN

Year One:

| EXPECTED OUTPUTS | PLANNED ACTIVITIES | | TIMEF | RAME | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|----|-------|------|----|----------------------|
| And baseline, indicators including annual targets | List activity results and associated actions | Q1 | Q2 | Q3 | Q4 | RESPONSIBLE PARTY |
| Output 1: Disaster/climate risk vulnerabilities of GMMA assessed. | Assessment of disaster/climate risk vulnerabilities of GMMA | | | | | OCD, CSCAND agencies |
| Baseline: MMEIRS Study; Initial National Communication on Climate Change | Consolidate multi-hazard data/information, climate scenarios (baseline,2020,2050) and disaggregated socio-economic data sets for GMMA | | | | | |
| <i>Indicators</i> : # of risk maps, exposure information and V&A reports produced for GMMA. | Prepare flood, landslide and storm surge hazard/risk maps for GMMA | | | | | |
| | Prepare updated seismic risk map(s) for GMMA Conduct vulnerability assessment for GMMA | | | | | |
| Targets: 1.1. Consolidated multi-hazard data/information, climate scenarios (baseline, 2020, 2050) and disaggregated socio-economic data sets for GMMA | Develop geomorphic flood, LS,SS impact models for GMMA | | | | | |
| 1.2. Flood, landslide and storm surge hazard/risk maps for GMMA | | | | | | |
| 1.3 Updated seismic risk map(s) for GMMA1.3 Initial Vulnerability Assessment report for GMMA. | | | | | | |
| 1.4. Impact models (Floods, LS and SS) developed for GMMA | | | | | | |
| Related CP outcome: Key stakeholders are better able to manage the country's environment and natural resources, develop and use sustainable energy sources, cope with the impacts of environmental emergencies and maintain sustainable development. | | | | | | |

| EXPECTED OUTPUTS | PLANNED ACTIVITIES | | TIMEFRAME | | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|-----------|----|----|----------------------------------------|
| And baseline, indicators including annual targets | List activity results and associated actions | Q1 | Q2 | Q3 | Q4 | RESPONSIBLE PARTY |
| Output 2: Priority disaster/climate risk mitigation actions for GMMA developed and implemented. Baseline: FCOS in place. Indicators% increase over baseline in # of CBEWS established and operational in priority sites; % increase over baseline in preparedness capacity of GMMA by end of project. Targets (year 1) Early Warning Systems 2.1. CBEWS for FF, LS, established in priority sites and corresponding monitoring teams trained. 2.3 National advisory system for flooding designed and tested Contingency Planning 2.6 GMMA Coordination mechanism for disaster preparedness and response established 2.7 Draft GMMA Integrated Contingency Plan formulated and tested 2.8 Individual Contingency Plan(s) for 50% of the GMMA LGUs formulated. | Development of Priority disaster/climate risk mitigation actions for GMMA Develop CBEWS for FF,LS, in priority sites Train and mobilize CBEWS monitoring and maintenance teams Design and test a national advisory system for flooding Mobilize the GMMA Coordination mechanism for disaster preparedness and response Formulate, test and adopt GMMA Integrated Contingency Plan Formulate, test and adopt individual Contingency Plan(s) for 9 GMMA LGUs | | | | | OCD, CSCAND agencies, MMDA, GMMA LGUs, |

| EXPECTED OUTPUTS | PLANNED ACTIVITIES | | TIME | RAME | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|------|------|----|-----------------------------------------------------------------------------------------------------------------------|
| And baseline, indicators including annual targets | List activity results and associated actions | Q1 | Q2 | Q3 | Q4 | RESPONSIBLE PARTY |
| Output 3: Competencies of GMMA LGUs and critical partners (NGAs, academe, professional associations) to mainstream DRM/CRM into local planning and regulatory processes enhanced. Baseline: Some LGUs with competency on preparedness and response but not on DRR in general. Indicators: % increase over baseline competency of LGUs and partners (including sectoral and risk agencies) on mainstreaming DRM/CRM into GMMA planning and regulatory processes. Targets (Year 1) 3.1 Capacity assessment report 3.2 Competency development programme for GMMA LGUs, academic institutions and professional associations designed and tested. | Competency Development for GMMA LGUs and critical partners (academe, professional associations) to mainstream DRM/CRM into local planning and regulatory processes. Conduct capacity assessment of concerned sectors and institutions Develop and implement the DRM/CRM competency development programme for GMMA | | | | | OCD and CSCAND agencies, CCC, Select academic and training institution(s) ²⁹ and professional associations |

²⁹ Will be tapped to conduct the trainings.

| EXPECTED OUTPUTS | PLANNED ACTIVITIES | | TIMEF | RAME | | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------|------|----|------------------------|-------------------------------------|
| And baseline, indicators including annual targets | List activity results and associated actions | | Q2 | Q3 | Q4 | RE | ESPONSIBLE PARTY |
| Output 4: DRM/CRM mainstreaming demonstrated in the land use/development plan(s) and regulatory processes of Metro Manila and other selected GMMA LGUs. 30 Baseline: Existing land use/development plans do not reflect disaster/climate risks and measures. Indicators: % increase over baseline of plans/regulatory processes exhibiting risk based strategies. Targets (Year 1) 4.1. Assessment report on DRM/CRM mainstreaming entry points for existing land use/ development. plans and regulatory processes for Metro Manila. 4.2. Selected LGU pilot sites for DRM/CRM mainstreaming in accordance with set criteria. | 4. Demonstration of DRM/CRM mainstreaming in plans/regulatory processes of Metro Manila and other selected GMMA LGUs. • Develop criteria and select pilot LGUs other than Metro Manila for DRM/CRM mainstreaming. • Review existing Metro Manila RPFP/RDP and selected GMMA LGUs'CLUPs/development plans /regulatory processes and relevant guidelines for DRM/CRM mainstreaming/enhancement. | | | | | MMDA, HLI LLDA, EMB | URB, Select GMMA LGUs, |
| Output 5 Knowledge Management System/ Community of Practice on DRM/CRM institutionalized. Baseline: Integrated knowledge management system and CoP on DRM/CRM non-existent for country and GMMA, in particular. Indicators: Integrated KM system and CoP on DRM/CRM in place and operational by end of project. Targets (Year 1) 5.1 KM/CoP Design(s) finalized. | 5. Development of a DRM/CRM knowledge system and Community of Practice • Design of a DRM/CRM knowledge management platform/system and Community of Practice | | | | | | CCC, Select academic institution(s) |

Regional Physical Framework Plan (RPFP)

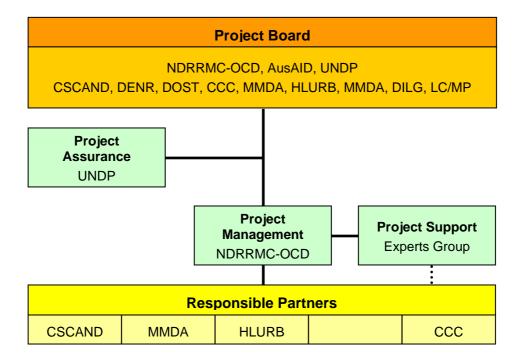
V. MANAGEMENT ARRANGEMENTS

The implementation of this project will be governed by a Memorandum of Understanding among NDRRMC, UNDP and AusAID that articulates their shared commitment in supporting disaster risk management and climate change agenda in the Philippines, and partnership arrangement in project implementation.

A. Organizational Structure

Project implementation will be a collaborative endeavour between and among a number of national and sub-national agencies, local government units and civil society organization(s). The Implementing Agency with over-all responsibility for the timely and cost-effective implementation of project activities is the Office of Civil Defense (OCD), on behalf of the NDRRMC. The Metro Manila Development Authority (MMDA), the Department of Science and Technology through its Philippine Institute of Volcanology and Seismology (PHIVOLCS) and the Philippine Atmospheric, Geosciences and Astronomical Services Administration (PAGASA); the Department of Environment and Natural Resources (DENR) through its Mines and Geosciences Bureau (MGB) and National Mapping and Resource Information Authority (NAMRIA); as well as the Climate Change Commission (CCC); Housing and Land Use Regulatory Board (HLURB); and National Economic Development Authority (NEDA) will act as Responsible Parties (RPs). The Department of the Interior and Local Government (DILG), League of Cities/Municipalities of the Philippines (LC/MP), Environmental Management Bureau (EMB) and the Laguna Lake Development Authority (LLDA) will also be engaged. The Project's organizational structure is depicted below.

Project Organization Structure



The Project Board (formerly the Project Executive Group/Project Steering Committee/Tripartite Committee) will be responsible for making management decisions for the project by consensus, when guidance is required by the Project Manager. This group is consulted by the Project Manager for decisions when PM tolerances (normally in terms of time and budget) have been exceeded.

The Project Board will convene at least twice a year (or as needed on a quarterly basis) with one meeting dedicated for an Annual Review to review the project performance and approve

project annual (or as the case maybe, quarterly) plans and authorize any major deviation from approved annual/quarterly plans. It is the authority that signs off the completion of each annual/quarterly plan as well as authorizes the start of the next annual/quarterly plan.

The Project Board, which will perform oversight functions and will be chaired by the NDRRMC-OCD. Members will include: AusAID, UNDP, CCC, NEDA, MMDA, DILG, DOST, DENR, HLURB, and the LC/MP. .CIDA will also be invited to the Project Board to ensure complementation and harmonization of activities and results.

The Project Assurance (PA) is the responsibility of each Project Board member; however, the role is delegated to UNDP. The PA role supports the Project Board by carrying out objective and independent project oversight and monitoring functions, and ensures that appropriate project management milestones are managed and completed.

The NDRRMC-OCD as the Implementing Partner (IP) is fully responsible and accountable for managing the project, achieving each component outputs, and for the effective use of project resources. This must be done following effective process and financial management practices. Specifically, the Implementing Partner shall approve and sign the Annual Work Plan (AWP) for the following year; approve and sign the Combined Delivery Report (CDR) at the end of the year; and sign the Financial Report (FR) or the Funding Authorization and Certificate of Expenditures (FACE).

The Responsible Partner (RP) is identified based on an assessment of its technical, financial, managerial and administrative capacities that will be needed for the project by the Implementing Partner to undertake a particular component or activity of a project. The Implementing Partner shall, however, remain fully responsible and accountable to the Project Board in successfully implementing the project, including components it may assign to certain Responsible Parties. The identified Responsible Partners at this time are CSCAND agencies (PHIVOLCS, PAGASA, MGB, NAMRIA and OCD), MMDA, HLURB, CCC and NEDA.

The Project Manager has the authority to run the project on a day-to-day basis on behalf of the Project Board within the constraints laid down by the Board. The Administrator of the OCD or his designated representative is the Project Manager.

The Project Manager will also form a Project Support Team to provide project administration, management and technical support to the Project. The Project Support Staff will be composed of both organic technical staff from OCD and as necessary, additional staff to be hired through the Project.

Relatedly, an Experts' Group (EG) will be organized to assist the Implementing Partner firm up the methodologies, framework and strategies to be delivered under the Project. The EG will be the technical sounding board of the Project. It will be tapped to ensure technical soundness and logical consistency of outputs with current policies and programs on climate change and DRR. The EG will be composed of technical experts from key institutions from the planning and development agencies (OCD, MMDA, NEDA, HLURB, Leagues, select civil society organization(s)); and the scientific agencies working on disaster risk management and climate change (DENR-EMB, DENR-MGB, NAMRIA, DOST-PHIVOLCS, DOST-PAGASA).

B. Capacity Assessment of Implementing and Responsible Partner(s)

The Implementing Partner, OCD, has high institutional capacity on disaster management and medium (but growing) capacity on disaster risk management. It also has an increasing project management capacity, specifically for DRM projects, being currently the implementing agency for a number of UNDP assisted, AusAID funded projects such as the multi-hazard mapping project, READY and the ADB-UNDP project on the Disaster Risk Management Framework formulation; the formulation of the Strategic National Action Plan (SNAP) on disaster risk reduction and many

others assisted by bilaterals like the Japan International Cooperation Agency (JICA), the World Bank and NGOs like the Asian Disaster Preparedness Center (ADPC).

Contemplated Responsible Partners (RPs) like PHIVOLCS has high competency in mapping seismic hazards but medium capacity in assessing risks. The same is true for PAGASA, which has competency to downscale global climate modelling results but inadequate analytical competency on extreme climate events. The MGB has high competency to map meteorologically triggered geologic hazards like rain-induced landslides but low capacity to undertake probabilistic risk assessment and risk-based mapping. NAMRIA is the country's mapping authority and has high technical capacity for base mapping but inadequate operational capacity, lacking in state of the art mapping equipment and mapping technologies. MMDA has adequate operational capacity to engage in response but low technical capacity for mainstreaming DRM/CRM into the region's land use, development and regulatory processes. The CCC and NDRRMC are mandated to implement the new Climate Change Act and Disaster Risk Reduction and Management Council, respectively, and to jointly come up with a framework on disaster risk reduction (DRR) and climate change adaptation (CCA). Both are new bodies and requested AusAID for policy support to come up with the DRR-CCA framework, and prepare corresponding national and local action plans. The NEDA is the central planning agency of the country mandated to set national and sub-national policies and guidelines on socioeconomic and physical development. It has high policy and planning capacity and is leading by learning and on-the-job the integration of DRR-CCA in development and land use planning, which is supported by AusAID through UNDP. The HLURB is mandated to develop guidelines on preparing comprehensive land use plan (CLUP) and ensure LGUs prepare and regularly update their plans. It currently works with NEDA in developing supplemental guidelines to integrate DRR-CCA into CLUP. Lastly, the MMDA has mandate over socio-economic and physical development of Metropolitan Manila. It needs institutional capacity building on land use planning and is open to working with NEDA on this.

The mandates, roles and responsibilities of the contemplated responsible partners and key stakeholders are provided in $\bf Annex~\bf A$.

VI. MONITORING FRAMEWORK AND EVALUATION

Project progress will be monitored according to UNDP rules and regulations with strong consideration given to AusAID's performance and quality reporting requirements. Quarterly and annual reviews are provided against a set of implementation milestones.³¹ Monitoring will be continuous, involving data collection and assessment of the project's field implementation and will involve key project staff meeting periodically to review operations and field implementation and to assess whether new priorities require a shift in the project's implementation. A monitoring and evaluation plan will be prepared for the project.

Indicators: Progressive indicators measuring processes, outputs, and outcomes have been included in the Results and Resources Framework (RRF). Indicators are both qualitative and quantitative.

Monitoring Project Progress – tools for monitoring the Project's timely completion, quality of the outputs and the efficient use of allotted resources (financial, human and physical) will include:

Within the annual cycle, on a quarterly basis

1. On a quarterly basis, a quality assessment shall record progress towards the completion of key results, based on quality criteria and methods captured in the Quality Management table below.

³¹ Strong consideration will be given to AusAID's performance and quality reporting requirements.

- 2. An Issue Log shall be activated in Atlas and updated by the Project Manager to facilitate tracking and resolution of potential problems or requests for change.
- 3. Based on the initial risk analysis submitted (see Annex 3), a risk log shall be activated in Atlas and regularly updated by reviewing the external environment that may affect the project implementation.
- 4. Based on the above information recorded in Atlas, a Project Progress Reports (PPR) shall be submitted by the Project Manager to the Project Board through Project Assurance, using the standard report format available in the Executive Snapshot.
- 5. A project Lesson-learned log shall be activated and regularly updated to ensure ongoing learning and adaptation within the organization, and to facilitate the preparation of the Lessons-learned Report at the end of the project.
- 6. A Monitoring Schedule Plan shall be activated in Atlas and updated to track key management actions/events.
- 7. Within the annual cycle, on a six-monthly basis, UNDP shall complete a Quality-at-Implementation (QAI) report for submission to AusAID.

Annually

- 1. Field visits. A representative each from the UNDP and AusAID office should visit the project at least once a year. Field visits serve the purpose of results validation, especially when undertaken in the first half of the year. If undertaken in the latter part of the year, the field visit should provide latest information on progress for annual reporting preparation. Field visits should be documented through brief and action-oriented reports, submitted within the week of return to the office.
- 2. Annual Review Report. An Annual Review Report shall be prepared by the Project Manager and shared with the Project Board and the Outcome Board. As a self-assessment by the project management, it does not require a cumbersome preparatory process. As minimum requirement, the Annual Review Report shall consist of the Atlas standard format for the PPR covering the whole year with updated information for each above element of the PPR as well as a summary of results achieved against pre-defined annual targets at the output level. As such, it can be readily used to spur dialogue with the Project Board and partners.
- 3. Annual Project Review. Based on the above report, an annual project review shall be conducted during the fourth quarter of the year or soon after, to assess the performance of the project and appraise the Annual Work Plan (AWP) for the following year. In the last year, this review will be a final assessment. This review is driven by the Project Board and may involve other stakeholders as required. It shall focus on the extent to which progress is being made towards outputs, and that these remain aligned to appropriate outcomes. Once cleared, key elements of the reports shall feed directly into the annual reporting exercise on results at the outcome level.
- 4. Within the annual cycle, on a six-monthly basis, UNDP shall complete a Quality-at-Implementation (QAI) report for submission to AusAID.

Audit and External Evaluation

5. The project will also be subject to at least one external management audit in accordance with established UNDP regulations.

- 6. The project will also be subject to at least one independent evaluation, i.e. mid-term review, to be conducted by an external team to assess progress on outputs/outcomes and identify areas for strategic, budgetary, or programmatic adjustments if necessary. This will comply with AusAID's quality principles in monitoring and evaluation.
- 7. Apart from the external audit mentioned above, the project is also subject to internal UNDP and AusAID spot-checks/audits.

At project completion (within 3 months after project completion)

1. The project's Terminal or Project Completion Report (PCR) will sum up the level of the project's accomplishments in meeting its objectives, outcomes and outputs. The PCR will also comply with AusAID's quality principles in monitoring and evaluation. The PCR will also highlight the breakthroughs and innovative contributions of the project in the field of coordination system development which are worth replicating in similar projects to be undertaken in other countries. It will also set out the strategies to efficiently managing resources;

Adaptive Management and Project Revisions

The monitoring framework and indicators will provide the project management with regular information on the project status. In addition, regular feedback will come from the Project Board. Collectively, this feedback will enable the project management to continuously learn lessons and modify approaches and strategies, and to overcome challenges and exploit opportunities.

Budget revisions/amendments to the contract will be done through a formal exchange of letters between UNDP and the Implementing Partner along with a revised Work and Financial Plan. Depending on the nature of the amendment, the proposed revision will be subject to AusAID processes and procedures.

The Project will address, as appropriate, cross-cutting issues on environment, disability, gender equality, child protection, anti-corruption, peace and conflict, counter-terrorism and anti-corruption. These will also be included, as appropriate, in the monitoring and evaluation and reporting plan.

Results from the Project will be disseminated within and beyond the Project intervention through information sharing networks, publications, and participation in local and international fora, among others. For all publications and advocacy activities, proper acknowledgement of UNDP and AusAID in a format, content, and manner satisfactory and acceptable to both parties will be ensured. A communications strategy will be prepared for the project.

Terminal Evaluation. An evaluation will be conducted at the end of the project to determine if the set outcome was achieved and to document lessons learned.

Quality Management for Project Activity Results

| OUTPUT 1: Disaster/climate risk vulnerabilities of GMMA assessed. | | | | | | |
|-------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|--|--|--|
| Activity Result 1 (Atlas Activity ID) | Assessment of disast | ter/climate risk vulnerabilities of GMMA Start Date: January 2011 End Date: June 2013 | | | | |
| Purpose | | To assess the risks and vulnerabilities faced by GMMA to multi-hazards, including those brought on by climate change. | | | | |
| Description | Consolidate multi-hazard data/information, climate scenarios (baseline,2020,2050) and disaggregated socio-economic data sets for GMMA Prepare flood, landslide and storm surge hazard/risk maps for GMMA | | | | | |
| | | I seismic risk map(s) for GMMA | CivilviA | | | |
| | | bility assessment for GMMA | | | | |
| | | S, SS impact models for GMMA | | | | |
| | | · • | | | | |
| | | ook on the Valley Fault System (1:10k) | | | | |
| | Develop REDAS | fully as a disaster/climate risk assessment so | oftware | | | |
| Quality Criteria Quality Method Date o | | | Date of Assessment | | | |
| | | | | | | |
| Multi-hazard risk maps and vulnerability assessment reports for all GMMA LGUs available by 2013 | | Surveys; Field monitoring; Independent Evaluations | Annual for surveys, field monitoring; Mid and End of project for evaluations | | | |

| OUTPUT 2: Priority of | OUTPUT 2: Priority disaster/climate risk mitigation actions for GMMA developed and implemented. | | | | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|--|--|--|
| Activity Result 2 (Atlas Activity ID) | | Development and implementation of priority disaster/climate risk mitigation actions for GMMA Start Date: January 2011 End Date: June 2013 | | | | |
| Purpose | · | ement priority mitigating measures such as cond integrated contingency planning. | mmunity-based early warning | | | |
| Description | Train and mobilizing Design and test Establish and operand response Formulate, test | S for FF, LS, tsunami and SS in priority sites ze CBEWS monitoring and maintenance team a national advisory system for flooding perationalize GMMA Coordination mechanism and adopt GMMA Integrated Contingency Plandadopt individual Contingency Plan(s) for 1 | for disaster preparedness | | | |
| Quality Criteria | Criteria Quality Method Date of Assessment | | | | | |
| CBEWS established and operational in critical priority sites by 2012. Operational Integrated Contingency Plan for GMMA available by 2011. | | Surveys; Field monitoring; Independent Evaluations | Annual for surveys, field monitoring; Mid and End of project for evaluations | | | |

| OUTPUT 3: Competencies of GMMA LGUs and critical partners (NGAs academe, professional associations) to mainstream DRM/CRM into local planning and regulatory processes enhanced. | | | | | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|
| Activity Result 3 (Atlas Activity ID) | (academo professional associations) to mainstream DRM/CPM | | | | | |
| Purpose | | To improve the capacities of local governments and critical partners (e.g. academe) to mainstream disaster/climate risk management into their comprehensive land use and local development plans, programmes and regulatory processes. | | | | |
| Description | Conduct capacity assessment of concerned sectors and institutions Develop and implement the DRM/CRM competency development programme for GMMA Evaluate implementation of the DRM/CRM competency development programme for GMMA | | | | | |

| Quality Criteria | Quality Method | Date of Assessment |
|-----------------------------------------------------------------------------------------------------------------|----------------------------------------------------|------------------------------------------------------------------------------------|
| Competency of GMMA LGUs and partners (including sectoral and risk agencies) on DRM/CRM enhanced by 30% by 2013. | Surveys; Field monitoring; Independent Evaluations | Annual for surveys, field monitoring; Mid and End of project for evaluations |

| | mainstreaming demonser selected GMMA LGU | strated in the land use/development plan(s) a | and regulatory processes of |
|-------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|------------------------------------------------------------------------------|
| Activity Result 4 (Atlas Activity ID) | | M/CRM mainstreaming in plans/regulatory Manila and other selected GMMA LGUs. | Start Date: January 2011 End Date: June 2013 |
| Purpose | To showcase mainstreaming of DRM/CRM measures in plans/regulatory processes of Metro Manila and select GMMA LGUs. | | |
| Description | Criteria setting and site selection of pilot LGUs for mainstreaming. Enhancement of plans and regulatory processes of selected LGUs and Metro Manila using the V&A results of Output 1. Development and passage of policy issuances adopting enhanced plans and regulatory processes | | |
| Quality Criteria | | Quality Method | Date of Assessment |
| DRM/CRM enhanced and development plan processes in place by | s/regulatory | Surveys; Field monitoring; Independent Evaluations | Annual for surveys, field monitoring; Mid and End of project for evaluations |

| Output 5: DRM/CRM Knowledge Management/ Community of Practice | | | |
|------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|------------------------------------------------------------------------------|
| | <u>, </u> | | |
| Activity Result 5 (Atlas Activity ID) | Development of a Community of Practic | DRM/CRM knowledge system and ce | Start Date: January 2011 End Date: June 2013 |
| Purpose | To consolidate and systematically share relevant DRM/CRM information and knowledge through a DRM/CRM knowledge system and Community of Practice. | | |
| Description | Design a DRM/CRM knowledge management platform/system and Community of Practice Pilot the KM system and CoP Institutionalize the KM and CoP | | |
| Quality Criteria | | Quality Method | Date of Assessment |
| Institutionalized DRM/CRM KM and CoP in place by end of project. | | Surveys; Field monitoring; Independent Evaluations | Annual for surveys, field monitoring; Mid and End of project for evaluations |

VII. LEGAL CONTEXT

This project document shall be the instrument referred to as such in Article 1 of the SBAA between the Government of the Philippines and UNDP, signed on ____ January 2011.

Consistent with the Article III of the Standard Basic Assistance Agreement, the responsibility for the safety and security of the executing agency and its personnel and property, and of UNDP's property in the executing agency's custody, rests with the executing agency.

The executing agency shall:

- a) put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the project is being carried;
- b) assume all risks and liabilities related to the executing agency's security, and the full implementation of the security plan.

UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of this agreement.

The executing agency agrees to undertake all reasonable efforts to ensure that none of the UNDP funds received pursuant to the Project Document are used to provide support to individuals or entities associated with terrorism and that the recipients of any amounts provided by UNDP hereunder do not appear on the list maintained by the Security Council Committee established pursuant to resolution 1267 (1999). The list can be accessed via http://www.un.org/Docs/sc/committees/1267/1267ListEng.htm. This provision must be included in all sub-contracts or sub-agreements entered into under this Project Document.

ANNEXES

Capacity Assessment: The summary of mandates of the Implementing Partner and Responsible Partners is attached as **Annex A.** A summary of the micro assessment result of the IP is attached as **Annex B.**

Risk Analysis. The risk log is attached as Annex C

Agreements. Any additional agreements, such as cost sharing agreements, memorandum of agreement/understanding, project cooperation agreements signed with NGOs³² (where the NGO is designated as the "executing entity") should be attached.

Terms of Reference: TORs for key project personnel will be developed by project start up.

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³² For GEF projects, the agreement with any NGO pre-selected to be the main contractor should include the rationale for having pre-selected that NGO.

Annex A. Roles and mandates of Implementing and Responsible Partners

| Agency Name | National Disaster Risk Reduction and Management Council |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mandate and Functions | Develop a NDRRMF which shall provide for a comprehensive, all-hazards, multi-sectoral, inter-agency and community-based approach to disaster risk reduction and management. The Framework shall serve as the principal guide to disaster risk reduction and management efforts in the country and shall be reviewed on a five-year interval, or as may be deemed necessary, in order to ensure its relevance to the times; Ensure that the NDRRMP is consistent with the NDRRMF; Advise the President on the status of disaster preparedness, prevention, mitigation, response and rehabilitation operations being undertaken by the government, CSOs, private sector, and volunteers; recommend to the President the declaration of a state of calamity in areas extensively damaged; and submit proposals to restore normalcy in the affected areas, to include calamity fund allocation; Ensure a multi-stakeholder participation in the development, updating, and sharing of a Disaster Risk Reduction and Management Information System and Geographic |
| | Information System-based national risk map as policy, planning and decision-making tools; 5. Establish a national early warning and emergency alert system to provide accurate and timely advice to national or local emergency response organizations and to the general public through diverse mass media to include digital and analog broadcast, cable, satellite television and radio, wireless communications, and landline communications; 6. Develop appropriate risk transfer mechanisms that shall guarantee social and economic protection and increase resiliency in the face of disaster; 7. Monitor the development and enforcement by agencies and organizations of the various laws, guidelines, codes or technical standards required by this Act; 8. Manage and mobilize resources for disaster risk reduction and management including the National Disaster Risk Reduction and Management Fund; 9. Monitor and provide the necessary guidelines and procedures on the Local Disaster Risk Reduction and Management Fund (LDRRMF) releases as well as utilization, accounting and auditing thereof; and 10. Develop assessment tools on the existing and potential hazards and risks brought about by climate change to vulnerable areas and ecosystems in coordination with the Climate Change Commission; 11. Develop vertical and horizontal coordination mechanisms for a more coherent implementation of disaster risk reduction and management policies and programs by sectoral agencies and LGUs; 12. Formulate a national institutional capability building program for disaster risk reduction and management to address the specific weaknesses of various government agencies and LGUs, based on the results of a biennial baseline assessment and studies; 13. Formulate, harmonize, and translate into policies a national agenda for research and technology development on disaster risk reduction and management; 14. In coordination with the Climate Change Commission, formulate and |
| | from which all policies, programs, and projects shall be based; 15. Constitute a technical management group composed of representatives of the abovementioned departments, offices, and organizations, that shall coordinate and meet as often as necessary to effectively manage and sustain national efforts on disaster risk reduction and management; 16. Task the OCD to conduct periodic assessment and performance monitoring of the member-agencies of the NDRRMC, and the Regional Disaster Risk Reduction and Management Councils (RDRRMCs), as defined in the NDRRMP; and 17. Coordinate or oversee the implementation of the country's obligations with disaster management treaties to which it is a party and see to it that the country's disaster management treaty obligations be incorporated in its disaster risk reduction and management frameworks, policies, plans, programs and projects |

| Agency Name | Office of Civil Defense-Department of National Defense (OCD-DND) |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mandate and Functions | The Office of Civil Defense is existing on the basis of Letter of Instructions No. 19 and Presidential Decree No. 1566. Its mandate emanates from Presidential Decree No. 1, series of 1972 as implemented by Letter of Instruction No. 19 of 1972. This law stipulates that during times of war and emergencies, the OCD is the principal agency responsible for coordinating the activities and functions of various government agencies and instrumentalities at all levels, including private institutions and civic organizations devoted to public welfare. This is to ensure that the facilities and resources of the entire nation may be utilized to the maximum extent for the protection and preservation of people's life |

and property.

The OCD, apart from being an attached bureau of DND, is also the operating arm and the secretariat of the National Disaster Coordinating Council (NDCC), which is the highest policy-making, coordinating and supervising body at the national level for disaster management in the country (Presidential Decree No. 1566 dated 11 June 1978). The same arrangement applies for the National Disaster Risk Reduction and Management Council with the passage of Republic Act 10121, the Philippines Disaster Risk Reduction and Management Act.

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

LOI 19 dated December 31, 1972 mandates the OCD to carry out the following functions:

- 1. Establish and administer a comprehensive national civil defense and assistance program;
- Formulate policies for the protection and welfare of the civilian population in time of war directly involving the Philippines or other national emergencies of equally grave character:
- Estimate the total material, manpower and fiscal requirements for carrying out the national civil defense and civil assistance program and allocate to the provinces, cities, municipalities and barangays such aid in facilities, materials and funds as may be made available from the national government;
- Develop and coordinate a program for informing, educating and training the general public and volunteer workers on civil defense and civil assistance measures and activities;
- 5. Furnish guidance to the various provinces, cities, and municipalities in the planning, organization and operation of their civil defense organizations:
- Advice the Secretary on matters concerning civil defense and make recommendations from time to time as may by deemed appropriate or as the Secretary may require; and Under PD 1566 dated 11 June 1978, OCD shall have the following additional functions:
 - a. Coordinate the activities and functions of the various agencies and instrumentalities of the National Government and private institutions and civic organizations to implement the policies set by the National Disaster Coordinating Council relative to Disaster Management;
 - b. Provide secretariat services to the National Disaster Coordinating Council;
 - c. Prepare and disseminate disaster control manuals and other publications related to measures on disaster prevention, control and mitigation; and
 - d. Advise the Chairman on matters concerning Disaster Management.
 - e. Perform such other functions as may be provided by law.

| Agency Name | Mines and Geosciences Bureau |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mandate and Functions | Directly in charge in the administration and disposition of the country's mineral lands and mineral resources; |
| | 2. Undertake geoscientific surveys and researches in the fields of land and marine geology, mining, mine environment, metallurgy, mineral economics, and mine geodetic surveys; |
| | 3. Recommends to the Secretary the granting of Mineral Agreements and endorses to the Secretary, for approval by the President, the granting of Financial or Technical Assistance Agreements (FTAA); |
| | 4. Provide laboratory and other technical services to the public and other government entities; |
| | Provide technical assistance to local government units in their performance of devolved functions on small-scale mining and quarry/sand and gravel mining operations; |
| | 6. Provide staff support and technical advisory to the Office of the Secretary on mining and geology matters; and |
| | 7. Acts as Secretariat to the Mines Adjudication Board (MAB). |

| Agency Name | National Mapping and Resource Information Agency |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mandate and Functions | As provided for in the Department of Environment and Natural Resources (DENR) |
| | Administrative Order No. 31, series of 1988, which prescribed the guidelines implementing Section 22 (a) of Executive Order 192, our organization is mandated to provide the public with map-making services and to act as the central mapping agency, depository, and distribution facility of natural resources data in the form of maps, charts, texts, and |
| | statistics. |

| Agency Name | National Mapping and Resource Information Agency |
|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | Four (4) technical departments are undertaking the networks of operation on map production and information generation. These are the Coast and Geodetic Surveys Department (CGSD), the M apping and Reprography Department (MRD), the Remote Sensing and Resource Data Analysis Department (RSRDAD), and the Information Management Department (IMD). |
| | The functions of the Coast and Geodetic Surveys Department (CGSD) are: (1) to acquire and analyse hydrographic and oceanographic data used for promoting navigational safety and oceanographic research. Outputs are nautical charts, navigational warnings, tide and current predictions, and (2) to establish and maintain a national geodetic control network to serve as common reference for all surveying and mapping activities in the country. |
| | As the sole agency of the government, NAMRIA with its Mapping and Reprography Department (MRD) produces, maintains and updates base maps that will serve as basic inputs in various development activities of the government, the academic and scientific community, and the private sector. |
| | These maps are produced based on data obtained from aerial photography and satellite imagery. |
| | The Remote Sensing and Resource Data Analysis Department (RSRDAD) is mandated to conduct land use assessment/evaluation and land classification. Its functions are: (1) to provide remote sensing services and vital data on the environment, land use, forestry, agriculture, water resources, coastal zone, among others, and (2) to conduct researches on remote sensing and GIS applications. |
| | The Information Management Department (IMD) works toward the sharing, transfer, exchange, packaging and dissemination of environment and natural resources data. It develops and maintains information systems and environment and natural resources databases for use not only within NAMRIA but also by outside clients. It also serves as the marketing arm of the agency for all its products and services. |

| Agency Name | Philippine Atmospheric Geophysical and Astronomical Services Administration (PAGASA) | |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Mandate and Functions | Mandate To provide protection against natural calamities and utilize scientific knowledge as an effective instrument to insure the safety, well-being and economic security of all the people, and for promotion of national progress. | |
| | Functions The Philippine Atmospheric, Geophysical and Astronomical Services Administration, presently existing, is hereby reorganized and shall have the following functions: 1. Maintain a nationwide network pertaining to observation and forecasting of weather and other climatological conditions affecting national safety, welfare and economy; 2. Undertake activities relative to observation, collection, assessment and processing of atmospheric and allied data for the benefit of agriculture, commerce and industry; 3. Engage in studies of geophysical and astronomical phenomena essential to the safety and welfare of the people; 4. Undertake researches on the structure, development and motion of typhoons and formulate measures for their moderation; and 5. Maintain effective linkages with scientific organizations here and abroad, and promote exchange of scientific information and cooperation among personnel engaged in atmospheric, geophysical and astronomical studies. | |

| Agency Name | Philippine Institute of Volcanology and Seismology | |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Mandate and Functions | As specified in Executive Order No. 128, PHIVOLCS is mandated to: 1. Predict the occurrence of volcanic eruptions and earthquakes and their geotectonic phenomena; 2. Determine how eruptions and earthquakes shall occur and areas likely to be affected; 3. Exploit the positive aspects of volcanoes and volcanic terrain in furtherance of the socio-economic development efforts of the government; 4. Generate sufficient data for forecasting volcanic eruptions and earthquakes; 5. Formulate appropriate disaster-preparedness and mitigation plans; and 6. Mitigate hazards of volcanic activities through appropriate detection, forecast and warning system. | |

| Agency Name | Metro Manila Development Authority |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mandate and Functions | Formulate, coordinate and regulate the implementation of medium and long term plans and programs for the delivery of metro-wide services, land use and physical development within Metropolitan Manila, consistent with national development objectives and priorities. |
| | Prepare, coordinate and regulate the implementation of medium term investment programs tor metro-wide services which shall indicate sources and uses of funds for priority programs and projects, which shall include the packaging of projects and presentation to funding institutions; |
| | 3. Undertake and manage on its own metro-wide programs and projects for the delivery of specific services under its jurisdiction subject to the approval of the Council. For this purpose, MMDA can create appropriate project management offices; |
| | 4. Coordinate and monitor the implementation of such plans, programs and projects in Metro Manila; identify bottlenecks and adopt solutions to problems of implementation; and |
| | 5. The MMDA shall set the policies concerning traffic in Metropolitan Manila, and coordinate and regulate the implementation of all programs and projects concerning traffic management specifically pertaining to enforcement, engineering and education. Upon request, it shall be extended assistance and cooperation, including but not limited to, assignment of personnel, by all other government agencies and offices concerned. |
| | 6. Install and administer a single ticketing system, fix, impose and collect fines and penalties for all kinds of violations of traffic rules and regulations, whether moving or non-moving in nature, and confiscate and suspend or revoke driver's licenses in the enforcement of such traffic laws and regulations, the provisions of RA 4136 and PD 1605 to the contrary notwithstanding. For this purpose, the Authority shall enforce all traffic laws and regulations in Metro Manila, through its traffic operation center, and may deputized members of the PNP, traffic enforcers of local government units, duly licensed security guards or members of non-governmental organizations to whom may be delegated certain authority, subject to such conditions and requirements as the Authority may impose. |
| | 7. Perform other related functions required to achieve the objectives of the MMDA, including the undertaking of delivery of basic services to the local government units when deemed necessary, subject to prior coordination with and consent of the local government unit concerned. |

| Agency Name | Housing and Land Use Regulatory Board |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mandate and Functions | The Human Settlements Regulatory Commission, renamed as the Housing and Land Use Regulatory Board, shall be the sole regulatory body for housing and land development. I is charged with encouraging greater private sector participation in low-cost housing through liberalization of development standards, simplification of regulations and decentralization of approvals for permits and licenses. 1. Promulgate zoning and other land use control standards and guidelines which shal govern land use plans and zoning ordinances of local governments; the zoning components of civil works and infrastructure projects of the national, regional and loca governments; subdivision or estate development projects of both the public and private sectors; and urban renewal plans, programs and projects: provided that the zoning and other land use control standards and guidelines to be promulgated hereunde shall respect the classification of public lands for forest purposes as certified by the Ministry of Natural Resources. 2. Review, evaluate and approve or disapprove comprehensive land use development plans and zoning ordinances of local government; and the zoning component of civil works and infrastructure projects of national, regional and local governments subdivisions, condominiums or estate development projects including industrial estates, of both the public and private sectors and urban renewal plans, programs and projects: Provided, that the land use Development Plans and Zoning Ordinances of Local Governments herein subject to review, evaluation and approval of the commission shall respect the classification of public lands for forest purposes as certified by the Ministry of Natural Resources: Provided, further, that the classification of specific alienable and disposable lands by the Bureau of Lands shall be in accordance with the relevant zoning ordinance of Local government where it exists and provided, finally, that in cities and municipalities where there are as yet no zoning ordinances, the Bureau of Lands may be subsequ |

Agency Name Housing and Land Use Regulatory Board relating to regulation of the value of land and improvements, and their rental. 4. Ensure compliance with policies, plans, standards and guidelines on human settlements promulgated in paragraph (a) of this section. 5. Conduct public hearings relating to its functions. 6. Act as the appellate body on decisions and actions of local and regional planning and zoning bodies and of the deputized officials of the Commission, on matters arising from the performance of these functions. 7. Promote, encourage, coordinate and assist private enterprises and government agencies and instrumentalities in planning, developing and coordinating human settlements plans and programs by furnishing legal, technical and professional assistance. 8. Develop and implement prototype projects supportive of its regulatory functions either by itself or as part of an inter-agency group or by contracts with such appropriate public or private entities as it may deem proper. 9. Call on any government employee or any department, bureau, office, agency or instrumentality of the government or private entities and organizations for cooperation and assistance in the exercise of its functions. 10. Adopt rules of procedures for the conduct of its business. 11. Staff its organization with appropriate and qualified personnel in accordance with that is deemed proper or necessary to achieve the objectives of the Commission. 12. Make or enter into contracts of any kind of nature to enable it to discharge its functions under this Order. 13. Acquire, purchase, own, lease, mortgage, sell or otherwise dispose of any land, or any improvements thereon, or property of any kind, movable and immovable, exercise the right of eminent domain by expropriating the land and/or improvements thereon, which in the opinion of the Commission, are vital and necessary to develop and implement prototype projects supportive of its regulatory functions. 14. Charge and collect fees in the performance of its functions. 15. Impose administrative fine not exceeding Twenty-Thousand Pesos (P20,000.00) for any violation of its charter and of its rules and regulations. 16. Issue orders after conducting the appropriate investigation for the cessation or closure of any use or activity and to issue orders to vacate or demolish any building or structure that is determines to have violated or failed to comply with any of the laws, presidential decrees, letters of instructions, executive orders and other presidential issuances and directives being implemented by it, either on its own motion or upon complaint of any interested party. 17. Cite and declare any person, entity or enterprise in contempt of the Commission in the following case: 18. Whenever any person entity or enterprise commits any disorderly or disrespectful conduct before the Commission or in the presence of its members or authorized representatives actually engaged in the exercise of their official functions or during the conduct of any hearing or official inquiry by the said Commission, at the place or near the premises where such hearing or proceeding is being conducted with obstruct, distract, interfere or in any other way disturb, the performance of such functions or the conduct of such hearing or proceeding. 19. Whenever any person, enterprise or entity fails or refuses to comply with or obey without justifiable reason, any lawful order, decision, writ or process of the Commission. 20. In connection therewith, it may in cases falling within the first paragraph hereof, summarily impose a fine of an amount not exceeding P2,000.00 and order the confinement of the violator for a period that shall not exceed the duration of the hearing or proceeding or the performance of such functions, and in cases falling within the second paragraph, hereof, it may, in addition to the administrative fine abovementioned, impose a fine of P500.00 for each day that the violation or failure or refusal to comply continues, and order the confinement of the offender until the order or decision shall have been complied with; In case the offender is a partnership,

21. Perform such other functions and activities which are necessary for theeffective accomplishment of the abovementioned functions. No injunction or restraining order shall lie against the Commission upon the ex parte motion or petition filed by any person or entity in the exercise by the Commission of its regulatory functions in support of the implementation of the Urban Land Reform Program as declared in

corporation or association or enterprise, the above fine shall be imposed on the assets of such entity and the president, managing partner or chief executive officer shall be

ordered confined.

| Agency Name | Housing and Land Use Regulatory Board |
|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | Proclamation Nos. 1893 and 1967 and of other programs or projects as may be declared by the president as national priority. Decisions of the Commission shall be appealable to the President of the Philippines whose decision shall be final subject only to review by the Supreme Court by certiorari or on questions of law. |

| Agency Name | National Economic Development Authority |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mandate and Functions | The powers and functions of the Authority reside in the NEDA Board. The Authority shall primarily be responsible for formulating continuing, coordinated and fully integrated social and economic policies, plans and programs, on the basis of the following: |
| | The State aims to achieve objectives of growth coupled with equity; Development leading to the attainment of the above mentioned goals is a multi-faceted process that calls for the coordination and integration of policies, plans, programs and projects of all sectors of society; |
| | 3. In the formulation of basic policies, plans, programs and projects, there shall be maximum participation by and consultation with concerned private sector groups, community organizations and beneficiaries and local government units in order to ensure that priority needs are incorporated into such policies, plans, programs and projects; |
| | 4. National plans shall be in fact the sum of nationally and regionally identified targets and strategies and locally fori-nulated approaches to perceived local needs and priorities, carried out within the framework of national strategies; |
| | 5. Major socio-economic policies, plans, programs and projects of different government agencies must be properly coordinated with the Authority at both the national and regional levels prior to their adoption, in order to ensure their consistency with established national priorities and coordination with other policies, plans, programs and projects of the government; and |
| | 6. The linkage between development planning, programming and budgeting shall be of the highest priority in planning and budgeting activities. |
| | 7. The Authority, after direct consultation with the 16 private sector, community organizations and beneficiaries, local government units and appropriate public agencies, shall be responsible for coordinating the formulation of continuing and integrated socioeconomic development plans, policies and programs, including the formulation of annual and medium-term public investment programs, programming of official development assistance in the form of grants and concessional loans from |
| | foreign governments and multilateral agencies and organizations, and the monitoring and evaluation of plan implementation. |

| Agency Name | Environmental Management Bureau |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mandate and Functions | The Environmental Management Bureau (EMB) formulates plans, programs, and appropriate environmental quality standards for the prevention and control of pollution and the protection of the environment and ensures their implementation. As a line bureau of the DENR, it is mandated to implement five environmental laws, namely, Presidential Decree 1586 (June 11, 1978) – Establishing an Environmental Impact Assessment System; Republic Act No. 6969 (October 26, 1990) – Toxic Substances and Hazardous and Nuclear Waste Control Act of 1990; Republic Act No. 8749 (June 23, 1999) – Philippine Clean Air Act of 1999; Republic Act No. 9003 (January 26, 2001) – Ecological Solid Waste Management Act; and Republic Act No. 9275 (March 22, 2004) – Philippine Clean Water Act |

| Agency Name | Laguna Lake Development Authority |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mandate and Functions | To make a comprehensive survey of the physical and natural resources and potentialities of the Laguna Lake region particularly its social and economic conditions, hydrologic characteristics, power potentials, scenic and tourist spots, regional problems, and on the basis thereof, to draft a comprehensive and detailed plan designed to conserve and utilize optimally the resources within the region particularly Laguna de Bay, To promote the region's rapid social and economic development and upon approval by the National Economic and Development Authority (NEDA) Board of such plan, To implement the same including projects in line with said plan: Provided, That implementation of all fisheries plans and programs of the authority shall require prior consensus of the Bureau of Fisheries and Aquatic Resources to ensure that such plans and programs are consistent with the national fisheries plans and program. For the purpose of the said survey, public agencies shall submit and private entities shall provide necessary data except such data which under existing laws are deemed inviolable. To pass upon and approve or disapprove all plans, programs, and projects proposed |

Agency Name

Laguna Lake Development Authority

by local government offices/agencies within the region, public corporations, and private persons or enterprises where such plans, programs and/or projects are related to those of the Authority for the development of the region as envisioned in this Act. The Authority shall issue the necessary clearance for approved proposed plans, programs, and projects within thirty days from submission thereof unless the proposals are not in consonance with those of the Authority or that those will contribute to the unmanageable pollution of the Laguna Lake waters or will bring about the ecological imbalance of the region: Provided, further, That the Authority is hereby empowered to institute necessary legal proceeding against any person who shall commence to implement or continue implementation of any project, plan or program within the Laguna de Bay region without previous clearance from the Authority; Provided, furthermore, That any local government office, agency, public corporation, private person, or enterprise whose plans, programs and/or projects have been disapproved by the Authority may appeal the decision of the Authority to the NEDA within fifteen (15) days from receipt of such disapproval whose decision on the matter shall be final. Reasonable processing fees as may be fixed by the Authority's Board of Directors shall be collected by the Authority for the processing of such plans, programs and/or projects: Provided, finally. That expansion plans shall be considered as new plans subject to review of the Authority and to payment of the processing fees.

- 5. The Authority and national and local government offices, agencies and public corporations shall coordinate their plans, programs, projects and licensing procedures with respect to the Laguna Lake region for the purpose of drawing up a Laguna Lake development plan which shall be binding upon all parties concerned upon approval of the NEDA board.
- 6. To plan, program, finance and/or undertake infrastructure projects such as river, flood and tidal control works, waste water and sewerage works, water supply, roads, portworks, irrigation, housing and related works, when so required within the context of its development plans and programs including the readjustment, relocation, or resettlement of population within the region as may be deemed necessary and beneficial by the Authority: Provided, That should any project be financed wholly or in part by the Authority, it is hereby authorized to collect reasonable fees and tolls as may be fixed by its Board of Directors subject to the approval of the NEDA Board from users and/or beneficiaries thereof to recover costs of construction, operation and maintenance of the projects: Provided, further, That if the Authority should find it necessary to undertake such infrastructure projects which are classified, as social overhead capital projects as determined by the NEDA, the Authority shall be authorized to receive financial assistance from the government in such amount as may be necessary to carry out the said projects subject to such terms and conditions that may be imposed by the government, upon recommendation of the NEDA Board: Provided, finally, That such amount as may be necessary for the purpose is hereby authorized to be appropriated out of the funds of the National Treasury that otherwise appropriated."
- 7. To reclaim or cause to be reclaimed portions of the Lake or undertake reclamation projects and/or acquire such bodies of land from the lake which may be necessary to accomplish the aims and purposes of the Authority subject to the approval of the NEDA Board: Provided, That the land so reclaimed shall be the property of the Authority and title thereto shall be vested in the Authority: Provided, further, That the resulting lakeshore area shall continue to be owned by the national government." "(j) The provisions of existing laws to the contrary notwithstanding, to engage in fish production and other aqua-culture projects in Laguna de Bay and other bodies of water within its jurisdiction and in pursuance thereof to conduct studies and make experiments, whenever, necessary, with the collaboration and assistance of the Bureau of Fisheries and Aquatic Resources, with the end in view of improving present techniques and practices. Provided, that until modified, altered or amended by the procedure provided in the following subparagraph, the present laws, rules and permits or authorizations remain in force:
- 8. For the purpose of effectively regulating and monitoring activities in Laguna de Bay, the Authority shall have exclusive jurisdiction to issue new permit for the use of the lake waters for any projects or activities in or affecting the said lake including navigation, construction, and operation of fishpens, fish enclosures, fish corals and the like, and to impose necessary safeguards for lake quality control and management and to collect necessary fees of said activities and projects: Provided, That the fees collected for fisheries may be shared between the Authority and other government agencies and political sub-divisions in such proportion as may be determined by the President of the Philippines upon recommendation of the Authority's Board: Provided, further, That the Authority's Board may determine new areas of fishery development or activities which it may place under the supervision of the Bureau of Fisheries and Aquatic Resources taking into account the overall development plans and programs for Laguna de Bay and related bodies of water: Provided, finally, That the Authority shall subject to the approval of the President of the Philippines promulgate such rules

| Agency Name | Laguna Lake Development Authority |
|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Agency Name | and regulations which shall govern fisheries development activities in Laguna de Bay which shall take into consideration among others the following socio-economic amelioration of bonafide resident fishermen whether individually or collectively in the form of cooperatives, lakeshore town development, a master plan for fishpen construction and operation, communal fishing ground for lake shore town residents, and preference to lake shore town residents in hiring laborers for fishery projects." 9. To require the cities and municipalities embraced within the region to pass appropriate zoning ordinances and other regulatory measures necessary to carry out the objectives of the Authority and enforce the same with the assistance of the Authority." 10. The provisions of existing laws to the contrary notwithstanding, to exercise water rights over public waters within the Laguna de Bay region whenever necessary to carry out the Authority's projects;" 11. To act in coordination with existing governmental agencies in establishing water quality standards for industrial, agricultural and municipal waste discharges into the lake and to cooperate with said existing agencies of the government of the Philippines in enforcing such standards, or to separately pursue enforcement and penalty actions as provided for in Sec. 4 (d) and Sec. 39-A of this Act: Provided, That in case of conflict on the appropriate water quality standard to be enforced such conflict shall be resolved thru the NEDA Board;" 12. To develop water supply from ground and/or lake water resources for municipal, agricultural and industrial usages, in coordination with the National Water Resources Council created by Presidential Decree No. 424 dated March 28, 1974 or its successors in interests, and to enter into agreements with municipalities, governmental agencies and corporations and the private sector to supply, distribute and market such water;" 13. Undertake studies on the improvement and maintenance of the desiable lake water quality of Laguna de Bay, and |
| | local government units involved in water quality management." |

| Agency Name | Department of Interior and Local Government |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mandate and Functions | Assist the President in the exercise of general supervision over local governments; Advise the President in the promulgation of policies, rules, regulations and other issuances on the general supervision over local governments and on public order and safety; |
| | Establish and prescribe rules, regulations and other issuances implementing laws on public order and safety, the general supervision over local governments and the promotion of local autonomy and community empowerment and monitor compliance thereof; |
| | 4. Provide assistance towards legislation regarding local governments, law enforcement and public safety; Establish and prescribe plans, policies, programs and projects to promote peace and order, ensure public safety and further strengthen the administrative, technical and fiscal capabilities of local government offices and personnel; |
| | Formulate plans, policies and programs which will meet local emergencies arising from natural and man-made disasters; Establish a system of coordination and cooperation among the citizenry, local executives and the Department, to ensure effective and efficient delivery of basic services to the public; Organize, train and equip primarily for the performance of police functions, a police. |
| | Organize, train and equip primarily for the performance of police functions, a police force that is national in scope and civilian in character. |

| Agency Name | League of Cities / Municipalities of the Philippines |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mandate and Functions | League of Municipalities of the Philippines |
| | Assist the national government in the formulation and implementation of the policies, programs and projects affecting municipalities as a whole; |
| | 2. Promote local autonomy at the municipal level; |
| | Adopt measures for the promotion of the welfare of all municipalities and its officials and employees; |
| | Encourage people's participation in local government administration in order to promote united and concerted action for the attainment of country-wide development goals; |
| | 5. Supplement the efforts of the national government in creating opportunities for gainful employment within the municipalities; |
| | Give priority to programs designed for the total development of the municipalities in consonance with the policies, programs and projects of the national government; |

| Agency Name | League of Cities / Municipalities of the Philippines |
|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | 7. Serve as a forum for crystallizing and expressing ideas, seeking the necessary assistance of the national government, and providing the private sector avenues for cooperation in the promotion of the welfare of the municipalities; and 8. Exercise such other powers and perform such other duties and functions as the league may prescribe for the welfare of the municipalities. |
| | League of Cities of the Philippines |
| | Assist the national government in the formulation and implementation of the policies, programs and projects affecting cities as a whole; Promote local autonomy at the city level; |
| | Adopt measures for the promotion of the welfare of all cities and its officials and employees; |
| | Encourage people's participation in local government administration in order to promote united and concerted action for the attainment of country-wide development goals; |
| | 5. Supplement the efforts of the national government in creating opportunities for gainful employment the cities; |
| | 6. Give priority to programs designed for the total development of cities in consonance with the policies, programs and projects of the national government; |
| | 7. Serve as a forum for crystallizing and expressing ideas, seeking the necessary assistance of the national government and providing the private sector avenues for cooperation in the promotion of the welfare of the cities; and |
| | 8. Exercise such other powers and perform such other duties and functions as the league may prescribe for the welfare of the cities. |

Annex B. Summary of the Micro-assessment Result of OCD

The Office of Civil Defense (OCD) acts as an Implementing Partner of the United Nations Development Programme (UNDP) for the project "Hazards Mapping and Assessment for Effective Community – based Disaster Risk Management (READY). Hence, in 2008 a micro assessment involving a general review of the OCD's system of accounting, reporting, auditing and internal controls was conducted to provide an overall risk rating of its financial management capacity specifically in the following areas: (1) capability to record all transactions and balances; (2) capability to support the preparation of regular and reliable financial statements; and (3) capability to safeguard its assets in accordance with acceptable auditing arrangements. The micro assessment, an open and transparent exercise, was not an audit to establish the conditionality for the provision of cash from UN agencies but was conducted to review the strengths and weaknesses of an implementing partner's, in this case OCD's, financial management system and at the same time help identify the most appropriate assurance methods and best procedures to use for transferring cash to the OCD.

Based on the standard Harmonized Approach to Cash Transfer (HACT) instrument (financial management capacity questionnaire checklist) and additional procedures performed by Manila Consulting, OCD obtained an overall risk rating of SIGNIFICANT RISK. Below are the risk rating for each of the tested areas:

| Area | Description | Risk Rating | | |
|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--|--|
| 1. As an implementing Partner | OCD receives financial assistance from various donor agencies which are remitted to the Bureau of Treasury and released by means of National Cash Allocation (NCA) by the Department of Budget and Management (DBM) to the depository bank. In the case of funds received from UNDP, a separate bank account is maintained for this purpose. Disbursements for both funds are made by checks and the recording of transactions are handled either by a Finance Officer through the OCD's accounting section for government and other donor funded projects or by the Finance and Admin Officer of the Planning Dvision for UNDP assisted projects. | LOW RISK | | |
| | OCD submits regular financial reports generated through the new government accounting system (NGAS) to the DBM and Commission on Audit (COA). Relatedly, the Planning Division which is involved in the implementation of the UNDP project submits monthly and quarterly financial and status reports to the UNDP. | | | |
| | Being an attached bureau of the Department of National Defense (DND), the Administrator of the OCD reports to the Secretary of DND. | | | |
| 2. Funds Flow | OCD as an implementing partner adheres, to the extent possible, to the One Fund Concept under the NGAS unless a donor agency specifically requires for the establishment of a separate fund accounting. The Planning Division (PD) which implements the UNDP project adopted the following modes of cash transfer: (1) direct payment to vendors and third parties; (2) direct cash transfer to the agency's PD; and (3) reimbursement to PD staff for expenditures incurred in support of activities agreed upon in the annual work plan (AWP). | LOW RISK | | |
| 3.Staffing | While the key management personnel in OCD's Finance Office (FO) are all permanent employees, being new in the implementation of UNDP projects, the FO is unfamiliar with procedures related to UN cash transfers. It was also noted that only the head of the Accounting Section has an Accounting degree. | SIGNIFICANT RISK | | |
| 4.Accounting Policies and Procedures | The relevant accounting policies and procedures such as | LOW RISK | | |

| Area | Description | Risk Rating |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
| | the NGAS were adopted by the Finance Office of OCD and the appropriate financial reporting are complied with. | |
| | Sufficient internal controls exist for the preparation, approval and recording of financial transactions. | |
| | Functional responsibilities are specifically assigned from authorization, procurement, recording, custody of assets and bank reconciliation. | |
| | Annual work and financial plans are prepared and are approved by the appropriate bodies. Actual results in implementing the workplans are compared with budgets and regular variance analyses are prepared adn discussed. | |
| | Check vouchers are reviewed, properly coded and approved before payments are done. | |
| | There are different sets of signatories with different levels of authorities depending on the amount to be disbursed. | |
| | OCD uses the acknowledgement receipt of equipment to account for its property and equipment and these are also adequately covered by insurance thru GSIS. Yearly physical counts are undertaken and reconciliation of subsidiary and general ledger balance are done. | |
| 5.Internal Audit | OCD's audit needs are serviced by the Internal Audit Service (IAS) which has 13 personnel and also covers the audit requirements of the entire Department of National Defense including the Armed Forces of the Philippines. | SIGNIFICANT RISK |
| 6. External Audit | OCD is audited annually by COA and a resident COA auditor conducts a post audit of transactions. The 2006 COA annual audit rendered a qualified opinion due to unreliable cash account balances. | MODERATE RISK |
| 7.Reporting and Monitoring | Financial statements for government transactions are prepared annually and submitted to COA, DBM and other government entities | LOW RISK |
| | Monthly and quarterly financial and progress reports are prepared, reviewed, approved and submitted to the UNDP. | |
| | Actual results of operations are compared on a monthly basis with the budget and programmed allocation in accordance with DBM prescribed guidelines and the work and financial plan. | |
| 8.Information Systems | OCD has adopted the NGAS and the appropriate training on the system has been provided to the staff assigned to record the transactions under NGAS. Access to financial data is limited to personnel authorized by the Chief Accountant. | LOW RISK |

Annex C: Offline Risk Log

Project Title:Enhancing Greater MetroManila's (GMMA)Institutional Capacities for
Effective Disaster/Climate Risk Management towards Sustainable DevelopmentAward ID: 00061036Date: March 2011

| # | Description | Date Identified | Туре | Impact & Probability | Countermeasures / Management response | Owner | Submitted, updated by | Last Update | Status |
|---|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|----------------|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|--------------------------|-------------|------------|
| 1 | The change in national and local leadership after the May 2010 elections will engender a transition process that may result in delay in project implementation because of changed priorities or uncertainties. | March 2011 | Political | P = 4 I = 3 | Conduct of proper and continuing consultations & dialogue at all levels and sectors will be undertaken to ensure support and continuous ownership of/buy in for the project. Briefing to be specifically provided to new or incoming leadership to enable an understanding of & secure buy in for the project. | Project Manager | Project Manager | March 2011 | Increasing |
| 2 | Natural disasters may derail project implementation as the key actors in this project are also key responders &decision-makers in case of emergencies. | March 2011 | Environmental | P = 4 I = 3 | Contingency plan which will activate system of "secondliners" for implementing entities. | Project Manager | Project Manager | March 2011 | No change |
| 3 | Insufficient technical & implementation capacity of key actors may impede timely achievement | March 2011 | Organizational | P = 3 I = 2 | Detailed orientation & training on processes, especially technical & financial reporting, project management, etcMentoring will | Project Manager | Project Manager | March 2011 | No change |

| # | Description | Date Identified | Туре | Impact & Probability | Countermeasures / Management response | Owner | Submitted, updated by | Last Update | Status |
|---|------------------------------------------------------------------------------------------|--------------------|-----------|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|-----------------------|-------------|-----------|
| | of outputs. | | | | also be resorted to. | | | | |
| 4 | Delay in financial releases because of non-compliance with set protocols like reporting. | March 2011 | Financial | P = 3 I = 2 | Detailed orientation & training on the financial system & protocols | Project Manager | Project Manager | March 2011 | No change |
| 5 | Some critical partners may fail to deliver outputs on time. | March 2011 | Strategic | P = 4 I = 3 | Close monitoring of implementation of deliverables of responsible agencies; Facilitation & streamlining of activities and outputs of RPs vis a vis the IP. | Project Manager | Project Manager | March 2011 | No change |