PRELIMINARY EXAMINATION OF EXISTING METHODOLOGIES FOR ALLOCATING AND TRACKING NATIONAL GOVERNMENT BUDGET FOR DISASTER RISK REDUCTION (DRR) IN THE PHILIPPINES[1]

By Susan Rachel G. Jose

December 2012

Disclaimer: The opinions expressed in this paper are those of the author and do not necessarily represent the views of the Asian Development Bank or UNISDR. The author accepts full responsibility for all errors and omissions.

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[1] This study was commissioned by UNISDR in collaboration with ADPC and the Asian Development Bank. The Asian Development Bank provided financial support for the development of this report under RETA 6511 – "Regional Stocktaking and Mapping of Disaster Risk Reduction Interventions for Asia and the Pacific".

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ACO	Agency central office
ARO	Agency regional office
CCA	Climate change adaptation
CO	Central office
CSO	Civil society organizations
DA	Department of Agriculture
DAR	Department of Agrarian Reform
DBCC	Development Budget Coordinating Committee
DBM	Department of Budget and Management
DENR	Department of Environment and Natural Resources
DepEd	Department of Education
DOH	Department of Health
DOST	Department of Science and Technology
DPWH	Department of Public Works and Highways
DSWD	Department of Social Welfare and Development
DRR	Disaster Risk Reduction
GAA	General Appropriation Act
GDP	Gross Domestic Product
HLURB	Housing and Land Use Regulatory Board
LDP	Local Development Plan
LDIP	Local Development Investment Program
LGUs	Local Government Units
MDG	Millennium Development Goals
MGB	Mining and Geosciences Bureau
MMDA	Metro Manila Development Authority
MOOE	Maintenance and other operating expenses
NDRMMC	National Disaster Risk Reduction and Management Council
NEDA	National Economic and Development Authority
NAMRIA	National Mapping and Resource Information Agency
NEP	National Expenditure Program
NHA	National Housing Authority
NGOs	Nongovernment organizations
OCD	Office of Civil Defense
OPIF	Organizational Performance Indicator Framework
PAGASA	Philippine Atmospheric, Geophysical and Astronomical Services Administration
PCIC	Philippine Crops Insurance Corporation
PDAF	Priority Development Assistance Fund
PHIVOLCS	Philippine Institute of Volcanology and Seismology
PDP	Philippine Development Plan
PhP	Philippine Peso
PIP	Public Investment Program
PPAs	Programs, Activities, Projects
PS	Personal Services
RDC	Regional Development Council
SNAP	Strategic National Action Plan

I. INTRODUCTION

The Philippines recognizes the need for effective disaster risk reduction (DRR) in order to meet its poverty reduction and inclusive growth agenda. The country has progressed in raising consciousness of the adverse impact of disasters on the population and the economy, integrating natural hazard risks in plans, strengthening institutions, and implementing projects like early warning systems, improving weather forecasting and strengthening disaster response. Little have been done, however, on determining if there are sufficient levels of disaster risk financing, considering that disaster damage and losses continue to be significantly high, and recovery and rehabilitation in affected areas slow. Tracking of public expenditures on DRR will influence better understanding and behavior toward a more comprehensive strategy to address the impacts of disasters.

This study intends to contribute to strengthening policy for investment in DRR within the context of public expenditure management in the Philippines. In particular, this study aims to:

a. Review DRR budget allocation in the national budget

b. Provide recommendations for further integration in the budget; and

c. Develop a methodology for tracking progress in DRR budget allocation.

In this paper, the term budget shall refer to the amount to be spent on current and operating expenditures (salary, travel, supplies, etc.) and capital outlays necessary for the operation of the programs, projects and activities of the various government departments and agencies. The national budget will refer to the total budget of all government agencies in the General Appropriations Act (GAA) as the national budget or budget. Budget allocation on the other hand shall refer to specific budget items, thus DRR budget allocation refers to that portion of the national budget that is allocated to specific programs, activities and projects related to disaster risk reduction. The use of the word budget and budget allocation will allow comparability with initiatives on monitoring the budget by various sectors (e.g., citizens' budget monitoring, budget watch, health budget monitoring).

It is important to lay down this terminology since in the strict sense of the word, the budget refers to what the national government plans to spend for its programs and projects, and the sources of what it projects to have as funds, either from revenues or from borrowings with which to finance such expenditures (DBM). Thus, the budget has two components, the expenditure program and the revenue and borrowings program.

The budget is generally understood to be the amount of resources that Congress has authorized the government to spend, and is backed up by a revenue and borrowings program that is projected to be available at the time of budget execution.

The budget for a given year of the national government covers the *new appropriations* defined in the General Appropriations Act and *existing or continuing* appropriations which have been previously enacted by Congress and which continue to remain valid as an appropriation authority for the expenditure of public funds. There are two types of existing appropriations (i) continuing, and (ii) automatic. C*ontinuing appropriations* refer to

appropriations available to support obligations for a specified purpose or project, such as multi-year construction projects which require the incurrence of obligations even beyond the budget year. Currently, appropriations for capital outlays and maintenance and other operating expenses are considered as continuing appropriations but only for a period of 2 years.

The analysis covers only budget allocation authorized in the General Appropriations Act (GAA), or what is termed as *new appropriations* which is legislated by Congress for every budget year. The GAA authorizes the use of government funds for specific purposes and conditions.

The study is structured as follows:

Section II provides the country context on disasters and development which briefly presents the risk profile of the country, the public policy on DRR, and the institutional dimension of DRR.

Section III introduces the budget formulation process in the Philippines including the reforms that have been adopted to address the precarious fiscal position of the country.

Section IV which presents the review of DRR budget allocation in the Philippines for the period 2009 to 2011, will include a definition of coverage of DRR expenditure and the trend analysis of DRR budget allocation.

Section V lays down recommendations to improve DRR financing, primarily within the budget and the budgeting process.

Section VI gives a synthesis of the DRR budget allocation tracking system, based on the actual process taken for the 2009-2011 analysis.

Section VII concludes the paper.

II. COUNTRY CONTEXT: DISASTERS AND DEVELOPMENT

A. Disaster Risks Profile: Risks are Staggering

The location of the Philippines in the so-called Pacific "ring of fire" exposes it to a variety of natural hazards such as earthquakes, tsunamis, tropical cyclones, floods and drought. An average of twenty-two typhoons visit the country each year, of which, five to seven are expected to be destructive. Communities along the country's 36,289 kilometer-coastline are prone to storm surges and sea level changes. Low-lying areas, some of which are densely populated urban centers, experience perennial flooding due to heavy rains brought about by typhoons, monsoons, thunderstorms, and the inter tropical convergence zone. El Nino phenomenon, on the other hand, brings about drought in many areas of the country adversely affecting potable water supply, hydroelectricity generation and agricultural production (World Bank: 2009).

Apart from hydro meteorological hazards, the country is also exposed to geologic hazards such as earthquakes, tsunamis, and volcanic- related hazards. There are more than 300 volcanoes in the country, of which 23 are active while 26 are potentially active.

The Philippines is the third most at risk country of natural disasters (2011 UNU-EHS World Risk Report). EM-DAT figures from 1982-2011 (Table 1) show that natural disasters affect an average of more than 3 million Filipinos and cause an average of more than 900 deaths annually. In terms of economic impact, annual damage from disasters amount to PhP 19.7 billion in the past two decades, equivalent to an average of 0.5 percent of GDP each year (World Bank: 2009). Typhoons are the most frequent and the most damaging of all natural disasters in the Philippines accounting for 88 percent of total damages and 79 percent of total lives lost.

Table 1. Impacts of Disasters in the Philippines from 1982 to 2011

Disaster	Number of Events	Persons Killed	Total Affected	Damage (000 US$)
Drought	6	8	5,547,442	64,453
Earthquake (ground shaking)	12	2,540	1,979,265	380,025
Flood	20	356	3,385,505	84,651
Storm surge/coastal flood	11	149	125,931	2,617
Landslide (wet and dry)	26	2,429	316,632	33,281
Storm/Tropical cyclone	185	23,096	91,197,264	5,529,644
Volcanic eruption	15	719	1,584,398	216,282

Source: EM-DAT: The OFDA/CRED International Disaster Database

B. Analysis of Geographic Distribution of Disaster Risks: Vulnerability Heightens Risk

At least 60 percent of the country's total land area is exposed to multiple hazards making almost 75 percent of its population at risk. The vulnerability of the country's population to natural hazards is amplified by high poverty incidence, which currently stands at 26.4 percent. Poverty and lagging development increases the adverse effects of natural disasters because it limits capacity to cope and prevent disaster loses. The poor are

particularly vulnerable because they have limited social and economic assets which make it difficult for them to recover from disasters.

Hazards are location specific and an analysis of the exposure of specific areas will provide a better understanding of the spatial dimension of disaster risks in the Philippines. In particular, disaster risks differ among provinces in the Philippines due to different levels of exposure and vulnerability. Hazard exposure arises from people occupying areas where they could be affected by specific types of hazard events that threaten their lives or property, while vulnerability is associated with the ability of the population to cope and recover from the impacts of disaster. The provinces are analyzed using population density to determine hazard exposure while poverty incidence is used to establish vulnerability. It is assumed that provinces with high population density and high levels of poverty are at great risk to disasters.

The analysis focuses only on hydro meteorological hazards, namely, tropical cyclones, floods and rain-induced landslides since typhoons and floods are considered to be the most frequent and most devastating types of disaster in the Philippines. In the last 30 years, nine of ten biggest disasters in terms of damage are caused by storms/tropical cyclones and flooding (Table 2).

Map 1 shows the pattern of cyclone occurrences across the country, which are observed to be more frequent in the northern and eastern regions. The provinces that are hit by typhoons more than once a year, on the average, are Sorsogon, Catanduanes, Northern and Eastern Samar, Leyte, Isabela, Cagayan, Mt. Province, Kalinga and Batanes Islands. Of these provinces, five (Abra, Apayao, Camarines Norte, Eastern and Northern Samar) have poverty incidence that is higher than 40 percent while two (Sorsogon and Leyte) have population density higher than the national average of 260 persons per square kilometre (Figure 1).

As for flooding (Map 2), provinces that have more than 20 percent of total land area susceptible to floods are Pampanga, Nueva Ecija, Pangasinan, Tarlac, Maguindanao, Bulacan, NCR, North Cotabato, Oriental Mindoro, Ilocos Norte, Iloilo, La Union, Cagayan, Sultan Kudarat, Ilocos Sur, Bataan, Leyte, Compostela Valley and Davao del Norte. Eleven of these have population density higher than the national average, including NCR, Pampanga and Bulacan which population density is more than 1000 persons per square kilometer. In terms of poverty, two (Maguindao and Sultan Kudarat) of the flood prone areas have poverty incidence rate of more than 40 percent (Figure 2).

Table 2. Top 10 Natural Disasters in the Philippines, 1992-2011, by damage cost

Disaster Event	Date of Occurrence	Damage ('000 US Dollars)
Flood	9 April 1995	700,300
Storm	29 September 2009	585,379
Storm	11 December 1990	388,500
Earthquake	16 July 1990	369,600
Storm	21 June 2008	284,694
Storm	18 October 2010	275,745
Storm	11 March 1995	244,000
Storm	21 October 2010	240,500
Storm	24 September 2009	237,489
Storm	9 January 1984	216,700

Source: EM-DAT: The OFDA/CRED International Disaster Database

In terms of rain induced landslides (Map 3), provinces that have more than 70 percent of total land area susceptible to landslides are Benguet, Mountain Province, Nueva Vizcaya, Apayao, Kalinga, Southern Leyte, Abra, Marinduque, Cebu, Catanduanes, Ifugao, Antique, Southern Leyte, Abra, Bukidnon, Davao Oriental) have poverty incidence rate of more than 40 percent while two (Cebu and La Union) have population density greater than the national average.

Areas exposed to multiple hydrometeorologic hazards (Map 4) are La Union, Leyte and Oriental Mindoro. These areas are visited by typhoons at least once a year and have at least 25 percent of total land area susceptible to floods and rain induced landslides. In terms of vulnerability, La Union and Oriental Mindoro have poverty incidence higher than the national

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C. Disaster Risk Reduction Policy: Mainstreaming into the Development Framework

Disasters are critical constraints to development given their staggering impact on the population and the economy. In order to secure inclusive growth and reduce poverty, disaster risk reduction strategies and measures are best integrated within the overall development framework, treating disaster risk reduction as a component of the development process.

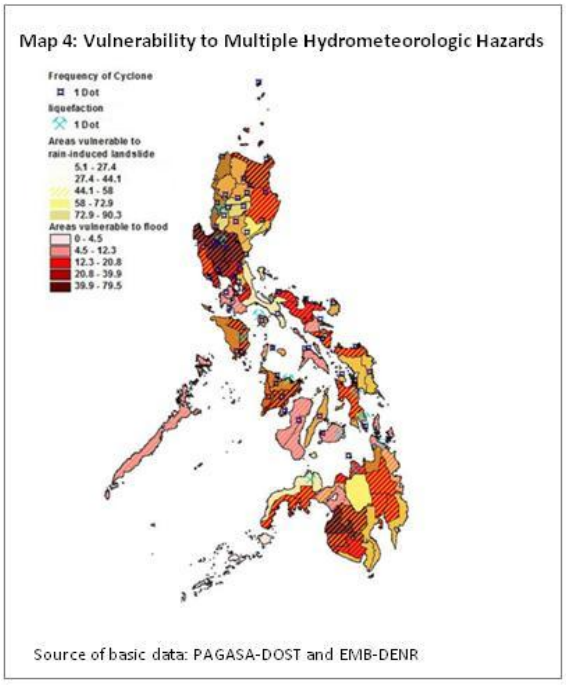
DRR mainstreaming in the Philippines is being done through the development planning process which hews with the public sector management functions of planning, investment programming, budgeting, implementation, monitoring, and evaluation. Government follows this process to ensure that resources are channelled toward activities that best achieve development objectives. By considering and addressing risks emanating from natural hazards in the development plan, programs and projects that support disaster risk reduction are provided with budgetary resources and their outcomes measured during monitoring and evaluation. Figure 3 presents development planning processes and outputs.

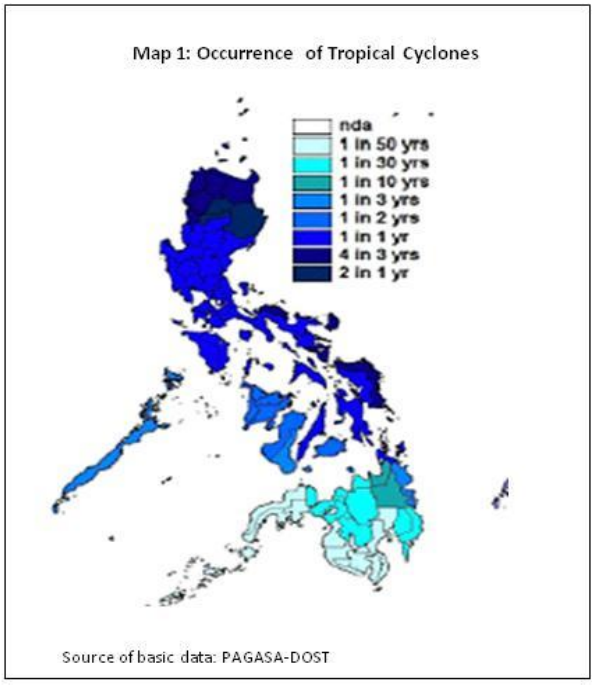
The socioeconomic agenda are set in the plan. The investment program translates the goals, objectives, and targets of the plan into specific programs and projects. The annual budget is the instrument through which the corresponding annual slice of the multiyear investment program is implemented. Implementation proceeds after budget approval.

Physical outputs and financial disbursements are monitored regularly, and for critical projects the impacts are evaluated. The results of monitoring and evaluation feed into plan performance reporting and updating.

The plans and investment programs at various levels of government constitute an integrated system of planning activities and outputs. For example, the provincial plans and investment programs must serve as policy or document inputs for the preparation of higher-level (regional and national) plans and programs. At

the same time, higher-level plans must provide a context for the preparation of provincial plans and programs.





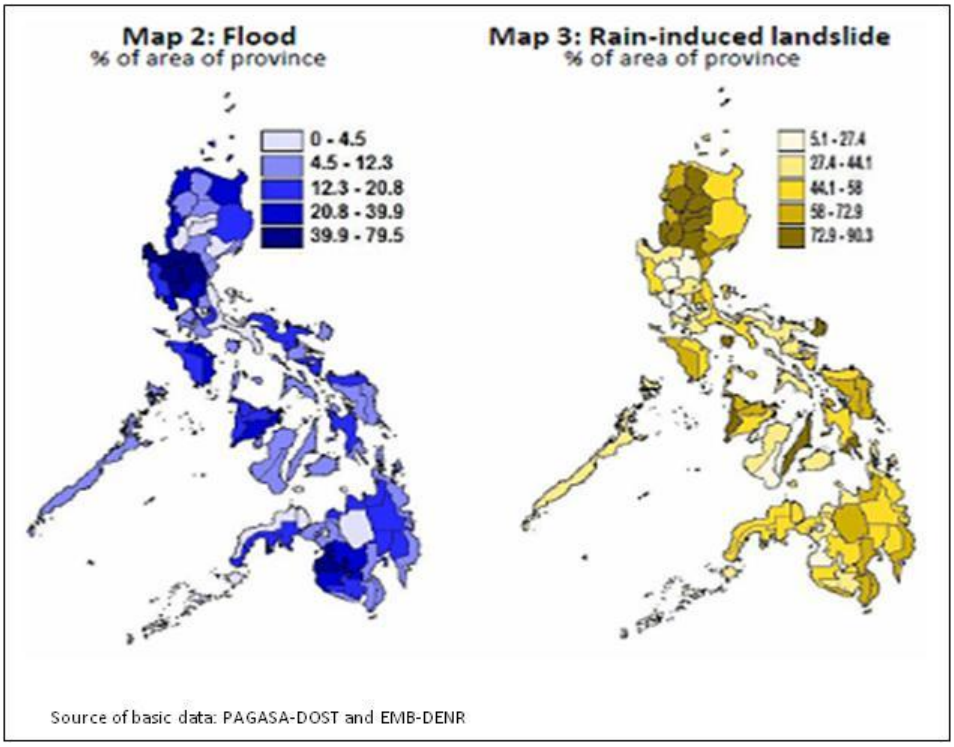


Figure 1: Typhoon Occurence and Poverty Incidence By Province, Philippines

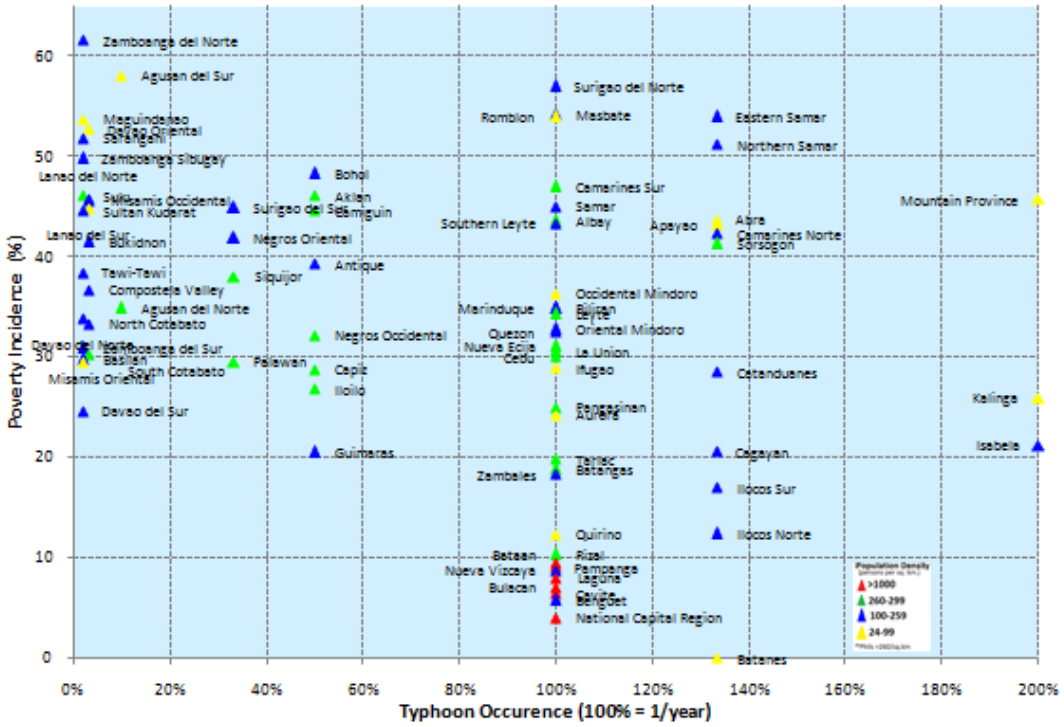
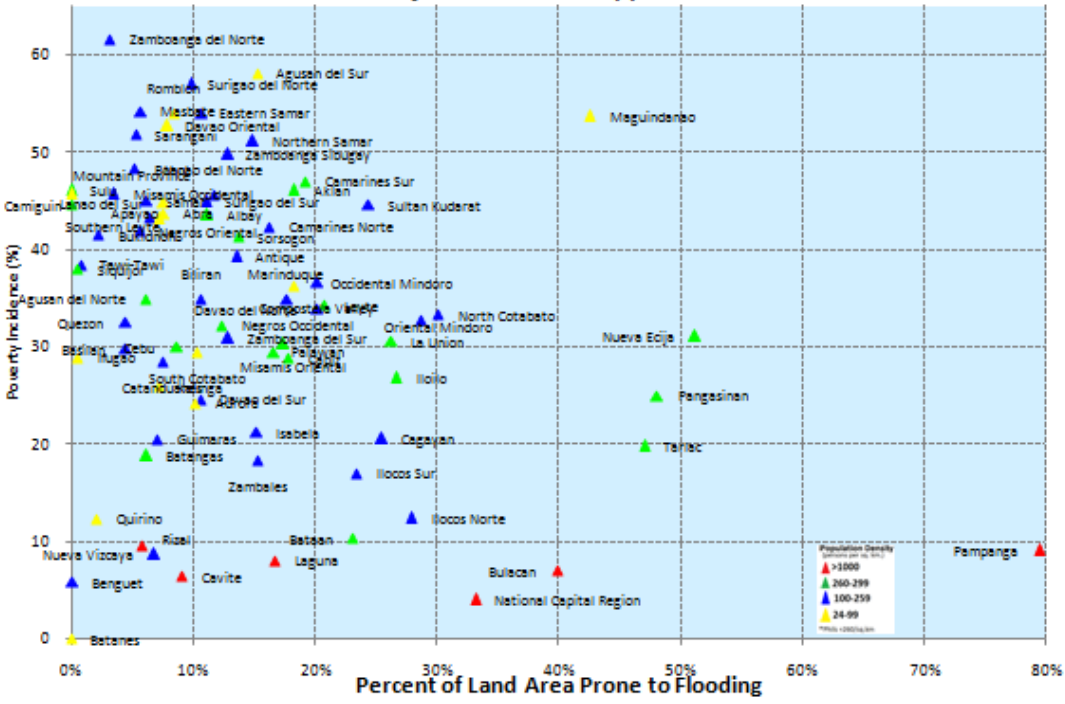
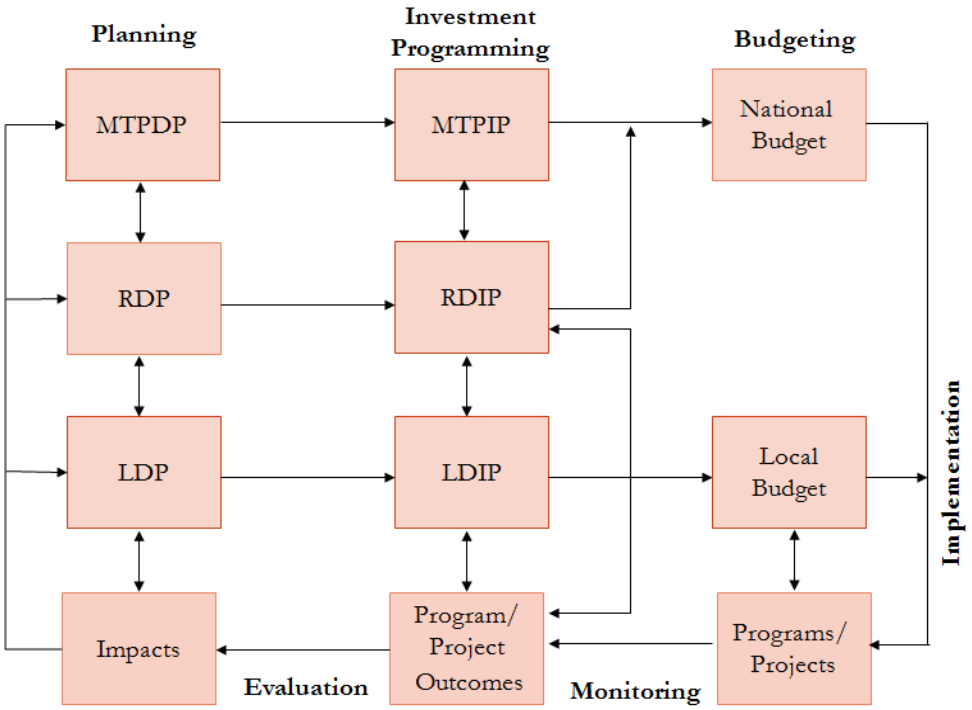


Figure 2: Land Area Prone to Floods and Poverty Incidence By Province, Philippines



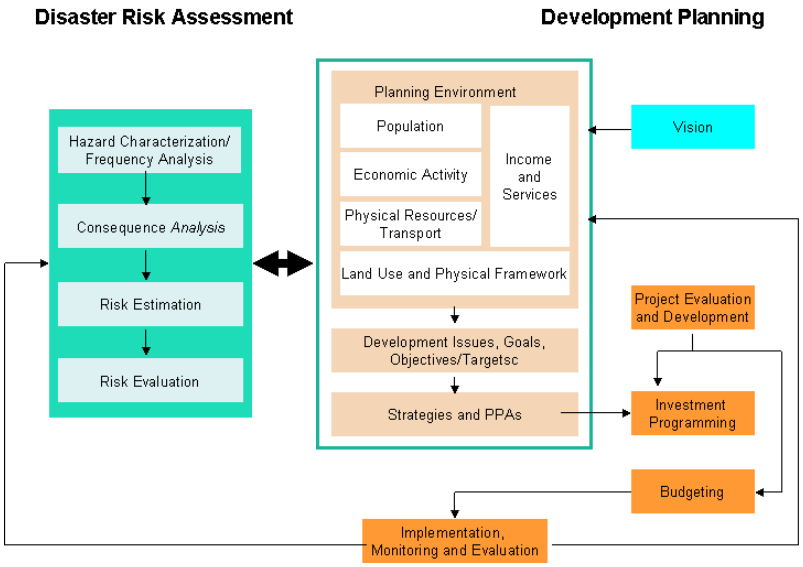
With plans as the main entry point, the National Economic and Development Authority, in partnership with UNDP and DIPECHO, developed a framework wherein the results of a four-step disaster risk assessment process are mainstreamed into plan (Figure 4). The methodology provides an organized and systematic approach to characterizing hazards in a planning unit, estimating risks in terms of fatality and property damage, evaluating vulnerability of the population and the economy and determining risk management options that become part of the programs and projects emanating from the plan that is passed on to the investment programming process. President Benigno Aquino issued Administrative Order No. 1 in September 2010 directing all provinces to utilize the Guidelines on Mainstreaming Disaster Risk Reduction in the Subnational Development and Land Use/Physical Framework Plans (which embodies the mainstreaming framework), and NEDA to capacitate government planners on the use of the Guidelines. NEDA, in partnership with UNDP and the AusAID, is now updating the Guidelines to incorporate climate change adaptation (CCA) and assist all provinces come up with their DRR and CCA-enhanced plans.

Figure 3: Development Planning Cycle in the Philippines



Source: Modified from NEDA-ADB. 2007. Guidelines on Strengthening Provincial/Local Planning and Expenditure Management, Volume 1. Manila

Figure 4: Framework for Mainstreaming Disaster Risk Reduction in the Development Planning Process in the Philippines



Source: 2008 NEDA-UNDP-EU, Guidelines on Mainstreaming Disaster Risk Reduction in Subnational Development and Land Use/Physical Planning in the Philippines

D. Philippine Development Plan: Main Entry Point for Disaster Risk Reduction

Consistent with the government's management functions as described in the development planning process and the framework for mainstreaming DRR into development, the main entry point for disaster risk reduction initiatives is the Philippine Development Plan. The PDP lays down the development directions and priorities of the country in the medium-term. It defines development outcomes that will be the formulation of the budget and guide mobilization, and service delivery.

The 2011-2016 Philippine Development Plan (PDP) purposively incorporates disaster risk reduction and climate change adaptation. It is a cross cutting concern that has been recognized in the formulation of macroeconomic policies, particularly the impact of disasters on overall growth prospects, in the economic sector policies as they affect livelihood and disrupt productive activities, in social development policies as they affect achievement of the Millennium Development Goals (MDGs), in infrastructure development policies as they are important lifelines in times of disasters, as well as the challenge of making critical infrastructures disaster resilient, and in the environment sector, as hazards are naturally land-based and affect decisions on the management and use of the natural resource regime. Annex 1 presents the PDP's goals, issues and strategies on DRR and CCA. It is also important to note that the PDP concretizes the political commitments of a particular presidency. The current PDP thus embodies the 16-point agenda of President Aquino.

The PDP was prepared through the Plan Steering Committees (PSCs) organized by NEDA and the Planning Committees (PCs) created and headed by said PSCs. National and regional consultations among the various

stakeholders – legislature, executive agencies, local government units (LGUs), private sector, and other stakeholders – were conducted to generate inputs for the Plan's chapters and the Investment Program.

Delivering results (e.g., poverty reduced, MDGs achieved, and economic development sustained) is being pursued (within the principles of the Paris Declaration on Aid Effectiveness) to provide focus and direction in the government's development planning cycle. Results orientation in the PDP is being pursued through the preparation of the Results Matrix (RM) for each of the Plan Chapters. The RM provides an indicator framework to the sector and sub-sector results statements of the Plan. It will be the basis for allocating budgetary resources and in the review of performance of agencies in terms of achieving plan outputs, outcomes and impacts. This emanates from the policy of the government to formulate and implement a national budget that is an instrument of national development, reflective of national objectives, strategies and plans. Under the PPBS concept, the budget is anchored on the degree by which the accomplishment of economic plans and the attainment of target contained in the Philippine Development Plan (PDP) and its Results Matrix and the Public Investment Program (PIP) are supported.

E. Specific DRRM Plans and Policies

As inputs to the Philippine Development Plan, the government also prepared specific sector plans and policies, including that for DRR. The Strategic National Action Plan (SNAP) for Disaster Risk Reduction: 2010-2019 was adopted in 2010 to define priority programs and projects toward building resilience of communities and risk reduction. The SNAP recognized the need for a paradigm shift from a reactive disaster response approach to a proactive DRR orientation. The SNAP also promotes cooperation and coordination mechanisms among various sectors and stakeholders, sustain DRR initiatives, and promote good practices of individuals, organizations, local government units (LGUs) and the private sector.

The National Disaster Risk Reduction and Management Framework details the strategies along four aspects of DRRM, namely: a) preparedness, b) prevention and mitigation, c) response, and d) rehabilitation and recovery. It promotes multistakeholder and multisectoral participation in DRRM through networking and building effective and mutually reinforcing partnerships, increasing government capacities, and empowering the communities through competency-based building. Adopted in June 2011, the framework sets a vision of safer, adaptive and disaster-resilient Filipino communities toward sustainable development. It puts emphasis in investing more resources in disaster mitigation and prevention and disaster preparedness in order to substantially reduce loss of lives and damages to assets

Recognizing that DRR and DRM efforts are linked to the development process, the NDRRMF underscores mainstreaming DRR as a means towards refocusing the development goals, objectives and targets and identifying/implementing appropriate interventions that will adequately respond to and address the impacts of disaster risks. It also highlights mainstreaming DRR as an important step towards avoiding huge losses from disasters as resources invested in risk reduction could prevent or at least minimize enormous costs of post-disaster recovery, repair and reconstruction.

Other strategies are advocacy and IEC; contingency planning; education on DRRM and CCA for all, institutionalization of DRRMCs and LDRRMOs; research, technology development and knowledge management; and monitoring, evaluation and learning. The Framework also incorporates in the four

DRRM aspects cross-cuting concerns such as health, human-induced disasters, gender mainstreaming, environmental protection, cultural sensitivity/indigenous practices, and human rights.

The NDRRMF will guide the work of the National Disaster Risk Reduction Management Councils (and its counterparts at the regional and local levels) which replaced the National Disaster Coordinating Council. The NDRRMC's composition has been expanded to include the private sector, CSOs, government financial institutions, and other concerned agencies. The 2010 NDRRMC law also mandated the creation of Local DRRM Offices (LDRRMOs) to support the local chief executive in pursuing DRR.

The Climate Change Act of 2009 also mandated the formulation of the 2011-2028 National Framework Strategy on Climate Change (NFSCC). The NFSCC, which guides the 2011-2029 National Climate Change Action Plan (NCCAP), provides for the mainstreaming of climate change into government policy formulations. Recognizing that climate change and DRR are closely interrelated and effective DRR will enhance climate change adaptive capacity, said law also provides for the integration of DRR into climate change programs and initiatives.

The law also created the Climate Change Commission (CCC) and similar to the NDRRMC, the CCC has a multi-stakeholder composition. Recognizing that both share a common goal of promoting disaster resilient Philippines and safer communities, the NDRRMC and CCC forged a Memorandum of Understanding (MoU) to strengthen their partnership in support of the implementation of both laws.

III. FINANCING CONSTRAINTS AND THE BUDGETARY PROCESS

A. Overall Fiscal Position in Perspective: Persistent Deficit since 1998

Over the last three decades the Philippines has experienced modest growth, but the government has been facing persistent deficits. The tight fiscal position has affected the government's ability to allocate resources for basic services and for efforts to achieve the Millennium Development Goals (MDGs). Thus, real household incomes have not risen significantly, poverty incidence has declined only slowly, and inequality remains high (ADB: 2007). This situation provided the stimulus for public expenditure management reforms in the Philippines with the end objective of optimizing use of resources to achieve development outcomes.

From a period of deficit of 3.5% of GDP in 1990, the country experienced surpluses of less than one percent of GDP in 1994-1997 (Figure 5). However, following the Asian financial crisis in 1997, fiscal trends deteriorated and the national government experienced a fiscal deficit equal to 1.9 percent of GDP in 1998. Government almost achieved a balanced budget in 2007 but thereafter the revenue effort has been declining from 17.10 percent of GDP in 2007 to 13.42 percent in 2009 resulting to a fiscal deficit of almost percent of GDP in 2009. These deficits were financed mainly through borrowings, both domestic and foreign, thus interest payments crowd out resources for much needed investments in social services, economic development and infrastructures.

National government expenditures became increasingly constrained since the downward spiral of government revenues in 1998 (with a slight recovery in 2007). Consequently, the government has been similarly restricted in pursuing its programs and priorities. Looking at Figure 7, expenditure for social services as percent of GDP declined during the 10-year period following the financial crisis in 1998. This was also the same period when revenue collections were declining and government expenditure were expanding, mainly attributable to increased debt and interest payments (Figure 6). Expenditures on economic services on the other hand have been flat, losing stimulus for increased investments and growth.

Table 3. Key Socioeconomic Indicators: Philippines

Gross Domestic Product (GDP) (Annual Average Growth Rate)	1981-1990	1991-2000	2001-2006
	1.8	3.1	4.6
Real Per Capita GDP[1] (Annual Average Growth Rate)	1981-1990	1991-2000	2001-2006
	-0.6	0.9	2.7
Poverty Incidence (Proportion of Population)	1988	2003	2006
	49.5	27.5	24.4
Gini Concentration Ratio[2]	1988	2003	2006
	0.4446	0.4605	0.4580

GDP divided by total population; reference year is 1988.

The Gini concentration ratio measures the inequality in income distribution, where zero means perfect equality and a value of one means perfect inequality.

Source: National Statistical Coordination Board

B. Unlocking the Budgeting Process: Understanding the Integration of DRR Expenditures

The budget serves as the instrument by which resources are allocated to programs and projects that best achieve development results. With competing priorities and tight fiscal position it will be difficult for government to dedicate resources for disaster risk reduction outside of the budget framework. Thus, it is important to understand what principles guide the budgeting process and how resources are being allocated among the spending units of government to enable us to examine the constraints and opportunities for DRR financing.

1. Public expenditure management framework

With managing the fiscal deficit, reduction of debt, and greater government accountability as major considerations, the Philippines has adopted a public expenditure management (PEM) framework that: (i) fosters the linkage between the plan and investment program on one hand and the budget on the other through common results; (ii) makes the budget credible, i.e., it is sufficiently backed up by the government's strategies on expanding its revenue base and improving tax compliance; and (iii) orients the budget to performance.

The budget serves as the financial translation of the development outcomes and outputs defined in the Philippine Development Plan (and the accompanying Results Matrix). The objective is to ensure that available public resources are maximized for core vital government services that provide the greatest contribution to growth and poverty reduction objectives. Government agencies specify and manage their outputs to maximize their contribution to the achievement of these outcomes.

In order for the budget to be credible, it must be backed up by sufficient revenues and this would have implications on the government's revenue raising strategies. A credible budget also implies that multiyear programs, activities and projects (PAPs) are part of a multiyear expenditure framework. This also fosters the connection between the plan and the budget by putting in a multiyear perspective to the traditional annual budget.

Performance indicators are developed to measure how well government is doing in terms of achieving the outcomes and outputs committed by the government agencies. The specification of these performance indicators and the corresponding performance targets is essential because they are used to gauge the performance of the government agencies during the annual performance review.

2. Annual budget formulation process

The annual budget formulation process is divided into three phases. These phases and the specific inputs, steps and outputs are presented in Figure 8.

Phase 1. Setting budget parameters. The first phase of the annual budget formulation cycle is to set the parameters for the upcoming budget. This is a three-step process: (a) formulation of economic assumptions and revenue forecasts, (b) preparation of three-year forward estimates of approved and ongoing PAPs, and (c) allocation of fiscal space through the paper on budget strategy

Figure 5. Fiscal Aggregates, 1990-2009 (percent of GDP)

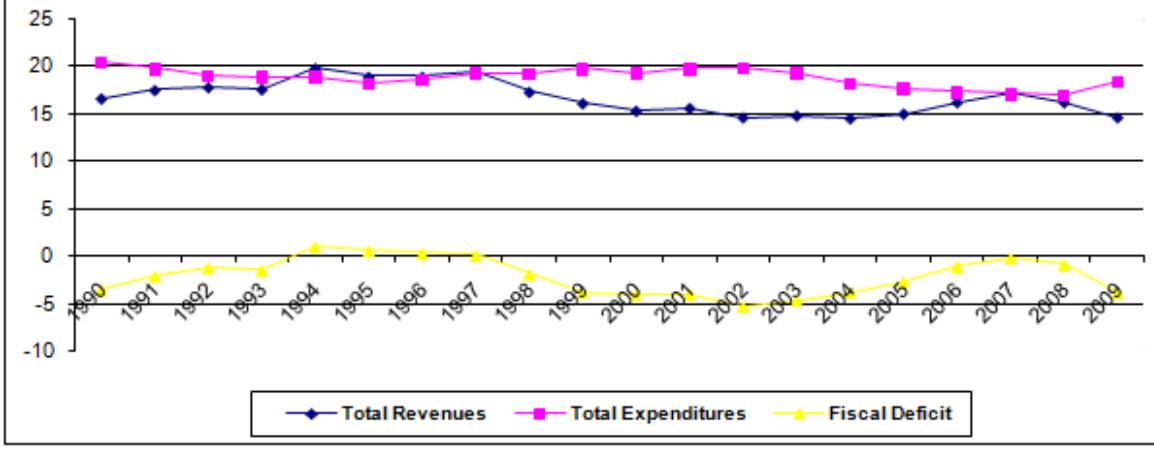


Figure 6. Financing the Deficit (In Billion Pesos)

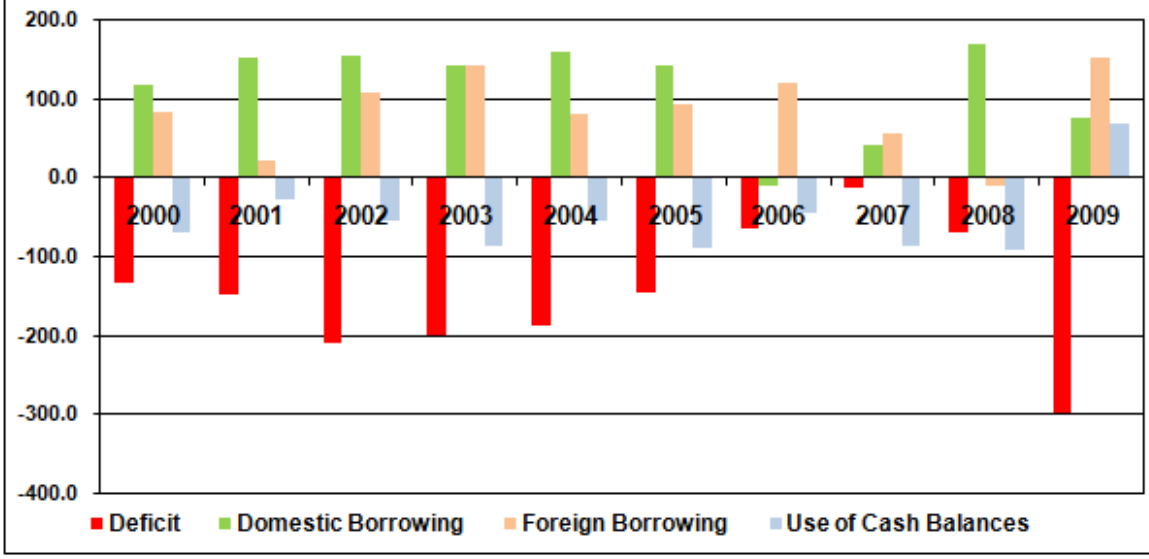
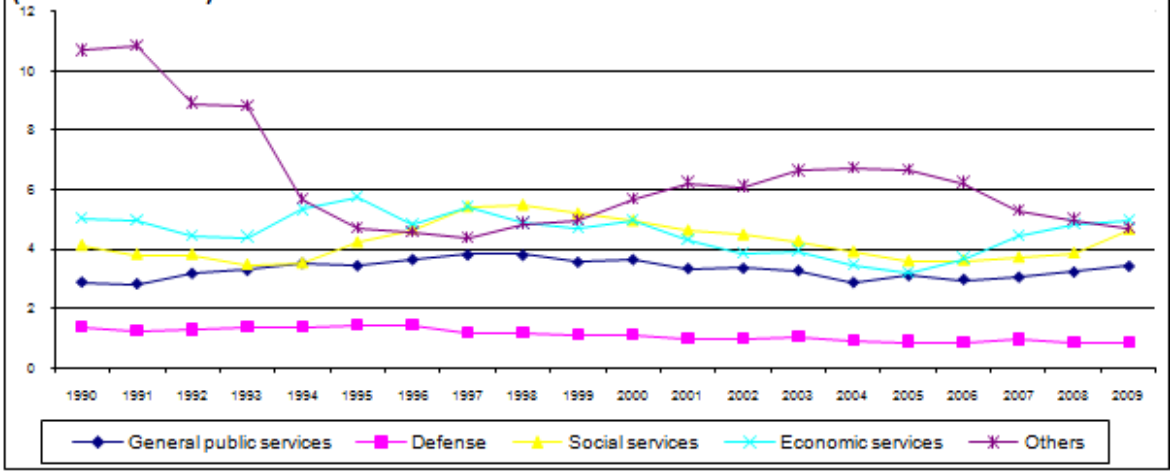


Figure 7. National Government Expenditures, by Sector, 1990-2009 (Percent to GDP)



Source of Data: ADB Key Indicators for the Asia and the Pacific 2010

a. *Formulation of economic assumptions and revenue forecasts.* The lead responsibility for overall economic assumptions lies with the National Economic and Development Authority. The lead responsibility for the revenue forecasts lies with the Department of Finance. The medium-term fiscal program of the Philippine Development Plan is the take off point for the formulation of the economic assumptions and revenue forecasts. Estimates of the gross domestic product, revenue effort and the budget deficit all determine the level of the expenditure program. Since revenues have been less than estimated in recent years (Figure 4), the expenditure program has to be accompanied by administrative reforms to increase revenue collection and ensure tax compliance and in some instances the enactment of new revenue measures, to ensure credibility of the budget.

b. *Preparation of forward estimates.* The Department of Budget and Management prepare the 3-year forward estimates in consultation with the line agencies. The forward estimates serve as the basis for the issuance of the indicative budget ceiling which shall guide agencies in the preparation of their respective budget proposal. The forward estimates cover the estimated annual cost of ongoing budgetary programs and projects. This will help ensure the continuous funding of program requirements beyond a given fiscal year, and help provide a sound basis of future years' budget requirements. The national expenditure program for the previous year serves as the starting point, with some changes being made for inflation, non-recurring expenditures, operating costs of completed projects, and so on, in order to show the cost of existing programs.

c. *Preparation of the paper on budget strategy*. The economic assumptions/revenue forecasts combined with the forward estimates yield the amount of fiscal space available for the upcoming budget.

The Department of Budget and Management prepares a paper on budget strategy (PBS) to discuss the uses of additional resources (or the fiscal space) deemed available. The PBS is an internal document used as a basis for discussion within the Development Budget Coordinating Committee (DBCC) for deciding on priority sectors for the use of new resources. The PBS discusses the macroeconomic outlook and fiscal targets, the President's priorities, current achievements and challenges in achieving the plan, and options for priority sectors.

The forward estimates and the paper on budget strategy are the main components of the medium-term expenditure framework (MTEF) which has been adopted to improve the predictability of the budget and integrate and improve the linkages between plan and the budget.

In summary, the total resources available for the preparation of the budget are the indicative ceilings derived from the forward estimates and the available fiscal space (projected revenues less forward estimates).

Phase 2: Allocating resources. The second phase in the annual budget formulation cycle is the actual allocation of resources to departments and agencies. The steps in this process are: (a) issuance of budget call; (b) conduct of budget forum; (c) consultation with Regional Development Councils and civil society organizations; (d) conduct of technical budget hearings; (e) budget review; (f) DBCC deliberation; and (g) President and Cabinet's review and approval.

a. *Issuance of budget call*. The annual budget process officially starts with the issuance of the budget call by the Department of Budget and Management to guide all government agencies in budget preparation activities. The major content of the budget call are: (a) the overall direction on economic goals and fiscal targets; (b) priority areas of government PAPs; (c) budget ceilings; (d) guidelines in the formulation of agency budget proposals; and (e) calendar of budget preparation activities.

   The first two points elaborate on the options presented in the paper on budget strategy. The budget ceilings refer to the indicative levels arrived at in the formulation of the forward estimates. These are the baseline requirements categorized as salaries, non-salary operating, capital and transfers. The ceilings are presented in aggregate for the total of a department's budget, including subsidiary ceilings for its subsidiary agencies. Departments are allowed to reallocate funds.

b. *Conduct of budget forum*. Immediately after the issuance of the budget call, DBM convenes the heads of all government departments and agencies in a budget forum. This is to further elaborate on the contents of the budget call and to clarify any issues departments may have. The DBM regional offices also conduct this budget forum with regional offices of line agencies.

c. *Consultations with Regional Development Councils and civil society organizations.* The Regional Development Councils coordinates regional plan formulation and is tasked to review and endorse budgets of agency regional offices. In the consultation process, the RDCs are able to provide suggestions on needed improvements in agency programs. Through these consultations feedback from local government units and nongovernment members on the impact of national government PAPs in their localities are generated. The regional offices of DBM and NEDA coordinate the conduct of the RDC consultations. The agency regional offices present their budget allocations taking into consideration allocations for existing PAPs and their share in the agency lump sum funds, as agreed with their central offices. The RDC feedback are reported back to the central office for needed adjustments in the regional distribution of the agency PAPs and lump sum funds. The ACOs, through the AROs, are enjoined to provide feedback on RDC recommendations which are incorporated in the budget submission to DBM. Together with DBM, the RDCs are also informed which RDC projects are finally included in the national expenditure program and submitted to congress for approval.

   Similarly, consultations shall be undertaken with partner and interested CSOs and other stakeholders at the central and regional levels. This formal consultations were initiated for the preparation of the 2012 budget and piloted in six departments, namely, Department of Agriculture (DA), Department of Agrarian Reform (DAR), Department of Public Works and Highways (DPWH), Department of Education (DepEd), Department of Health (DOH), and Department of Social Welfare and Development (DSWD).

   The following principles of CSO engagement were agreed upon by DBM with CSOs under the Budget Advocacy Group: transparency, accountability, integrity, partnership, onsultation and mutual empowerment, respect for internal processes, upholding national interest, and sustainability.

d. *Conduct of technical budget hearings.* Review of budget proposals takes place in formal technical budget hearings conducted by DBM. Departments explain in detail their budget proposals. NEDA attend these hearings particularly as resource person for major capital investments. The department budgets are finalized after the hearings and series of bilateral exchanges between the department and the budget specialist assigned to it.

   Performance and results are critical in these hearings. Performance and results information are integral part of the dialogue between DBM and departments and agencies. The DBM first introduced the Book of Outputs in 2007 which contain the Organizational Performance Indicator (OPIF) of the departments and attached agencies. It has been updated in 2011. Designed to change the way policy makers and implementers view the budget and the budgeting process

   The department's performance relative to the implementation of the previous year's budget also figures in the discussion as this have implications on the following year's budget.

e. *Budget review within DBM.* After all these technical hearings and bilateral exchanges between agencies and their respective Budget and Management Bureau at DBM, each Bureau will then submit its assessments of the proposals and recommend funding levels for their respective agency to the Executive Review Board. This is an internal DBM body consisting of the Secretary and senior officials. The submission of the assessments is a formal procedure with specific forms and protocols and is by no means an automatic endorsement of the recommendation of the Bureaus (Blondal: 2010). The Executive Review Board will often seek revisions for the funding levels of specific program.

f. *DBCC deliberations.* DBM also consults the Development Budget Coordinating Committee. An update of the economic assumptions and revenue projects may result from these consultations. DBM submits their recommendations to agencies which may still appeal the funding levels. Requests from agencies are consolidated by DBM and the Executive Review Board may meet again to consider them.

g. *Review and approval by the Cabinet and the President.* DBM submits to the Cabinet its final recommendations in a Cabinet meeting for review and approval of the budget embodied in the National Expenditure Program (NEP).

Phase 3. Congressional deliberations and approval.

a. *Submission of the National Expenditure Program to Congress.* Within 30 days from the President's State of the Nation Address on the last Monday of July, government submits its budget to Congress.

b. *Congressional deliberation*. The House of Representatives and the Senate conduct their own deliberation of the NEP. However, only after the House has finished its deliberations and approval does the budget go to the Senate.

   Through the Appropriations Committee of the House, hearings with, first the representatives of the DBCC and its members, to review the overall economic and fiscal performance, including the macroeconomic assumptions and revenue forecasts upon which the proposed budget is based. The

Appropriations Committee then divide into subcommittees to scrutinize the budget proposal of their respective departments and agencies. The heads of the respective departments and agencies go to Congress to explain their respective programs and projects.

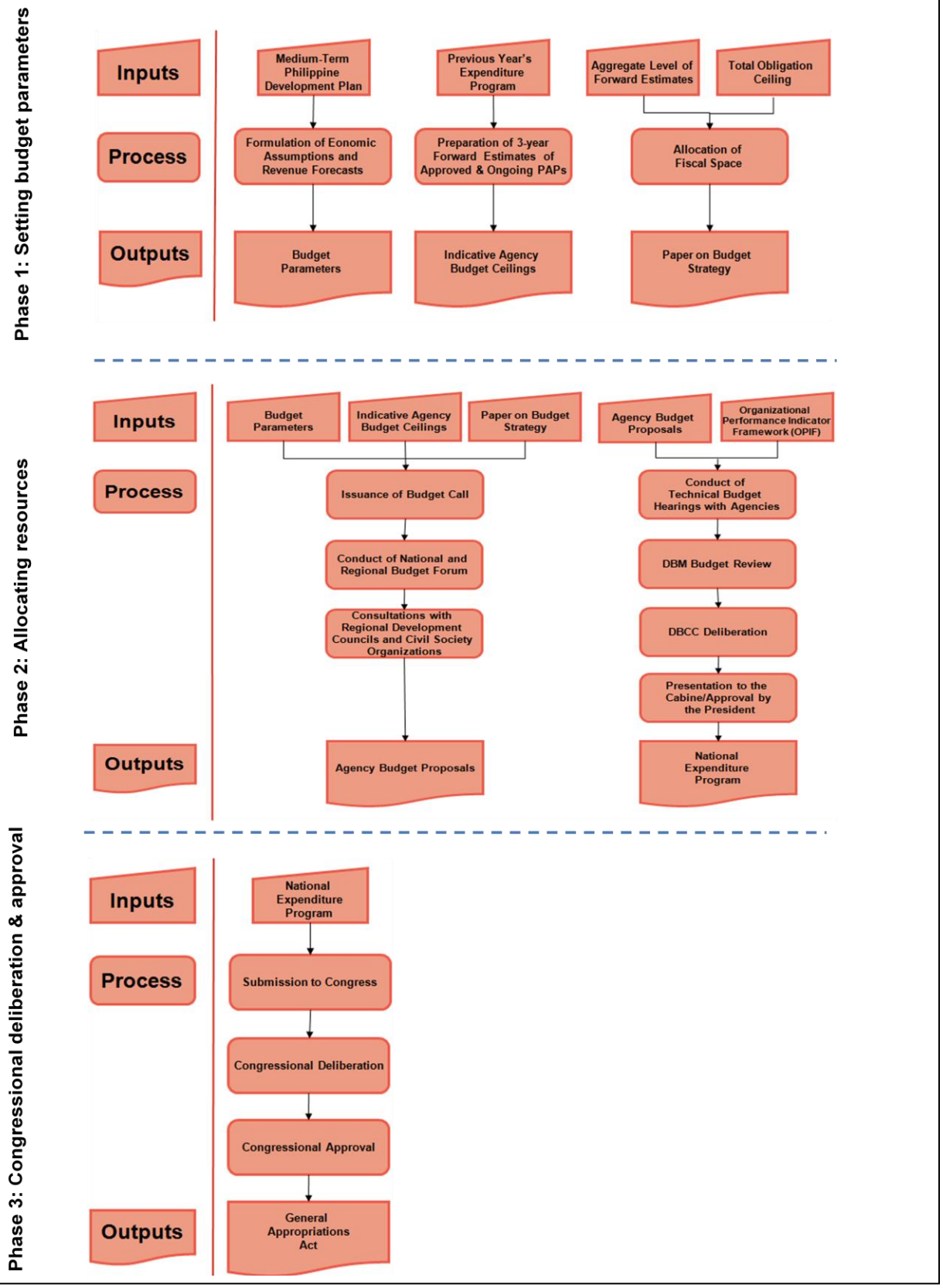
The Appropriations Committee and its subcommittee will then prepare a committee report which include proposed amendments. At this stage, the budget evolve into the form of the general appropriations bill. The Appropriations Committee will approve the committee report and the House holds a plenary session to approve the bill. The approved bill will then be transmitted to Senate.

The Senate scrutinizes the House bill through its Finance Committee. The Finance Committee also divides into subcommittees which hold hearings to scrutinize departments and agencies in the same way as the House Appropriations Committee. The Senate generally looks at the aspects of fiscal responsibility of the budget.

The Senate then formally approves the budget in a plenary session based on the report and amendments of the Finance Committee.

c. *Congressional approval.* If the Senate bill differs from the House bill, which is typically the case, a Bicameral Conference Committee is convened to reconcile the differences in a compromise bill. The compromise bill is approved by the House and Senate in a plenary.

Figure 8: Annual Budget Formulation Process



IV. REVIEW OF DRR BUDGET ALLOCATIONS

A. What Constitutes Disaster Risk Reduction?

Disaster risk reduction is aimed at dealing with the fundamental elements of disaster risk: hazard, exposure and vulnerability. Disaster risks are caused by interactions between hazard events and the characteristics of exposed elements that make them susceptible to damage. Disaster risk assessment examines the factors that cause losses in order to estimate loss probabilities. Risk factors include the probability of destructive hazard events as well as the contingent vulnerabilities of the exposed elements at risk.

For purposes of this study, DRR expenditures shall be categorized using these elements, as follows: (i) understanding hazards; (ii) minimizing exposure; and (iii) lessening vulnerability/building resilience.

Understanding hazards covers budget allocations dealing with better understanding of the destructive potential of hazards, their probability of occurrence, intensity, location among others. Specific activities include hazard mapping, assessment, monitoring and forecasting. It also includes establishment of databases and research and development. Generally, the government would rely on its scientific and technological agency or agencies to generate hazard information and make these known by the public through easily understandable hazard maps and bulletins.

Minimizing exposure covers budget allocations that reduce exposure of people, infrastructure, economic activities or environmentally important land uses (e.g., agricultural areas) to impact of hazards. These may include spending on technical or non-structural measures like implementing appropriate land-use planning in flood-prone areas and ensuring proper building codes in earthquake-prone areas. Structural measures relate to mitigating risks, such as flood control projects and forest management.

Lessening vulnerability centers on addressing factors that limit coping capacities of exposed elements. Classified under this are pre-disaster budget allocations related to preparedness, sensitizing plans and policies, allocating funds to enable government to respond to disasters, and risk financing.

B. Addressing Vulnerability through the MDGs

A strong argument for disaster risk reduction is spending on programs and projects directed at making lives and livelihoods disaster resilient. These are basically spending on social infrastructure and services on improving health and wellbeing, social protection and sustainable livelihood, among others. These items will not be part of DRR budget allocation analysis, not only because of the strong emphasis on social services as a basic government function, but also since these are part of the Philippine government commitment to meet the Millennium Development Goals (MDGs).

To step up support to the MDGs, the Philippine government adopted a reporting system for budget allocations and expenditures including physical targets and accomplishments. NEDA and DBM issued relevant Guidelines which included the reporting forms and the list of programs and projects that are considered to be contributing to the MDGs (Annex 1).

This MDG tracking provides insights on government spending particularly those that directly contribute to reducing vulnerabilities on disaster risk reduction especially in relation to improving the poverty conditions such as livelihood, education, health and well-being, social protection, among others.

Box 1. The challenge of DRR classification

In the author's review of existing systems that track development expenditures, the widest scope maybe that of the AidData. The AidData web portal serves as a repository of development finance activities, many of them taken from the OECD's Creditor Reporting System, in addition to aggregating information on individual activities from other sources (World Bank, Global Environment Facility, Global Fund to Fight AIDS, Tuberculosis and Malaria, among others).

Aid expenditure has been tracked systematically by the OECD through its Creditors Reporting System which requires all of its member-development assistance countries (DAC) to submit reports on their official development assistance. Some non-DAC countries also submit report to the CRS.

The OECD-DAC CRS classifies disaster prevention under humanitarian aid. Other expenditure classification under this are emergency response, reconstruction relief and rehabilitation and disaster prevention and preparedness. In recognition of the importance of investments on flood control, the purpose codes on this type of expenditure is cross-referenced under disaster prevention and preparedness.

Disaster preparedness, however, is encompassing. Export of data (using the AidData portal on 1 July 2011) generated a list of 226 projects under the 700 code (Humanitarian Aid). The list also yielded other project categories but with emergency response, reconstruction and relief and rehabilitation and disaster prevention and preparedness components.

Data on disaster risk reduction are hidden within many development sectors. Development projects which have elements of DRR from the exported list are road and transport, forestry policy and administration, water supply and sanitation, water resources protection, biosphere protection, river development, flood prevention and control, agriculture development, agricultural inputs, environmental policy and administrative management, environmental education and training, emergency/distress relief, environmental research, fishing policy and administrative management, medical research, reconstruction relief, and social and welfare services.

The final classification used in the analysis reconciles what these existing DRR financing tracking systems cover and the existing programs and projects of relevant government agencies as presented in the General Appropriations Act or the approved budget.

C. Analysis of DRR Budget Allocations for 2009-2011: Accounting for Directly Related Allocations

The General Appropriations Act for the years 2009, 2010 and 2011 were scrutinized to come up with the analysis of DRR budget allocation. Existing programs and projects of relevant government agencies were categorized into the three elements of reducing disaster risks, i.e., (i) understanding hazards; (ii) minimizing exposure; and (iii) lessening vulnerability/building resilience. The result is presented in Table 4.

1. Increasing DRR budget allocation but mainly for post-disaster recovery

DRR budget allocation expanded by 61.40 percent in 2011 alone, that is to PhP 27.332 billion from PhP16.934 billion in 2010 (Table 5). This is a tremendous increase from the less than one percent growth in DRR budget between 2009 and 2010.

The biggest growth (360 percent) goes to sustainable recovery basically to address the requirements for rehabilitation and reconstruction. The 2011 DRR budget basically addresses the requirements for rehabilitation and reconstruction as a result of the two major typhoons that hit the country in 2010 (Box 2).

Budget for maintenance of flood control systems also significantly grew at 182 percent. This is an important budgetary item as recurrent costs, particularly for maintenance, would extend economic life of DRR investments.

Notable as well are the growth in expenditures on hazard assessments including investments on forecasting and early warning, as well as on risk financing.

Only two items have shown a decline in budget allocation, namely, preparedness and preliminary and detailed engineering of disaster countermeasures for roads, bridges and flood control projects, which, however, are important pre-disaster spending.

In these three years, almost ¾ of the total DRR budget allocation is for capital investments (Annex Table 3) indicating government priority for long-term capital forming structures to reduce disasters, although this must be supported by investments in maintenance.

Table 4. DRR Budget Allocation: 2009-2011 (In Pesos)

Items		2009	2010	2011
	Total National Budget (Net of Debt Service) (PhP)	1,173,451,790,000	1,264,388,000,000	1,287,910,000,000
	GDP current (PhP)	8,026,143,000,000	9,003,480,000,000	9,932,508,000,000
	Population	92,226,600	94,010,000	95,790,000
	Per Capita DRR Budget Allocation	182	180	285
	Total DRR Budget Allocation	16,782,524,000	16,934,925,000	27,332,435,475
1	Understanding hazards	769,725,950	532,195,000	1,009,547,600
1.1	Hazard Identification, Mapping and Assessment	221,377,950	18,738,300	33,370,800
1.2	Hazard monitoring, forecasting and warning	525,371,950	501,778,850	951,189,600
1.3	Research and Development	22,976,050	11,677,850	24,987,200
2	Minimizing exposure	11,628,616,050	12,674,354,000	17,041,603,875
2.1	Structural/Physical Measures	11,306,118,000	12,470,869,000	16,883,834,000
	Construction of Flood Control/Seawall and Drainage Projects	6,905,623,000	8,653,806,000	11,539,225,000
	Maintenance, Repair and Rehabilitation of	912,175,000	632,001,000	1,781,741,000

Items		2009	2010	2011
	Flood Control and Drainage Systems,Structures and Related Facilities			
	Forest Management	3,488,320,000	3,185,062,000	3,562,868,000
2.2	Technical Measures/Non-structural	322,498,050	203,485,000	157,769,875
	Risk Mitigation and Other Services	27,097,050	15,085,000	23,474,875
	Preliminary and Detailed Engineering of Disaster Countermeasures (Roads/Bridges and Flood Control Projects)	295,401,000	188,400,000	134,295,000
3	Lessening vulnerability/ building resilience	4,384,182,000	3,728,376,000	9,281,284,000
3.1	Preparedness	122,167,000	222,971,000	128,601,000
3.2	Disaster Response	2,143,343,000	2,203,437,000	3,352,729,000
3.3	Sustainable Recovery	1,902,401,000	1,221,468,000	5,616,183,000
3.4	Risk Financing	216,271,000	80,500,000	183,771,000

Box 2. The impact of Typhoons Ondoy and Pepeng

The world witnessed such impact during Typhoons Ondoy and Pepeng in 2009. Tropical Storm Ondoy hit the Philippines on September 26, 2009, causing widespread flooding**.** **I**ntense rains exceeded the Marikina River's carrying capacity and generated high flooding. Ondoy caused extensive flooding in the Metro Manila area and the neighboring Rizal Province, including the cities of Antipolo, Makati, Malabon, Marikina, Muntinlupa, Pasig, Quezon, San Juan, Taguig and Valenzuela. Tropical Storm Ondoy was quickly followed by Typhoon Pepeng.

Typhoons Ondoy and Pepeng resulted in large numbers of affected persons and casualties. Death from the two natural disasters almost reached a thousand with damage and losses equivalent to about 2.7 percent of GDP. The Office of Civil Defense reported cost of damage at about 38.2 billion pesos. The storms hit regions of the country that account for over 60 percent of GDP (including the National Capital Region, which accounts for about 38 percent of total GDP). The adverse impacts on the productive sectors were largely due to damaged or lost inventories, raw materials and crops. In addition, business operations were interrupted by power and water shortages, damaged machinery and absent employees, which contributed to an overall reduction in production capacity.

Source: From the Post Disaster Need Assessment Report coordinated by WB in 2009, in partnership with the Philippine Government, ADB, AusAID, EC, UN and GFDRR; and Office of Civil Defense.

Table 5: Growth Rate of DRR Budget Allocation from 2010 to 2011 (In Percent)

Items		2009-2010	2010-2011
	Total DRR Budget Allocation	0.91	61.40
1	Understanding hazards	-30.86	89.70
1.1	Hazard Identification, Mapping and Assessment	-91.54%	78.09
1.2	Hazard monitoring, forecasting and warning	-4.49%	89.56
1.3	Research and Development	-49.17%	113.97
2	Minimizing exposure	8.99	34.46
2.1	Structural/Physical Measures	10.30	35.39
	Construction of Flood Control/Seawall and Drainage Projects	25.32	33.34
	Maintenance, Repair and Rehabilitation of Flood Control and Drainage Systems,Structures and Related Facilities	-30.71	181.92
	Forest Management	-8.69	11.86
2.2	Technical Measures/Non-structural	-36.90	-22.47
	Risk Mitigation and Other Services	-44.33	55.62
	Preliminary and Detailed Engineering of Disaster Countermeasures (Roads/Bridges and Flood Control Projects)	-36.22	-28.72
3	Lessening Vulnerability/Building Resilience	-14.96	148.94
3.1	Preparedness	82.51	-42.32
3.2	Disaster Response	2.80	52.16
3.3	Sustainable Recovery	-35.79	359.79
3.4	Risk Financing	-62.78	128.29

2. Foreign-assistance is significant but local funds remain the main source of DRR budget

A developing country like the Philippines leverages domestic resources with official development assistance to meet its budgetary requirements for public services. Scrutiny of the General Appropriations Act for disaster risk reduction-related budget gave an indication of levels of foreign borrowings for flood control projects of the Department of Public Works and Highways (DPWH). While DPWH is not the only government agency which have flood control projects (the other one is the Metro Manila Development Authority), it almost accounts for the total budget for this sector (i.e., 88.3% in 2009, 85.92% in 2010, and 98.12 percent in 2011). Although local funds are still the main source for flood control projects, foreign loans have been increasing, almost quadrupling the 2009 level in 2011 (Table 6 and Box 3).

This trend might continue considering that disasters continue to affect disproportionately the poor, the government's awareness of the country's vulnerability to disasters, the increasing costs of damage, and the projected impacts of climate change on existing hazards. Further, with successive disasters experienced by the country, there are unmet demands for financing for rehabilitation and reconstruction. Financing for rehabilitation and reconstruction implies diverting development funds to rebuilding facilities. While this may be an opportunity for building back better, and generate business and employment for several industries, these form of incentives are perverse. The better lesson is to continuously invest on disaster risk reduction to ensure that sustainable economic development is achieved.

Table 6. Source of Funds for Flood Control Projects: 2009-2011

Items	2009	2010	2011
DPWH budget allocation for construction of flood control projects (PhP)	6,097,623,000	7,435,631,000	11,322,608,000
Local funds (%)	92.59	76.98	78.54
Foreign loans (%)	7.41	23.01	27.32
Share of DPWH to total budget allocation for construction of flood control projects (%)	88.30	85.92	98.12
Share of DPWH to total DRR budget (%)	36.33	43.91	41.43

Grant assistance from development partners could be a significant source of nonstructural response specifically in building capacities of national government agencies and local government units in addressing disaster risks, mainstreaming disaster risk reduction into national and local plans, policies and projects, conduct of scientific researches, hazard mapping and disaster risk assessments, and implementation of small community projects such as rainfall monitoring and early warning.

Box 3. Foreign loan funding for mitigating continuing hazards from the Mt. Pinatubo eruption

Twenty years have passed since the Mt. Pinatubo eruption, yet its hazardous effects continue. A large portion of the province of Pampanga was practically devastated by the eruption and flooding due to clogging of river ways caused by sedimentation of pyroclastic flows remain to be a major concern. To address this, a 1.32 billion peso loan from the Japan Bank for International Cooperation was used in 2011 to fund the flood control works in Porac-Gumain River and Pasac Delta Area as part of the Mt. Pinatubo Hazard Urgent Mitigation Project Phase III. The government provided a 289 million peso-counterpart.

3. DRR budget allocation still meager relative to the national budget and GDP

In spite of the increase, the DRR budget allocation relative to the national budget (net of debt services) remain trivial. The 2011 DRR budget allocation composes a mere 2.12 percent of the national budget (Table 7) and 0.28 percent of the projected GDP for 2011 (Table 8).

A significant share in the 2011 national budget and GDP is for flood control projects which is about 1.04 percent of the national budget and 0.14 percent of GDP. Share of sustainable recovery in 2011 is quite significant, 0.44 percent of the national budget, mainly because of the post-Ondoy and Pepeng reconstruction and rehabilitation requirements which brought a staggering 12.4 billion damage or about 0.14 percent of GDP. The share of sustainable recovery relative to GDP, however, is only 0.06 percent, or less than half of that of the damage.

On a per capita basis, this budget translates to about PhP285 budget allocation per Filipino for DRR in 2011.

Table 7: Share of DRR Budget Allocation to National Budget (Less of Debt Services): 2009-2011 (In Percent)

Items		2009	2010	2011
	Total DRR Budget Allocation	1.43	1.34	2.12
1	Understanding hazards	0.07	0.04	0.08
1.1	Hazard Identification, Mapping and Assessment	0.02	0.00	0.00
1.2	Hazard monitoring, forecasting and warning	0.04	0.04	0.07
.3	Research and Development	0.00	0.00	0.00
2	Minimizing exposure	0.99	1.00	1.32
2.1	Structural/Physical Measures	0.96	0.99	1.31
	Construction of Flood Control/Seawall and Drainage Projects	0.59	0.68	0.90
	Maintenance, Repair and Rehabilitation of Flood Control and Drainage Systems, Structures and Related Facilities	0.08	0.05	0.14
	Forest Management	0.30	0.25	0.28
2.2	Technical Measures/Non-structural	0.03	0.02	0.01
	Risk Mitigation and Other Services	0.00	0.00	0.00
	Preliminary and Detailed Engineering of Disaster Countermeasures (Roads/Bridges and Flood Control Projects)	0.03	0.01	0.01
3	Lessening vulnerability/building resilience	0.37	0.29	0.72
3.1	Preparedness	0.01	0.02	0.01
3.2	Disaster Response	0.18	0.17	0.26
3.3	Sustainable Recovery	0.16	0.10	0.44
3.4	Risk Financing	0.02	0.01	0.01

4. DRR budget composition: minimizing exposure of population and assets takes priority

DRR spending gives priority to programs, activities and projects (PAPs) that minimize exposure of the population and the economy to the consequences of hazard events (Table 9). About 62 percent of the budget is allocated for these PAPs.

In particular, 42 percent of capital outlay is allotted for the construction and improvement of flood control projects. In contrast, only 7 percent is directed to maintenance, repair and rehabilitation of existing facilities. As a percentage of the total DRR budget, 2011 expenditure for construction and improvement of flood control projects was almost 10 percentage points lower than that of 2010 and almost of the same level with that of 2009.

Expenditures for forest management account to 13 percent of the DRR budget. Important to control flooding and prevention of landslides, forest management expenditures cover management of forestland and forest sources, forest development and protection, soil conservation and watershed management including rehabilitation and integrated development of river basins, and community-based forestry. Share of forest management has been declining from 21 percent in 2009, to 19 percent in 2010 and just 13 percent in 2011.

Table 8: Share of DRR Budget Allocation to Gross Domestic Product (GDP): 2009-2010 (in percent)

Items		2009	2010	2011
	Total DRR Expenditures	0.21	0.19	0.28
1	Understanding hazards	0.01	0.01	0.01
1.1	Hazard Identification, Mapping and Assessment	0.00	0.00	0.00
1.2	Hazard monitoring, forecasting and warning	0.01	0.01	0.01
1.3	Research and Development	0.00	0.00	0.00
2	Minimizing exposure	0.14	0.14	0.17
2.1	Structural/Physical Measures	0.14	0.14	0.17
	Construction of Flood Control/Seawall and Drainage Projects	0.09	0.10	0.12
	Maintenance, Repair and Rehabilitation of Flood Control and Drainage Systems, Structures and Related Facilities	0.01	0.01	0.02
	Forest Management	0.04	0.04	0.04
2.2	Technical Measures/Non-structural	0.00	0.00	0.00
	Risk Mitigation and Other Services	0.00	0.00	0.00
	Preliminary and Detailed Engineering of Disaster Countermeasures (Roads/Bridges and Flood Control Projects)	0.00	0.00	0.00
3	Lessening vulnerability/building resilience	0.05%	0.04%	0.09%
3.1	Preparedness	0.00%	0.00%	0.00%
3.2	Disaster Response	0.03%	0.02%	0.03%
3.3	Sustainable Recovery	0.02%	0.01%	0.06%
3.4	Risk Financing	0.00%	0.00%	0.00%

Table 9: Distribution of DRR Budget: 2009-2011 (In Percent)

DRR Budget Allocation		% Share to Total		
		2009	2010	2011
1	Understanding hazards	4.59	3.14	3.69
1.1	Hazard Identification, Mapping and Assessment	1.32	0.11	0.12
1.2	Hazard monitoring, forecasting and warning	3.13	2.96	3.48
1.3	Research and Development	0.14	0.07	0.09
2	Minimizing exposure	69.29%	74.84	62.35
2.1	Structural/Physical Measures	67.37	73.64	61.77
	Construction of Flood Control/Seawall and Drainage Projects	41.15	51.10	42.22
	Maintenance, Repair and Rehabilitation of Flood Control and Drainage Systems, Structures and Related Facilities	5.44	3.73	6.52
	Forest Management	20.79	18.98	13.04
2.2	Technical Measures/Non-structural	1.92	1.20	0.58
	Risk Mitigation and Other Services	0.16	0.09	0.09
	Preliminary and Detailed Engineering of Disaster Countermeasures (Roads/Bridges and Flood Control Projects)	1.76	1.11	0.49
3	Lessening vulnerability/building resilience	26.12	22.02	33.96
3.1	Preparedness	0.73	1.32	0.47
3.2	Disaster Response	12.77	13.01	12.27
3.3	Sustainable Recovery	11.34	7.21	20.55
3.4	Risk Financing	1.29	0.48	1.10

Budget for the scientific aspects of hazards and risk such as hazard assessment, mapping, forecasting and early warning accounts for less than five percent of the total DRR budget with a 2011 share lower than that of 2009. However, the share of expenses for hazard monitoring and forecasting has increased putting emphasis on better forecasting capabilities.

The second highest bulk of government spending is on lessening vulnerability and increasing resilience mainly for disaster response and sustainable recovery. The government has allocated a large amount of stand-by funds to respond to disasters and sustain recovery. The details of these DRR expenditures are presented in Table 10.

The total calamity fund for 2011 amounts to PhP 5 billion; 53 percent of which is intended for disaster response, and 47 percent for post-disaster repair and reconstruction. This is a significant increase from the constant 2010 and 2009 levels of PhP 2 billion.

The Department of Education is also allocated a quick response fund for the immediate repair of affected educational facilities. The PhP 480 million allocation for 2011 is lower than the 2010 level of PhP 650 million. Total disaster response budget allocated to the Department of National Defense and the branches of Armed Forces of the Philippines amounts to about PhP 175 million in 2011 down from the 2009 level of 620 million.

As for planning and policy, what has been allocated for 2011 is for the formulation of a disaster risk management framework (including climate change adaptation strategy) for the Department of Public Works and Highways. This is expected to lay down the future directions for risk-sensitive infrastructure planning and design.

Another significant allocation is the PhP 40 million-Enhancing Local Government Units (LGUs) Capacity for Climate Change Framework under the Department of Interior and Local Government which will be used to encourage LGUs to shift focus on disaster prevention and risk reduction through strengthening communities and peoples capacities to anticipate, cope with, and to recover from disaster as an integral part of development programs.

Risk financing through crop insurance in the Philippines started back in 1978 with the Philippine Crop Insurance Corporation (PCIC) as administrator. The budget allots a national government subsidy for crop insurance premium of subsistence farmers under the Crop Insurance Program. The amount was about 184 million in 2009 and 114 million in 2011. Additional budget of PhP30.5 million for the expansion of the crop insurance program was provided to PCIC in 2009 and 2010.

In 2010 and 2011, a budget for the insurance of school buildings amounting to PhP50 million and PhP 70 million respectively. This is an important pre-disaster spending considering the spiraling effects of damage to school building facilities to the education program of government, especially as it tries to surmount already existing deficits in classrooms for current enrollees.

Table 10. Budget for Disaster Preparedness, Response, Recovery and Risk Financing: 2009-2011 (PhP)

DRR Budget		2009	2010	2011
3.	Lessening Vulnerability/Building Resilience			
3.1	Preparedness	122,167,000	222,971,000	128,601,000
	Policy and Planning	6,096,000	139,702,000	60,344,000
	Planning, direction and coordination for civil defense	66,071,000	63,269,000	68,257,000
	Barangay Security, Emergency and Disaster Preparedness			
	Establishment of Disaster Risk Reduction and Harmonizing Action to Negate Disaster's Adverse Effects (HANDA) LGU program	50,000,000	20,000,000	
3.2	Disaster Response	2,143,343,000	2,203,437,000	3,352,729,000
	Calamity Fund: Aid, Relief and Rehabilitation Services to Communities/Areas Affected by Calamities, including Training of Personnel, and Other Pre-disaster Activities.	1,150,000,000	1,150,000,000	2,650,000,000
	Rescue and Relief Operations to Barangays Affected by Calamities		200,000,000	
	Disaster Response	620,088,000	157,682,000	174,686,000
	Assistance to victims of disasters and natural calamities including handling and hauling of commodity donations	73,255,000	45,755,000	48,043,000
	Quick Response Fund	300,000,000	650,000,000	480,000,000
3.3	Sustainable Recovery	1,902,401,000	1,221,468,000	5,616,183,000
	Calamity Fund: Repair and Reconstruction of Permanent Structures, including Capital Expenditures for Pre-disaster Operations, Rehabilitation and Other Related Activities	850,000,000	850,000,000	2,350,000,000
	Post Ondoy and Pepeng Short Term Roads and Bridges Infrastructure Rehabilitation Project			2,979,855,000
	Disaster Related Rehabilitation Projects			250,000,000
	Bridge Construction/Acceleration Project for Calamity Stricken Areas (Austrian-Assisted)	1,052,401,000	371,468,000	36,328,000
3.4	Risk Financing	216,271,000	80,500,000	183,771,000
	Insurance Coverage for School Buildings		50,000,000	70,000,000
	National government subsidy for crop insurance premium of subsistence farmers under the Crop Insurance Program	183,771,000		113,771,000
	Expansion of Crop Insurance Program	30,500,000	30,500,000	
	Assistance to LGUs on Accessing Municipal Development Fund for DRR	2,000,000		

5. Regional distribution of DRR budget allocation: Where are we spending?

Except for 2010, only less than half of the budget has specific regional locations. The rest are considered nationwide or projects which can be spent in any of the regions (e.g., calamity fund). Interregional projects which cover two or more regions have significantly high allocation under the recovery and reconstruction

budget after Typhoons Pepeng and Ondoy. As it is, the bulk of the expenditures are in NCR and Region 3, the two regions hardest hit by these two typhoons (Table 11).

Table 11. Regional Distribution of DRR Budget Allocation: 2009-2011 (In percent)

Region	2009		2010		2011	
Total DRR Expenditures	16,782,524,000		16,934,925,000		27,332,435,480	
	With Nationwide	Without Nationwide	With Nationwide	Without Nationwide	With Nationwide	Without Nationwide
Nationwide	53.30		34.71		52.42	
Interregional	0.09	0.18	0.34	0.53	11.12	19.00
NCR	8.32	17.82	17.91	27.43	21.07	36.03
CAR	0.90	1.92	1.35	2.07	0.82	1.40
1	7.09	15.18	3.81	5.84	2.53	4.33
2	2.16	4.63	2.12	3.24	0.99	1.69
3	3.93	8.42	14.78	22.63	9.01	15.40
4A	2.02	4.32	2.18	3.34	0.95	1.62
4B	1.24	2.66	1.44	2.20	0.93	1.58
5	4.83	10.35	5.09	7.80	3.03	5.18
6	7.42	15.90	5.56	8.51	1.22	2.09
7	1.03	2.21	0.86	1.31	0.82	1.40
8	1.03	2.21	1.26	1.94	0.83	1.42
9	0.89	1.91	1.42	2.18	0.61	1.05
10	1.33	2.85	2.18	3.34	1.27	2.18
11	1.16	2.49	1.16	1.78	0.78	1.33
12	0.64	1.37	2.76	4.22	1.45	2.47
13	2.18	4.68	0.90	1.37	1.06	1.81
ARMM	0.42	0.89	0.18	0.27	0.00	0.00

Considering that flood is one of the most frequent and devastating hazard events in the country, a significant portion of the budget for DRR is spent on structural and physical measures to minimize exposure to flooding. This includes budget for flood control and forest management projects allocated across the different regions of the country.

The regional allocation of flood control projects relates well with the levels of exposure of the different regions to flooding (Figure 9). For instance, the budget on flood control projects are highly skewed in favor of Region 3 and the National Capital Region (NCR) which also have the highest percentage of total land area susceptible to floods at 35 and 38 percent, respectively. NCR accounts for about 38 percent of the country's gross domestic product and serves as the country's financial and administrative center; thus, economic loss rate is expected to be relatively large. Regions 1, 5 and 6 also received substantial allocation for flood control. These regions are also susceptible to floods.

In terms of the budget for forest management, Regions 1 and 2 have the biggest share (Figure 10). Regional allocation is more evenly distributed across the regions, excluding NCR.

Figure 9. Budget Allocation for Flood Control by Region

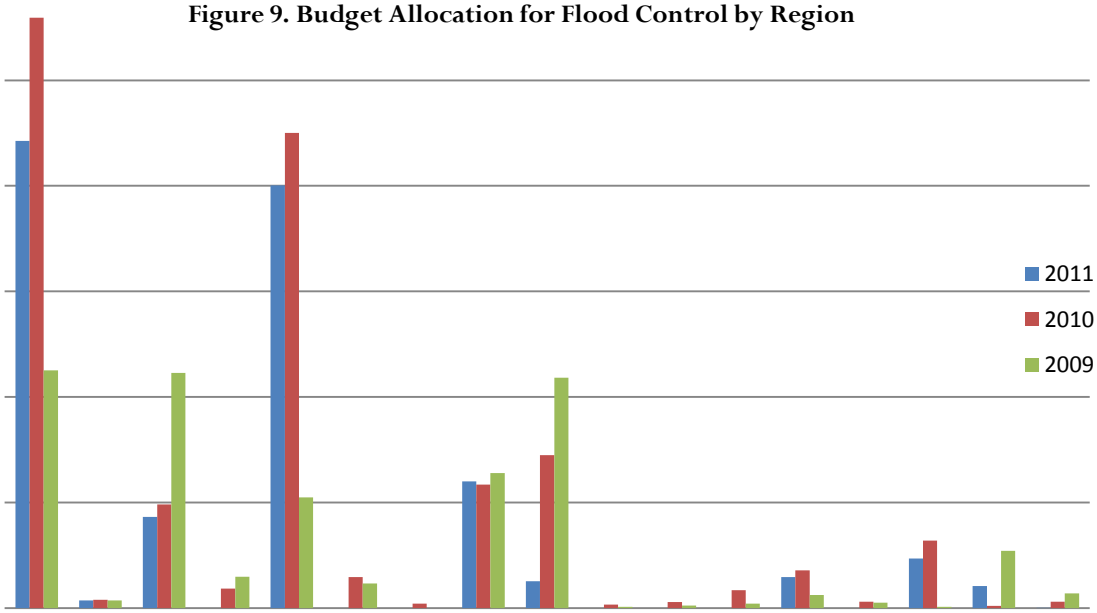
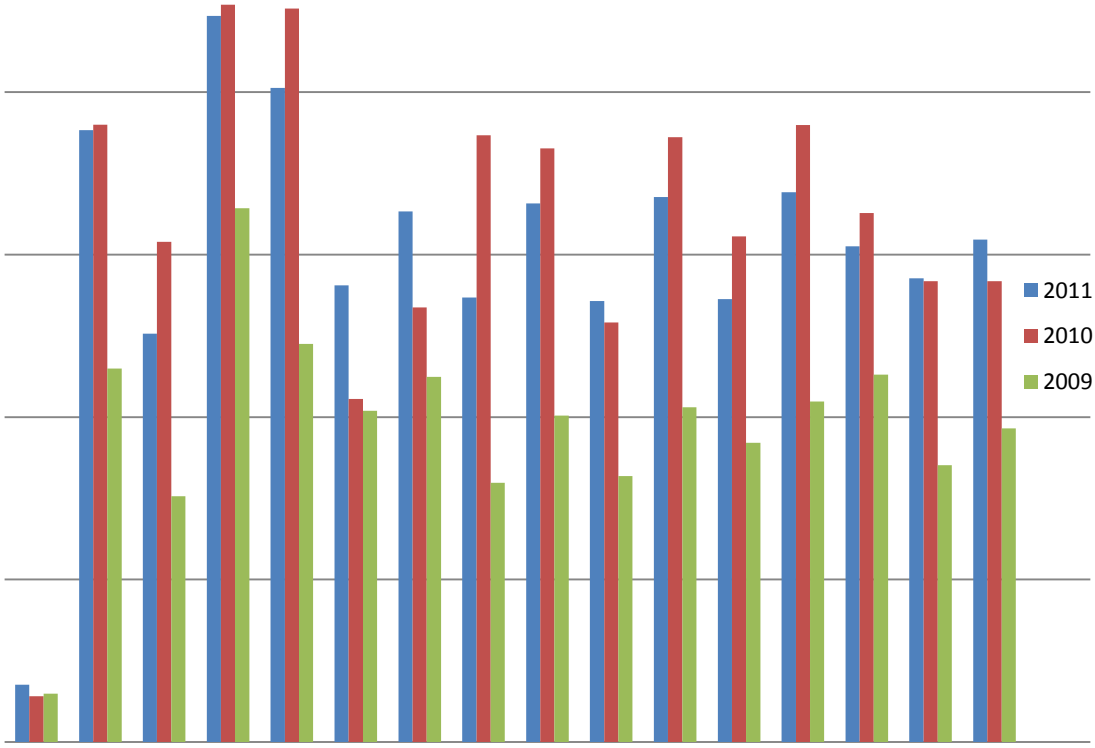


Figure 10. Budget Allocation for Forest Management by Region



V. RECOMMENDATIONS FOR IMPROVED DRR ALLOCATIONS

A. Can We Still Improve the Current DRR Allocation? Looking at Possible Entry Points

What was shown in the previous section is an initial accounting of DRR expenditures. There are two entry points to improve DRR allocation: one, by accounting for the DRR components of relevant programs, the overall level of expenditure levels will increase; two by minimizing nationwide projects, the regional distribution of the budget may improve; and three, during budget execution, augmentation from savings from other budget items.

1. Accounting for DRR components of relevant programs

Agencies may be required to breakdown the DRR components of highly relevant budget items which have direct impact on DRR (Table 12).

In the agency OPIFs, the Department of Agriculture has a program on El Nino/La Nina mitigation which falls under its program on the development of the crops sector; the Mines and Geosciences Bureau is doing geohazard mapping for municipalities and assessing municipalities that may be affected by sea level change due to climate change, both of which fall under its planning and policy formulation program; NAMRIA is also doing a mapping of low-lying areas vulnerable to sea level rise die to climate change under its mapping and remote sensing program; the Department of Health is implementing a health facilities enhancement program that can very well capture retrofitting of those hospitals in hazard-prone areas, and a hospital facilities policies.

The priority development assistance fund (PDAF) refers to the Congressional allocation of the budget. The General Appropriations Act prescribes the specific projects that can be funded from the PDAF, one of which is flood control.

The performance challenge funds for LGUs on the other hand is a financial subsidy to qualified LGUs under the Local Governance Performance Management Program. The Fund may be used by LGUs to comply with the Philippine Disaster Risk Reduction and Management Act of 2010 (apart from the MDGs and Ecological Solid Waste Management Act of 2000).

Financial subsidy to LGUs shall be used to fund programs and projects of the priority sectors of legislative districts in the LGUs. It shall be released to a specific local government unit as financial subsidy. Similar to PDAF, flood control projects are qualified to be funded.

The law prescribes that 20 percent of the internal revenue allotment shall be used for development projects. The list of projects that can qualify under this 20 percent development fund includes those for disaster risk management: construction or rehabilitation of evacuation centers, purchase or repair of area-wide calamity related alarm or warning system, purchase or repair of appropriate calamity-related rescue operations equipment such as inflatable boats, breathing apparatus, extraction tools, safe line rescue ropes, fire extinguishers, chainsaws, two-way handheld radios, purchase and development of land for the relocation of

informal settlers and relocation of victims of calamities, implementation of flood and erosion control projects such as rehabilitation and construction of drainage systems, desilting of rivers, declogging of canals.

Table 12. PAPs in the National Budget with Potential DRR Components: 2009-2011

Programs with Potential DRR Components	Agency	Allocation in the Budget (PhP)		
		2009	2010	2011
Share to national budget				
Total		165,878,321,400	171,032,863,400	158,359,924,600
Planning and Policy Formulation	MGB	4801000	6607000	7,644,000
Mapping and Remote Sensing	NAMRIA	604173000	470942000	361,459,000
Development of the Crops Sector	DA	99,169,000	99,116,000	8,101,170,000
Health Facilities Enhancement	DOH	2,073,248,000	3251695000	7,143,909,000
Formulation of policies, standards, and plans for hospital and other health facilities	DOH	241,131,000	119944000	143,151,000
Resettlement Program	NHA	3,200,000,000	3,230,000,000	4,275,000,000
Land Use Planning Assistance	HLURB	60,231,000	14,059,000	60,231,000
School building Program	DepEd	2,000,000,000	2,000,000,000	2,000,000,000
National Arterial and Secondary National/Local Roads and Bridges	DPWH	70,560,282,000	66,172,861,000	48,699,807,000
Various Infrastructure including Local Projects	DPWH	23,203,986,000	25,971,254,000	890,249,000
Priority Development Assistance Fund	Agencies, LGUs	9,665,027,000	10,861,211,000	24,620,000,000
Local Governance Performance Management Program-Performance-Based Challenge Fund for Local Government Units	DILG			500,000,000
Financial subsidy to LGUs	LGUs	4,168,500,000	5,674,699,000	4,168,500,000
20% Development Fund from the internal revenue allotment (IRA) of LGUs	LGUs	49,997,773,400	53,160,475,400	57,388,804,600

2. Breaking down regional allocation from nationwide projects

Table 12 indicates the high share of nationwide projects in DRR expenditures. This is an opportunity for improving allocation to those areas which are in need of DRR resources, based on the spatial dimension of hazards and vulnerability. The list of nationwide DRR programs that could still be reallocated is presented in Table 13.

Table 13. Nationwide DRR Programs Potentially Allocable to the Regions: 2009-2011

DRR Expenditures	2009	2010	2011
Share of Nationwide funds potentially allocable to the Regions to total nationwide DRR expenditures	15.85	7.44	9.20
Nationwide programs potentially allocable to the regions	1,934,889,000	678,473,000	1,717,641,000
Maintenance of flood control projects			
Other River Control Projects			152,255,000
Forest Management			
Management of forestlands & forest resources	10,000,000	30,000,000	66,000,000
Forest Development	1,500,000,000	160,462,000	496,534,000
Forest protection	30,692,000	230,559,000	174,958,000
Community-based forestry program	49,576,000	179,984,000	78,452,000
Soil conservation and watershed management(including rehabilitation and integrated development of river basins)	334,621,000	57,468,000	325,147,000
Preliminary and Detailed Engineering of Disaster Countermeasures (Roads/Bridges and Flood Control Projects)			
Construction of Countermeasure Infrastructure in Sediment-Related Disaster-Prone Areas along National Highways	10,000,000	20,000,000	134,295,000
Preparedness, effective response, and sustainable recovery			
Disaster-Related Rehabilitation Projects			250,000,000
Enhancing LGU Capacity on Climate Change Adaptation and Disaster Risk Management Framework			40,000,000

Box 4. Augmenting the 2010 calamity fund

The budget allocation for the calamity fund which was 2 billion pesos in the General Appropriations Act was increased to 3.75 billion. When President Aquino assumed office in July 2010, the status of the Calamity Fund was a major concern only P592,034,346 remained in the budget; 70 percent had been spent. The immediate relief and rehabilitation requirements of typhoons Ondoy and Pepeng which hit the country in 2009 almost depleted the calamity fund (see Box 3). With the typhoon season still coming in the second half of the year, the need to augment the fund became a priority. The new government was able to source 1.75 billion pesos from the 3.5 billion allotted for unfilled positions in various national government agencies, which had remained unused at the end of the first semester of 2010.

The legal basis comes from Section 70 of Republic Act No. 9970, the General Appropriations of 2010, on the Use of Savings, "The President of the Philippines, the Senate President, the Speaker of the House of Representatives, the Heads of the constitutional commissions enjoying fiscal autonomy, and the Ombudsman are hereby authorized to augment any item in this Act from savings in other items of their respective appropriations."

Source: Department of Budget and Management

3. Augmentation from savings

The General Appropriations Act may have certain general provisions that will allow augmentation of funds for a specific budget item from savings of another budget item. This is a possible source for augmenting

DRR budget items should there be a need. This was exercised in 2010 by then newly installed President Aquino (Box 4) to augment the almost depleted Calamity Fund turned over by the outgoing administration. This kind of flexibility accords government to augment any item in the national budget from savings in other items. This augurs well for emergency response and relief financing in times of disasters. However, it can also be argued that these funds could have been used for other needs, specifically for reducing vulnerabilities such as spending on the Millennium Development Goals.

B. What are the Entry Points in the Budget Formulation Process?

1. More consistent GAA and OPIF PAP classification and consultation processes

The OPIF is the instrument that would be useful in assessing outputs and outcomes of the budget since it gives an indication of performance indicators of programs, activities and projects (PAPs). However, there is incongruence in the PAPs in the OPIF and the PAPs in the GAA for some agencies.

Take the case of the OPIF of the Mines and Geosciences Bureau. Harmonization of PAP classification should be undertaken in the future to facilitate analysis of outcomes and outputs of DRR budgets.

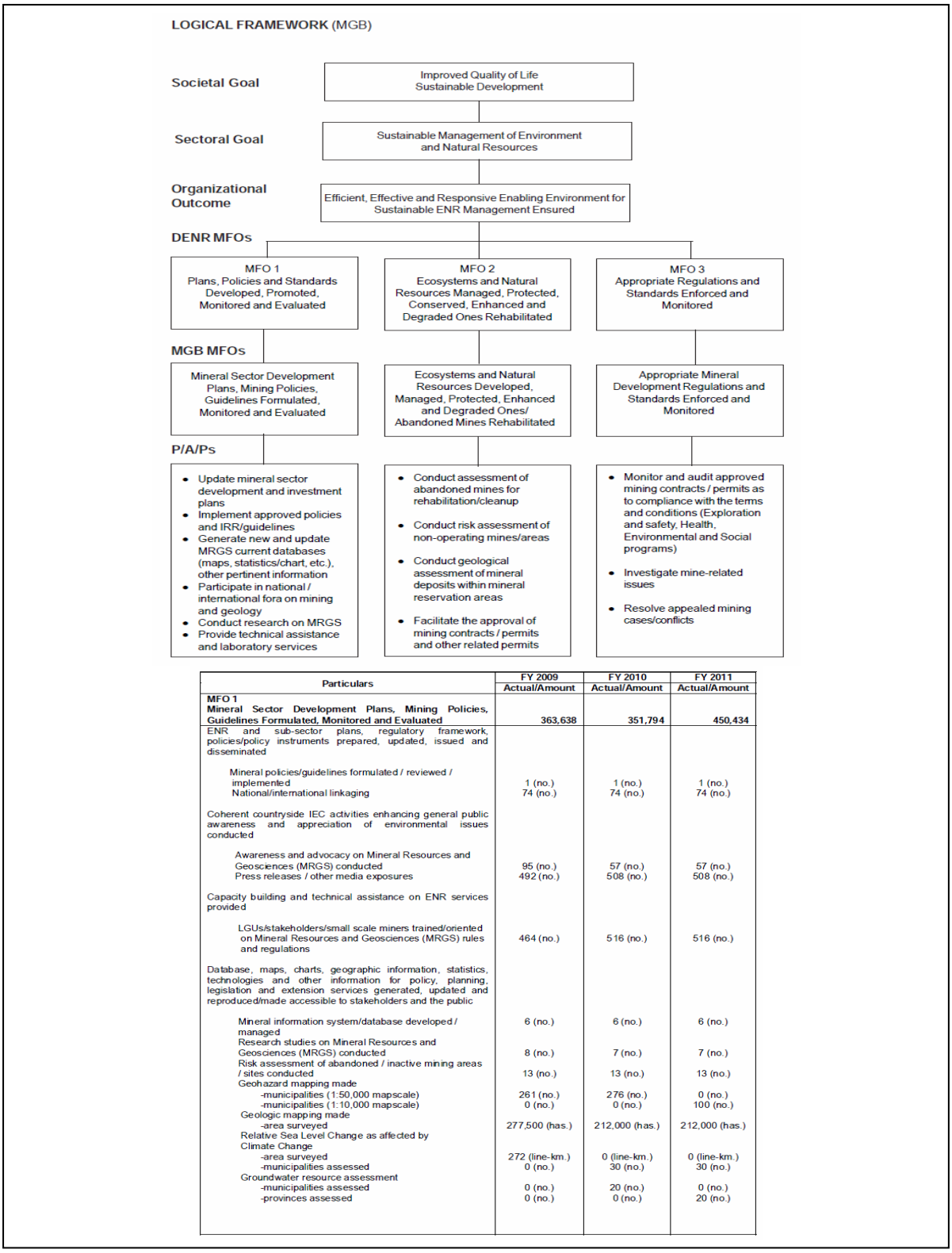
It is not easy to associate under what program and activity of the GAA are the PAPs under MFO 1. Thus, while geohazard mapping and sea level rise survey are part of major final output 1 (MFO 1), with clear physical targets for 2011, it is difficult to determine the budget allocation to these PAPs.

In the case of PAGASA, there is an attempt to match the GAA and the OPIF that fell short of indicating the proportion of the PAP attributable to a particular MFO (ratio and proportion was undertaken in this study in order to come up with an indicative budget allocation for the DRR expenditure categories). The PAPs in the OPIF include the classification of the PAP in the GAA. For example, A.II.a.2 Flood forecasting and hydro-meteorological services correspond to Program A.II and activity a.2 of the GAA.

Table 14. PAPs in the General Appropriations Act: Mines and Geosciences Bureau

A.	Programs and Activities
I.	General Administration and Support
a.	General Management and Supervision
b.	Human Resource Development
II.	Support to Operations
a.	Planning and Policy Formulation
b.	Mineral Economics, Information and Publications
c.	Research and Development
III.	Operations
a.	Mineral Land Administration
b.	Geoscience Development and Services

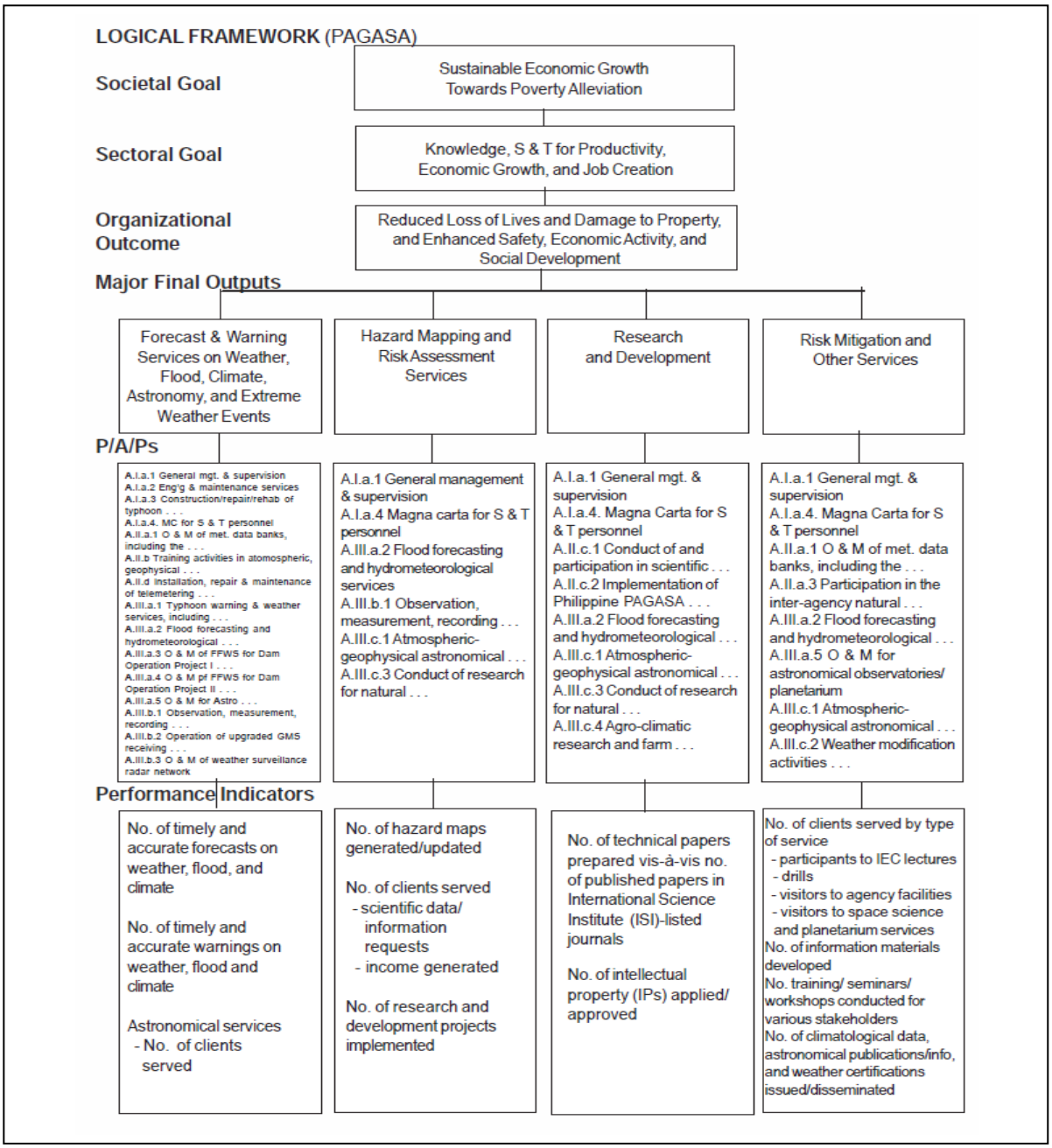
Figure 11. Organizational Performance Indicator Framework for the Mines and Geosciences Bureau of the Department of Environment and Natural Resources



Particulars	FY 2009 Actual/Amount	FY 2010 Actual/Amount	FY 2011 Actual/Amount
MFO 1 Mineral Sector Development Plans, Mining Policies, Guidelines Formulated, Monitored and Evaluated	**363,638**	**351,794**	**450,434**
ENR and sub-sector plans, regulatory framework, policies/policy instruments prepared, updated, issued and disseminated			
Mineral policies/guidelines formulated / reviewed / implemented	1 (no.)	1 (no.)	1 (no.)
National/international linkaging	74 (no.)	74 (no.)	74 (no.)
Coherent countryside IEC activities enhancing general public awareness and appreciation of environmental issues conducted			
Awareness and advocacy on Mineral Resources and Geosciences (MRGS) conducted	95 (no.)	57 (no.)	57 (no.)
Press releases / other media exposures	492 (no.)	508 (no.)	508 (no.)
Capacity building and technical assistance on ENR services provided			
LGUs/stakeholders/small scale miners trained/oriented on Mineral Resources and Geosciences (MRGS) rules and regulations	464 (no.)	516 (no.)	516 (no.)
Database, maps, charts, geographic information, statistics, technologies and other information for policy, planning, legislation and extension services generated, updated and reproduced/made accessible to stakeholders and the public			
Mineral information system/database developed / managed	6 (no.)	6 (no.)	6 (no.)
Research studies on Mineral Resources and Geosciences (MRGS) conducted	8 (no.)	7 (no.)	7 (no.)
Risk assessment of abandoned / inactive mining areas / sites conducted	13 (no.)	13 (no.)	13 (no.)
Geohazard mapping made			
-municipalities (1:50,000 mapscale)	261 (no.)	276 (no.)	0 (no.)
-municipalities (1:10,000 mapscale)	0 (no.)	0 (no.)	100 (no.)
Geologic mapping made			
-area surveyed	277,500 (has.)	212,000 (has.)	212,000 (has.)
Relative Sea Level Change as affected by Climate Change			
-area surveyed	272 (line-km.)	0 (line-km.)	0 (line-km.)
-municipalities assessed	0 (no.)	30 (no.)	30 (no.)
Groundwater resource assessment			
-municipalities assessed	0 (no.)	20 (no.)	0 (no.)
-provinces assessed	0 (no.)	0 (no.)	20 (no.)

Source: 2011 Book of Output of Departments/Agencies, Department of Budget and Management

Figure 12. Organizational Performance Indicator Framework of DOST-PAGASA



Source: 2011 Book of Outputs of Departments/Agencies, Department of Budget and Management

2. Pushing for DRR budget allocations in the consultation processes

In the annual budget formulation process described in Section II, there are two consultation processes that can serve as venue for advocating DRR budget allocations. These are the consultations with the Regional Development Councils, and with civil society organizations.

The Regional Development Councils (RDCs) prepare the Regional Development Plans (RDPs) and operationalize national development strategies at the regional level, articulating how a particular region will

contribute to the attainment of national development objectives and targets. In the budget consultation, the RDC review and endorse the budget of agency regional offices, based on the RDP. It is therefore important that DRR priorities are articulated in the RDP.

While one-fourth of the composition of the RDCs come from nongovernment organizations and civil society organizations (CSOs), DBM still holds special consultations with CSOs. CSOs being a major partner in disaster risk management (they are members of the Disaster Risk Reduction and Management Council at all levels), they could help advocate for DRR in these budget consultations.

VI. PROPOSED DRR BUDGET ALLOCATION TRACKING SYSTEM FOR THE PHILIPPINES: A SYNTHESIS

A. Purpose: Why Track?

The regular tracking of DRR budget allocations in the national budget supports the implementation of the Philippine Disaster Risk Reduction and Management Act of 2010 which gives priority to mainstreaming DRR in development processes such as policy formulation, socioeconomic development planning, budgeting and governance. It will also serve as a starting point for assessing government actions with respect to the implementation of the national disaster risk reduction and management framework, which puts emphasis in investing more resources in disaster mitigation and prevention and disaster preparedness in order to substantially reduce loss of lives and damages to assets.

The proposed DRR Budget Allocation Tracking System (DRRBATS) will basically be an advocacy tool to: (a) inform stakeholders on government action with respect to allocating resources to programs, activities and projects that lead to disaster risk reduction; (b) improve government policies related to continuing budget appropriations on disaster risk reduction; and (c) influence decisions of agencies permissible by law during budget implementation, especially in considering DRR in the allocation of lumpsum and nationwide PAPs.

B. Coverage: What to Track?

Annex Table 4 shall be the basic form that shall be used in monitoring DRR budget allocation. The enacted budget (General Appropriations Act) shall be used as basic source of information. The list inlcudes the DRR expenditures contained in the three-year analysis in this paper, including the PAPs with possible DRR components. The concerned agencies may provide the necessary information if it is not provided in the GAA.

C. Tracking Methodology: Analytical Flow

Figure 6 presents the analytical flow of the tracking system. It provides a guide on how to navigate the General Appropriations Act (GAA). It is important to be familiar with the structure of the GAA in general and that of the agency budget, particularly on the specific programs, activities and projects (PAPs).

D. Reporting: Content and Analysis

The report generated from the tracking system shall contain analyses, tables and graphs depicting the patterns of DRR budget allocation in the country using Annex Table 4 as working table. It is a compilation of information on the country's DRR budget allocation and basically tells how much is being spent on DRR, for what purpose and where.

With some adjustments, depending on what information would be available in the 2012 GAA, the 2009-2011 analysis can be used to populate a time series. Once the 2012 GAA is available, analysis can be undertaken for 2009-2012, with special emphasis on what government is spending for in 2012.

E. Implementation: Where to Lodge

The tracking system may be lodged with the Office of Civil Defense (OCD), who may undertake the annual reporting or could partner with a nongovernment organization. There are nongovernment initiatives with regard to budget monitoring such as the Alternative Budget Initiative of Social Watch Philippines. UNDP and NEDA assisted Social Watch Philippines document their three year experience in monitoring the government budget. The specific areas that this group has looked into are allocations for the environment, education, health and agriculture.

Figure 13. Analytical Flow of the DRR Budget Allocation Tracking System

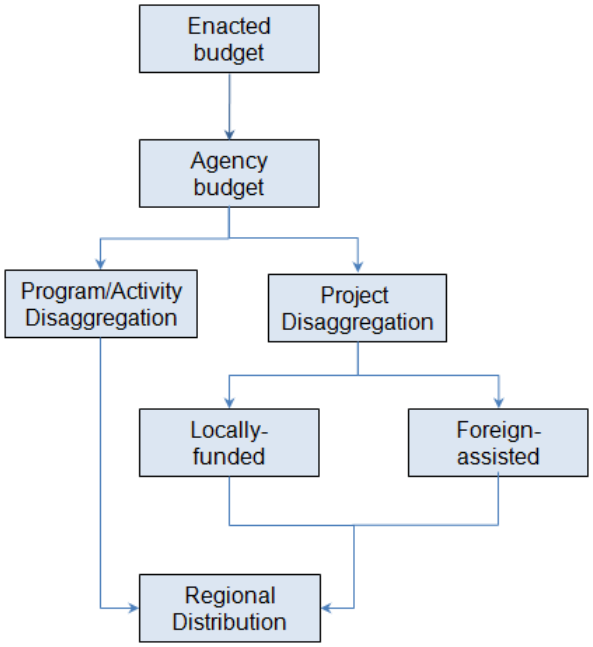
How much is the total budget allocation that goes to DRR? How is this changing over time?

What is the share of the DRR budget to the total national budget? What is the share of the DRR budget to GDP?

What is the distribution of the DRR budget among different DRR elements? Are funds targeted for pre-disaster preparedness? post-disaster recovery?

How much of the DRR budget are from external sources (foreign-assisted)?

What share of the DRR budget allocation goes to different regions? Is it targeted toward those areas in greater need?



Box 5. Analysis of DRR Budget Allocation

1. Analysis of the DRR Budget
   a. Total DRR Budget Allocation
   b. Growth Rates of DRR Budget Allocation
   c. Share of DRR Budget Allocation to National Budget
   d. Share of DRR Budget Allocation to GDP
   e. Composition of DRR Budget Allocation
   f. Share of Foreign Assistance to DRR Budget Allocation
   g. Regional Distribution of DRR Budget Allocation
2. Recommendations
   a. Relevant Programs with Possible DRR Components
   b. Regional /Provincial breakdown of Nationwide Programs
   c. Special PAPs to monitor during budget execution
   d. Policy recommendations

VII. CONCLUSION

The progress that the Philippines have made in terms of mainstreaming DRR in its development processes can further gain momentum by heightening attention on the behaviour of government in terms of allocating budgetary resources to finance disaster risk reduction.

The study clearly indicates that the government budget does pay attention to disaster risk reduction and within existing government structures, processes and outputs for managing development, there is room for improving budgetary allocations.

This budget allocation tracking is just a first step for creating awareness on how much is being spent for DRR, for what purpose, and where. The analysis can be further improved by looking at outputs and outcomes and to what extent these have been achieved through the budget. It is also important to compare whether the "planned" spending or allocation as indicated in the original budget were actually spent for the specific purposes. Thus, it will also be important to compare allocation with actual expenditures, on the financial side, but also look at the physical side in terms of targets and actual accomplishments. The performance indicators of agency PAPs in their OPIF can serve as a useful basis for this purpose. But this will be a tedious process that can better be undertaken by a research or academic institution, although if this is built into the budget reporting systems, this may simplify reporting. Planners and budget officers of agencies do not need to prepare new reports.

The bottom line, however, is to be able to measure whether risks have been reduced, to what extent DRR budget allocation are correlated to this reduction, and the time lag for impacts. This would require a more sophisticated tool in econometrics. Nevertheless, once a sufficient time series of DRR budget allocations is established through the proposed tracking system, all of this information can be generated.

Meanwhile, initiatives undertaken by OCD to prepare a national plan to detail the national disaster risk reduction and management framework should contain an initiative on how the tracking system can be expanded to look at parameters of risk reduction.

A budget allocation tracking system may be replicated at the local level, given frontline responsibilities of local governments in disaster risk reduction. The study has already shown the allocations in the national budget which local government units may use for disaster risk reduction. Other sources are the Local Disaster Risk Reduction and Management (LDRRM) Fund, which amounts to five percent of local revenues and can be used for pre-disaster and post-disaster activities. The Municipal Development Fund has also set up a disaster management loan facility for LGUs and the possible Peoples' Survival Fund which have progressed discussions in Congress.

It is also important to note that the national budget is not the only source of DRR spending. There are off-budget spending that are not systematically documented, such as technical assistance in the form of grants from development partners and from other sources, for example humanitarian aid groups' assistance to nongovernment organizations. Knowing how much are these inflows, for what purpose are they spent and where, will provide information that will help government improve overall DRR budget allocations.

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ANNEX TABLE A.1 PAPS IN SUPPORT OF THE MDGS

MDG-related PAPs on education

Pre-school and elementary levels covering the following:

• Operations of schools (includes budget for teaching personnel)

• Purchase of textbooks, desks and instructional materials

• Construction, repair and maintenance of school buildings and classrooms

• Teacher trainings

• Implementation of alternative learning system (ALS) programs

• Pre-school Service Contracting

• Others which are supportive of achieving universal access to primary education

Secondary level covering the following:

• Operations of schools (includes budget for teaching personnel)

• Purchase of textbooks, desks and instructional materials

• Construction, repair and maintenance of school buildings and classrooms

• Teacher trainings

• Implementation of alternative learning system (ALS) programs

• Implementation of the Government Assistance for Students and Teachers in Private Education (GASTPE) through Education Service Contracting (ESC) and Education Voucher System (EVS)

• Others which are supportive of improving access to secondary education

MDG-related PAPs on social welfare and development services

• Early childhood care and development services

• Food for School Program

• Self-employment assistance

• Calamity relief operations and assistance to victims of disasters

• Maintenance and operation of centers for neglected, abandoned, abused children and women

• Assistance to distressed and disadvantage population

• Kapit-Bisig Laban sa Kahirapan-Comprehensive and Integrated Delivery of Social Services (KALAHI-CIDSS)

• Pantawid Pamilyang Pilipino Program (Conditional Cash Transfer)

• Tindahan Natin

MDG-related PAPs on health, water, and sanitation

• Family Health and Primary Health Care programs

• Expanded Program on hnmunization

• Malaria Prevention

• Tuberculosis Control

• National AIDS/STI Prevention and Control Program

• Quarantine services and international health surveillance

• Epidemiology and Disease Surveillance

• Environmental and occupational health care

• Women's Health and Safe Motherhood Project

• Family Planning Initiatives

• Health facility enhancement particularly BEmONC and CEmONC

• Health Promotion activities (maternal and child health, AIDS, TB, Malaria and other diseases)

• Health insurance subsidy for indigents

• Advocacy activities related to responsible parenthood and natural family planning

• Affordable drugs program

• Water and sanitation services (level 1 and level 2)

• Government spending on basic water and sanitation services refers to allocations for Level l and level 2 water supply and sanitation projects that are made on account of the Department of Public Works and Highways (DPWH), the Agrarian Reform Fund (ARF), the Local Government Empowerment Fund (LGEF), and the Municipal Development Fund (MDF)

PAPs under the Accelerated Hunger Mitigation Program (AHMP)

• Food for School Program

• Programang Gulayan Para sa Masa

• Rice Seeds Subsidy

• Coconut Intercropping and Salt Fertilization Project

• Livestock Program

• Fishery Program

• Barangay Bagsakan

• Breakfast Feeding Program

• Training on Infant and Young Child Feeding (IYCF) and Pabasa sa Nutrisyon

• Irrigation and small-water impounding and diversion dam projects

• Port projects

• Construction of flatbed dryers

Pro-poor housing PAPs

• community mortgage program

• resettlement of informal settlers

• socialized housing

Government spending on pro-poor infrastructure refers to

• Allocations for roads and bridges in the DPWH budget

• Allocation for electricification in the DOE budget

• Allocations on farm-to-market roads in the budgets of the DA, Department of Agrarian Reform (DAR), the Agriculture and Fisheries Modernization Fund (AFMA), the ARF, and the LGEF

Employment enhancement measures

• Programs of the Department of Labor and Employment (DOLE):

1. Capacity building services for livelihood opportunities through provision of income augmentation assistance

2. Technical vocational education, skills and competency and productivity training services

2.1.Social protection and welfare services i.e., community-based and integrated interventions to reduce the incidence of child labor; workplace family welfare programs that promote health, nutrition, responsible parenthood, balancing family and work life, among others

2.2.Advocacy to increase the number of workers in the informal sector (WIS) who are covered by social protection (DOLE Social Protection Program for WIS)

MDG-related PAPs on CARPlland redistribution

• Land distribution and titling

• Leasehold contracting

• Land survey

• Training to agrarian reform beneficiaries

• Delivery of agrarian justice

MDG-related project on gender and development (GAD)

• Implementation of the Gender-Responsive Economic Actions for the Transformation of Women (GREAT Women) Project

• Capacity-building activities on gender main streaming and gender sensitivity

MDG-related PAPs which aims to ensure environmental sustainability on the areas of (a) forest resources and watersheds; (b) biodiversity resources; (c) coastal and marine resources; (d) air quality; (e) water resources; and (t) waste and toxic chemicals:

• Community-Based Forest Management (CBFM)

• Fisheries Resource Management Program (FRMP)

• Solid Waste Management Program

• Linis Hangin Program

• Green Philippine Highways Program

• Huli - Smoke Program

• Sagip Hog Program

It should be stressed that ODA funds, because they are appropriated, are taken into account when one examines national and local government spending as authorized by the General Appropriations Act (GAA) and local appropriations ordinances.

List of MDG-related PAPs for selected oversight agencies

Pro-poor PAPs of the National Anti-Poverty Commission (NAPC)

• Advocacy efforts for the promotion, adoption and nationwide implementation of the Community-Based Monitoring System (CBMS) as the monitoring tool for the localization and achievement of the MDGs.

• Coordination and monitoring of the implementation of the Kapit-Bisig Laban sa Kahirapan (Linking Arms Against Poverty) Program as the country's focused, accelerated, convergent, expanded strategic program to reduce poverty.

• Coordination and monitoring of the implementation of the Comprehensive Livelihood and Emergency Employment Program (CLEEP).

Employment enhancement measures

• Food-for-Work Program of the Department of the Interior and Local Government (DILG)

• Support to CBMS Local Implementation and Provincial Roll-out (DILG)

Other MDG-related PAPs

• Support to the nationwide implementation of the Early Childhood Care and Development Program

(ECCD)

• Support to the implementation of the MDG Fund of the Municipal Development Fund Office (MDFO)

• Advocacy and coordinative activities related to poverty reduction and hunger mitigation programs

• Advocacy and coordinative activities on gender and development

• Advocacy and coordinative activities related to housing

ANNEX TABLE A.2 DRR BUDGET ALLOCATION BY EXPENSE CLASS: 2009-2011 (IN PESO)

Items	2009				2010				2011			
	PS	MOOE	CO	Total	PS	MOOE	CO	Total	PS	MOOE	CO	Total
Total DRR Budget Allocation	2,127,136,000	3,546,049,000	11,109,339,000	16,782,524,000	1,532,687,000	3,391,081,000	12,011,157,000	16,934,925,000	1,756,741,000	6,876,166,475	18,699,528,000	27,332,435,475
Reducing the likelihood of hazards	213,445,800	171,605,150	384,675,000	769,725,950	107,419,950	391,775,050	33,000,000	532,195,000	123,393,650	626,308,950	259,845,000	1,009,547,600
Hazard Identification, Mapping and Assessment	87,150,250	59,732,700	74,495,000	221,377,950	7,449,000	10,289,300	1,000,000	18,738,300	8,519,100	15,211,500	9,640,200	33,370,800
Hazard monitoring, forecasting and warning	114,188,600	101,003,350	310,180,000	525,371,950	99,679,100	370,099,750	32,000,000	501,778,850	114,544,050	596,340,750	240,304,800	951,189,600
Research and Development	12,106,950	10,869,100	0	22,976,050	291,850	11,386,000	0	11,677,850	330,500	14,756,700	9,900,000	24,987,200
Minimizing exposure	1,416,176,200	1,621,262,850	8,591,177,000	11,628,616,050	1,380,687,050	1,296,176,950	9,997,490,000	12,674,354,000	1,476,030,350	2,392,073,525	13,173,500,000	17,041,603,875
Structural/Physical Measures	1,398,436,000	1,612,456,000	8,295,226,000	11,306,118,000	1,375,170,000	1,286,609,000	9,809,090,000	12,470,869,000	1,470,093,000	2,380,764,000	13,032,977,000	16,883,834,000
Construction of Flood Control/Seawall and Drainage Projects	0	0	6,905,623,000	6,905,623,000	0	0	8,653,806,000	8,653,806,000	0	0	11,539,225,000	11,539,225,000
Maintenance, Repair and Rehabilitation of Flood Control and Drainage Systems, Structures and Related Facilities	24,275,000	887,900,000	0	912,175,000	24,098,000	607,903,000	0	632,001,000	19,277,000	1,762,464,000	0	1,781,741,000
Forest Management	1,374,161,000	724,556,000	1,389,603,000	3,488,320,000	1,351,072,000	678,706,000	1,155,284,000	3,185,062,000	1,450,816,000	618,300,000	1,493,752,000	3,562,868,000

Items	2009				2010				2011			
	PS	MOOE	CO	Total	PS	MOOE	CO	Total	PS	MOOE	CO	Total
Technical Measures/Non-structural	17,740,200	8,806,850	295,951,000	322,498,050	5,517,050	9,567,950	188,400,000	203,485,000	5,937,350	11,309,525	140,523,000	157,769,875
Risk Mitigation and Other Services	17,740,200	8,806,850	550,000	27,097,050	5,517,050	9,567,950	0	15,085,000	5,937,350	11,309,525	6,228,000	23,474,875
Preliminary and Detailed Engineering of Disaster Countermeasures (Roads/Bridges and Flood Control Projects)	0	0	295,401,000	295,401,000	0	0	188,400,000	188,400,000	0	0	134,295,000	134,295,000
Lessening vulnerability/building resilience	497,514,000	1,753,181,000	2,133,487,000	4,384,182,000	44,580,000	1,703,129,000	1,980,667,000	3,728,376,000	157,317,000	3,857,784,000	5,266,183,000	9,281,284,000
Preparedness	53,420,000	68,747,000	0	122,167,000	44,580,000	20,344,000	158,047,000	222,971,000	48,938,000	59,663,000	20,000,000	128,601,000
Disaster Response	444,094,000	1,448,663,000	250,586,000	2,143,343,000	0	1,552,285,000	651,152,000	2,203,437,000	108,379,000	2,814,350,000	430,000,000	3,352,729,000
Sustainable Recovery	0	50,000,000	1,852,401,000	1,902,401,000	0	50,000,000	1,171,468,000	1,221,468,000	0	800,000,000	4,816,183,000	5,616,183,000
Risk Financing	0	185,771,000	30,500,000	216,271,000	0	80,500,000	0	80,500,000	0	183,771,000	0	183,771,000

ANNEX TABLE A.3 SHARE OF DRR BUDGET ALLOCATION BY EXPENSE CLASS: 2009-2011 (IN PERCENT)

Items		2009				2010				2011			
		PS	MOOE	CO	Total	PS	MOOE	CO	Total	PS	MOOE	CO	Total
	Total DRR Expenditures	12.67	21.13	66.20	100.00	9.05	20.02	70.93	100.00	6.43	25.16	68.42	100.00
1	Understanding hazards	27.73	22.29	49.98	100.00	20.18	73.61	6.20	100.00	12.22	62.04	25.74	100.00
1.1	Hazard Identification, Mapping and Assessment	39.37	26.98	33.65	100.00	39.75	54.91	5.34	100.00	25.53	45.58	28.89	100.00
1.2	Hazard monitoring, forecasting and warning	21.73	19.23	59.04	100.00	19.87	73.76	6.38	100.00	12.04	62.69	25.26	100.00
1.3	Research and Development	52.69	47.31	0.00	100.00	2.50	97.50	0.00	100.00	1.32	59.06	39.62	100.00
2	Minimizing exposure	12.18	13.94	73.88	100.00	10.89	10.23	78.88	100.00	8.66	14.04	77.30	100.00
2.1	Structural/Physical Measures	12.37	14.26	73.37	100.00	11.03	10.32	78.66	100.00	8.71	14.10	77.19	100.00
	Construction of Flood Control/Seawall and Drainage Projects	0.00	0.00	100.00	100.00	0.00	0.00	100.00	100.00	0.00	0.00	100.00	100.00
	Maintenance, Repair and Rehabilitation of Flood Control and Drainage Systems, Structures and Related Facilities	2.66	97.34	0.00	100.00	3.81	96.19	0.00	100.00	1.08	98.92	0.00	100.00
	Forest Management	39.39	20.77	39.84	100.00	42.42	21.31	36.27	100.00	40.72	17.35	41.93	100.00
2.2	Technical Measures/Non-structural	5.50	2.73	91.77	100.00	2.71	4.70	92.59	100.00	3.76	7.17	89.07	100.00
	Risk Mitigation and Other Services	65.47	32.50	2.03	100.00	36.57	63.43	0.00	100.00	25.29	48.18	26.53	100.00
	Preliminary and Detailed Engineering of Disaster Countermeasures (Roads/Bridges and Flood Control Projects)	0.00	0.00	100.00	100.00	0.00	0.00	100.00	100.00	0.00	0.00	100.00	100.00
3	Lessening vulnerability/building resilience	11.35	39.99	48.66	100.00	1.20	45.68	53.12	100.00	1.69	41.57	56.74	100.00
3.1	Preparedness	43.73	56.27	0.00	100.00	19.99	9.12	70.88	100.00	38.05	46.39	15.55	100.00
3.2	Disaster Response	20.72	67.59	11.69	100.00	0.00	70.45	29.55	100.00	3.23	83.94	12.83	100.00
3.3	Sustainable Recovery	0.00	2.63	97.37	100.00	0.00	4.09	95.91	100.00	0.00	14.24	85.76	100.00
3.4	Risk Financing	0.00	85.90	14.10	100.00	0.00	100.00	0.00	100.00	0.00	100.00	0.00	100.00

ANNEX TABLE A.4 PROPOSED DRR BUDGET ALLOCATION TRACKING SYSTEM FORM

	DRR Budget Items	Location	Agency	(Year)			
				PS	MOOE	CO	Total
	Total DRR Expenditures						
1	Understanding hazards						
1.1	Hazard Identification, Mapping and Assessment						
	Atmospheric-geophysical, astronomical hazard identification, mapping and assessment		PA**G**ASA				
	Volcanic and earthquake hazard identification, mapping and assessment		PHIVOLCS				
	Geohazard identification, mapping and assessment		MGB				
	Geohazard identification, mapping and assessment		NAMRIA				
	Others						
1.2	Hazard monitoring, forecasting and warning						
	Flood forecasting, monitoring and warning		PAGASA				
	Volcano and earthquake hazard monitoring, forecasting and warning		PHIVOLCS				
	Construction, rehabilitation and maintenace of operations of Seismic Stations						
	Others						
1.3	Research and Development						
	Atmospheric-geophysical, astronomical and space sciences research		PAGASA				
	Agro-climactic research and farm weather services and climate variability and climate change studies		PAGASA				
	Volcano eruption prediction research and development of active volcanoes and investigations of other volcano emergencies		PHIVOLCS				
	Earthquake prediction studies		PHIVOLCS				
	Others						
2	Minimizing Exposure						
2.1	Structural/Physical Measures						
	Construction of Flood Control/Seawall and Drainage Projects		DPWH, MMDA, PRRC				
	Maintenance, Repair and Rehabilitation of Flood Control and Drainage Systems, Structures and Related Facilities		DPWH, MMDA, PRRC				
	Forest Management		DENR				

	DRR Budget Items	Location	Agency	(Year)			
				PS	MOOE	CO	Total
	National Arterial and Secondary National/Local Roads and Bridges (DRR critical infrastructure components)		DPWH				
	Various Infrastructure including Local Projects (DRR critical infrstructure components)		DPWH				
	School building program (DRR component)		DepEd				
	Priority Development Assistance Fund (Flood control component)		Various agencies				
	Others						
2.2	Technical Measures/Non-structural						
	Risk mitigation services		PAGASA, PHIVOLCS				
	Resettlement Program (DRR component)		NHA				
	Land Use Planning Assistance (DRR component)		HLURB				
	Development of the Crops Sector (El Nino/La Nina mitigation component)		DA				
	Others						
2.3	Preliminary and Detailed Engineering of Disaster Countermeasures						
	Detailed engineering of disaster countermeasures such as roads, bridges and flood control projects		DPWH				
	Conduct of hydrological surveys		DPWH				
	Feasibility study/master planning of river basins for purposes of flood control mitigation		DPWH				
	Health Facilities Enhancement (DRR component)		DOH				
	Formulation of policies, standards, and plans for hospital and other health facilities (DRR component)		DOH				
3	Lessening vulnerability/building resilience						
3.1	Preparedness						
	Planning and policy formulation		Various agencies				
	Planning, direction and coordination for civil defense		OCD				
	Barangay/community early warning		DILG				
	Others						
3.2	Disaster Response						
	Response, Rescue and Relief Operations		DILG, PAF, PA, PN, DND OSEC				
	Assistance to victims of disasters and natural calamities including handling and hauling of commodity donations		DSWD				
	Quick Response Fund		DepEd				

	DRR Budget Items	Location	Agency	(Year)			
				PS	MOOE	CO	Total
	Calamity Fund: Aid, Relief and Rehabilitation Services to Communities/Areas Affected by Calamities, including Training of Personnel, and Other Pre-disaster Activities.		DBM				
	Others						
3.3	Sustainable Recovery						
	Calamity Fund: Repair and Reconstruction of Permanent Structures, including Capital Expenditures for Pre-disaster Operations, Rehabilitation and Other Related Activities		DBM				
	Disaster Related Rehabilitation Projects		DPWH, other agencies				
	Others						
3.3	Risk Financing						
	Insurance Coverage for School Buildings		DepEd				
	National government subsidy for crop insurance premium of subsistence farmers under the Crop Insurance Program		PCIC				
	Expansion of Crop Insurance Program		PCIC				
	Others						