

RECONSTRUCTION ASSISTANCE ON YOLANDA

IMPLEMENTATION FOR RESULTS

Reconstruction Assistance on Yolanda: IMPLEMENTATION FOR RESULTS

Published by:

National Economic and Development Authority 12 St. Josemaria Escriva Drive, Ortigas Center, Pasig City Tel: +632 631 0945 to 68 www.neda.gov.ph

ISSN: 2243-7576



Executive summary

Since typhoon Yolanda struck the Visayas region on November 8, 2013, national government agencies, local government units (LGUs), communities, the private sector, and the international community have been working together to meet immediate post-disaster needs. Without a concerted, well-coordinated and adequately resourced set of programs and projects to restore and rehabilitate the economic and social conditions, the effects of Yolanda are likely to have a significantly negative impact on achieving the growth, poverty reduction and employment creation objectives of the Philippine Development Plan (PDP).

National Economic and Development Authority (NEDA) has prepared two planning documents for Reconstruction Assistance on Yolanda (RAY). *Build Back Better*¹ provided initial estimates of the overall damage and loss caused by Yolanda and adopted a three-phased approach to address immediate critical needs, recovery, and full reconstruction. *Implementation for Results* presents an overall results framework for monitoring progress consistent with Philippine Development Plan. It also highlights key policy and program initiatives under implementation or consideration by four clusters covering: (i) livelihoods and business development; (ii) housing and resettlement; (iii) social services; and (iv) infrastructure. The clusters are chaired by departmental secretaries and coordinated by the Office of the Presidential Assistant for Rehabilitation and Recovery (OPARR).

OPARR led the preparation of a Comprehensive Rehabilitation and Recovery Plan (CRRP), which was informed by RAY; a post-disaster needs assessment² coordinated by the Office of Civil Defense; and detailed sector- and area-based plans prepared by national government agencies and local governments. The CRRP includes detailed listings of reconstruction investment projects with details on the process of formulating, implementing, updating, and monitoring the Yolanda recovery and full rehabilitation phases.

Implementation for Results highlights the large portion of the recovery and reconstruction needs related to the private sector, both individuals and enterprises. It provides a framework to ensure close alignment between the objectives of the recovery and rehabilitation program and the PDP.

Consistent with the OPARR Clusters, the report identifies policies, operational strategies, and roles and responsibilities for implementation to guide decisions affecting short- and medium-term recovery and rehabilitation. It provides a framework to enable stakeholders to: (i) determine priority programs responsive to recovery and rehabilitation needs; (ii) identify and address gaps

¹ National Economic and Development Authority. 2013. Reconstruction Assistance on Yolanda (RAY): *Build Back Better*. Manila. (http://www. gov. ph/downloads/2013/12dec/20131216-RAY. pdf)

² Office of Civil Defense. 2014. Post Disaster Needs Assessment (PDNA) in Ty Yolanda Affected Areas. Manila. (Unpublished draft, April 2014).

and constraints; and, (iii) monitor and assess on-going progress to ensure the recovery and rehabilitation program stays on track to achieve its intended results.

A Results Framework is provided as a basis for planning and monitoring the impact of recovery and rehabilitation activities with the goal "to establish resilient, sustainable regions with high and sustainable growth, able to withstand and recover from disasters faster and better." More than 10,000 individual programs and projects are anticipated for implementation as part of the overall recovery and rehabilitation efforts. The results framework links: inputs to outputs; outputs to outcomes; and outcomes to the overall goal of the PDP. While the longer-term objective is to restore conditions prior to Yolanda, there is a window of opportunity to "build back better" and to achieve a higher level of development outcomes in some of the poorest areas of the country.

Consistent with national policies, cross-cutting issues of gender and vulnerable groups, environment, and disaster risk reduction and mitigation need to be mainstreamed in the plans, programs, and activities of the recovery and rehabilitation program.

Important needs are being met by government agencies through their regular programs, supplemented to meet expanded post-disaster needs. Recovery and reconstruction plans being drawn up by national government agencies and LGUs already reflect many of these needs. Once validated, these plans will provide a solid basis for addressing the core investment needs for recovery and rehabilitation. These programs provide support through three main channels: (i) direct interventions and investment; (ii) indirect interventions, such as providing access to adequate finance; and (iii) ensuring an enabling environment for private sector recovery. However, given the unprecedented scale of the damage and loss caused by Yolanda, additional policies and operational programs are likely to be needed above and beyond currently planned activities.

Livelihood and Business Support: In the immediate aftermath of Yolanda, livelihoods were severely disrupted, affecting about 5. 6 million workers; people were unable to earn income to support their families. The recovery and rehabilitation program must put in place policies and programs that enable and encourage the private sector to recover, re-start their enterprises and create employment. In the productive sectors, there are opportunities to strengthen the recovery of agriculture and industry, trade and commerce through skills development and accelerating existing programs such as the Philippine Integrated Coconut Industry Poverty Reduction Roadmap to assist coconut farmers. Important considerations are to increase the availability of credit, micro-enterprise support and to provide income opportunities for women and vulnerable groups. Two key policy issues are: financing for recovery and reconstruction, and property and business tax relief.

Housing and Resettlement: Yolanda totally damaged about 490,000 houses and partially damaged about 520,000. The government's objective is to provide sufficient support to enable families to either repair or rebuild damaged houses, mainly in the same place as they were before. For poor households that need to be relocated from hazard-prone areas, the government intends to implement disaster-resilient mass housing in delineated safe areas in cooperation with LGUs and communities. Important considerations include the need to consider alternative approaches to housing to mobilize the collective capacity and resources of government, local communities, and the private sector, as well as land use planning, land ownership, disaster resilience, gender and environmental issues, coordination and monitoring of programs and financing. Two key policy issues are: implementing an owner-driven approach to housing, and reassessing demarcation of "safe/unsafe/controlled" and involuntary resettlement.

Social Sectors: Significant assistance was provided to restore social services as part of the immediate response to the disaster. Schools and medical facilities were repaired and education and health services re-started. Food aid was provided and short-term cash-for-work schemes were implemented by government agencies and NGOs. However, Regions IV-B, VI, VII and VIII lag behind the national targets for many of the Millennium Development Goals (MDGs), particularly in poverty, education and health. It is within this context that recovery and reconstruction of social sectors in Yolanda-affected areas presents an opportunity to ensure all public education and health facilities have the requisite inputs to provide effective services, and social protection schemes address the needs of the most vulnerable groups. As communities plan and begin to recover from the effects of Yolanda, achieving greater coordination and convergence of programs presents an opportunity to realize synergy in the planning and implementation of social services. Three key policy issues identified for this cluster are: managing the transition from relief to recovery and reconstruction, determining the mix of social protection programs for disaster response, and multi-purpose evacuation centers.

Infrastructure: In the context of an integrated approach to disaster risk management, reconstruction will use "build-back-better" standards for project design, to ensure that infrastructure will better withstand the effects of future disasters. Under Yolanda, most of the infrastructure repairs and reconstruction will be undertaken through the usual operations of relevant government agencies. However, agency capacity to procure, and both agency and contractor capacity to implement a very large number of projects across a very wide region, raise many policy and implementation issues. Two key policy issues identified are: raising the quality of building construction, and zoning for hazards.

Oversight and Performance Monitoring: The Results Framework, which describes the recovery program in terms of a "results chain," as well as the inputs and the targets, provides a systematic approach to monitor and evaluate the recovery program.

Monitoring and evaluation of the achievement of targets will take place at two distinct but closely connected levels: the outcomes of the government's recovery efforts will be monitored by NEDA; and the outputs, which measure the specific infrastructure, livelihood, social sector and housing products that result from processing inputs through planned projects, will be based on OPARR's reports to the President on Yolanda implementation. The Department of Budget Management (DBM) is developing the online Open Reconstruction system to provide OPARR the tools to monitor project financial expenditure.

NEDA will prepare periodic evaluation reports to summarize and evaluate the achievement of sector outcomes by the recovery and rehabilitation program over the reporting period for National Disaster Risk Reduction and Management Council (NDRRMC) and the President. OPARR will prepare status reports for the President as required under Memorandum Order No. 62. NEDA and OPARR will work closely together to harmonize this reporting.

Acknowledgments

We would like to thank our local and international partners for their unwavering support in the production of this document, and in the continuing recovery efforts in Yolanda affected areas:

The Asian Development Bank; Department of Foreign Affairs and Trade, Australia; European Union; Organization of Islamic Cooperation; United Nations; World Bank; Cebu Ports Authority; Department of Agriculture; Department of Agrarian Reform; Department of Environment and Natural Resources; Department of Education; Department of the Interior and Local Government; Department of Health; Department of Labor and Employment; Department of Transportation and Communications; Department of Public Works and Highways; Department of Social Welfare and Development; Department of Trade and Industry; Energy Development Corporation; Local Water Utilities Administration; National Disaster Risk Reduction and Management Council; National Grid Corporation of the Philippines; National Power Corporation; Office of the Presidential Assistant for Rehabilitation and Recovery; Philippine Atmospheric, Geophysical and Astronomical Services Administration; and the Regional Development Councils of Western Visayas, Central Visayas, Bicol, Eastern Visayas, MIMAROPA, and Caraga.

Most of all, we salute the citizens and local government units of Aklan, Antique, Biliran, Capiz, Cebu, Dinagat Islands, Iloilo, Leyte, Southern Leyte, Masbate, Palawan, Negros Occidental, Eastern Samar, Samar, and Tacloban City, whose courage, determination, and perseverance serve as inspiration to us all.

Acronyms and abbreviations

ACPC	Agricultural Credit Policy Council
BAI	Bureau of Animal Industry
BAS	Bureau of Agricultural Statistics
BFAR	Bureau of Fisheries and Aquatic Resources
BLES	Bureau of Labor and Employment Statistics
BSP	Bangko Sentral ng Pilipinas
CCC	Climate Change Commission
CDD	Community-driven development
CLUPs	Comprehensive Land Use Plans
DA	Department of Agriculture
DENR	Department of Environment and Natural Resources
DepEd	Department of Education
DILG	Department of the Interior and Local Government
DOLE	Department of Labor and Employment
DOST	Department of Science and Technology
DOT	Department of Tourism
DPWH	Department of Public Works and Highways
DSWD	Department of Social Welfare and Development
DTI	Department of Trade and Industry
FAO	Food and Agriculture Organization
GDP	Gross domestic product
GFDRR	Global Facility for Disaster Reduction and Recovery
GFIs	Government financial institutions
GRDP	Gross regional domestic product
HGC	Home Guaranty Corporation
НН	Household
HLURB	Housing and Land Use Regulatory Board
ICT	Information and communications technology
ICTO	Information and Communications Technology Office
KALAHI-CIDSS	Kapit-Bisig Laban sa Kahirapan – Comprehensive and Integrated Delivery of Social Services
LGU	Local government unit
LWUA	Local Water Utilities Administration
MDGs	Millennium Development Goals
MFIs	Microfinance institutions
MGB	Mines and Geosciences Bureau

Acronyms and abbreviations

MLD	Million liters per day
MSMEs	Micro, small and medium enterprises
MWSS	Metropolitan Waterworks and Sewerage System
NAPC	National Anti-Poverty Commission
NDRRMC	National Disaster Risk Reduction and Management Council
NDRRMP	National Disaster Risk Reduction and Management Plan
NEA	National Electrification Administration
NEDA	National Economic and Development Authority
NGAs	National government agencies
NGOs	Non-government organizations
NHA	National Housing Authority
NHTS-PR	National Household Targeting System for Poverty Reduction
NIA	National Irrigation Administration
NWRB	National Water Resources Board
OCD	Office of Civil Defense
OPARR	Office of the Presidential Assistant for Rehabilitation and Recovery
PARR	Presidential Assistant for Rehabilitation and Recovery
PCIC	Philippine Crop Insurance Corporation
PDNA	Post-Disaster Needs Assessment
PDP	Philippine Development Plan
PhilGEPS	Philippine Government Electronic Procurement System
PHILSSA	Partnership of Philippine Support Service Agencies Incorporated
PSA	Philippine Statistics Authority
RA	Republic Act
RAY	Reconstruction Assistance on Yolanda
RBCO	River Basin Control Office
SEZs	Special Economic Zones
SHFC	Social Housing Finance Corporation
SUCs	State universities and colleges
SWIP	Small water impounding project
ТВ	Tuberculosis
TDAs	Tourist destination areas
UN	United Nations
WDs	Water districts

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Introduction

Since Yolanda struck the Visayas region on November 8, 2013, national government agencies, local governments, communities, the private sector, and the international community have been working together to meet immediate post-disaster needs.

A detailed Yolanda recovery and rehabilitation program covering the short- and medium-term response is currently being finalized based on the findings and recommendations of NEDA's Reconstruction Assistance on Yolanda (RAY)³ reports, the Post-Disaster Needs Assessment (PDNA)⁴ coordinated by the Office of Civil Defense (OCD), and detailed sector- and area-based plans prepared by national government agencies and local governments.

Post-disaster needs assessment. Led by OCD, a post-disaster needs assessment was undertaken, which complemented the assessment of disaster impacts presented in RAY.⁵ The PDNA adopted a bottom-up approach to data collection, using localized PDNA Guidelines.⁶ Seven teams were organized from the national, regional and local government units to cover the 171 municipalities and cities located within the 50-km radius of the Typhoon Yolanda track. As reported in the PDNA, data collected underwent field validation, with estimates based on standard unit costs, local assessments and agreed assumptions. Where data gaps existed, estimates were applied by experts. The PDNA noted that due to time constraints and the need for field validation, some data were not completely represented in the report (Table 1.1).

SECTORS	DAMAGE	LOSS	NEEDS
Infrastructure sectors	9,584.60	2,614.19	28,201.49
Economic sectors	21,833.62	29,530.91	24,431.17
Social sectors	55,110.83	6,219.79	42,981.52
Cross-sectoral	3,069.02	4,394.74	9,030.69
Total	89,598.07	42,759.63	104,644.87

Table 1.1: Summary of PDNA damage, loss and needs (PhP million)

Source: PDNA Executive Summary, Tables 2, 3 and 4

³ National Economic and Development Authority. 2013. Reconstruction Assistance on Yolanda (RAY): *Build Back Better*. Manila. (http://www.gov.ph/downloads/2013/12dec/20131216-RAY.pdf)

⁴ Office of Civil Defence. 2014. Post-Disaster Needs Assessment (PDNA) in Ty Yolanda Affected Areas. Manila. (Unpublished draft, April 2014).

⁵ The approaches to estimating needs taken by the PDNA and RAY are discussed in Annex 1.

⁶ World Bank. 2013. Recommended PDA Guidance Notes (Draft). Prepared under Capacity Building for Post-Disaster Assessments in the Philippines Contract 7162294. Manila.





OPARR has established and is coordinating five cluster groups⁷ that are leading the preparation of sector- and area-based recovery and rehabilitation plans by national government agencies and local governments, in collaboration with the private sector, local communities, and the international community.

Completed plans will provide detailed information on the requirements for capital investment, materials and equipment, land, human, and other resources. Once validated through consultations with stakeholders, the plans will provide the basis for determining the comprehensive masterplan with details of national budget requirements, additional staffing needs, and supplemental technical and organizational capacity for successful implementation.

Implementation for results. To accelerate and intensify the recovery and rehabilitation process, this report—*Implementation for Results*—provides a framework to ensure close alignment between the objectives of the recovery and rehabilitation program and the Philippine Development Plan.⁸ Consistent with the OPARR clusters, *Implementation for Results* provides a framework for identifying policies, operational strategies and roles and responsibilities for implementation to guide decisions affecting short- and medium-term recovery and rehabilitation.

⁷ The five OPARR cluster groups are: resettlement; livelihoods; social services; infrastructure; and, support.

⁸ National Economic and Development Authority. 2014. Philippine Development Plan 2011-2016: Midterm Update. Manila (http://www.neda.gov.ph/?p=1128)

It emphasizes seizing opportunities for disaster risk reduction and community improvement consistent with the overall goals of the PDP. The framework focuses on priority recovery themes including: sustainable land use, housing repair and reconstruction, business resumption and economic redevelopment, social sector response, and infrastructure restoration and mitigation.

As the recovery and rehabilitation process gains momentum, with rapidly expanding activities, increased resources; and greater stakeholder engagement, the framework enables stakeholders involved in implementation to: (i) determine priority programs responsive to recovery and rehabilitation needs; (ii) identify and address gaps and constraints; and (iii) monitor and assess ongoing progress to ensure the recovery and rehabilitation program stays on track to achieve the intended results.

Results framework

To ensure alignment between the Yolanda recovery and rehabilitation program and the overall goal of the Philippine Development Plan (PDP), a results framework⁹ was prepared (Figure 2).

The updated PDP provides the overall blueprint for implementing policies, programs and projects towards the overarching national development goal of inclusive growth achieved through poverty reduction in multiple dimensions and massive creation of quality employment, with equal development opportunities and a sustainable and climate resilient-environment.

Disaster resiliency is integrated in the strategies, programs, and projects identified in the PDP 2011-2016 Midterm Update, as well as in the Revalidated Public Investment Program and Results Matrices. This is in line with the government's policy to incorporate disaster risk reduction in development planning at various levels of government, as stated in the Philippine Disaster Risk Reduction and Management Act of 2010 (RA 10121) and its Implementing Rules and Regulations.

Without a concerted, well-coordinated and adequately resourced set of programs and projects to restore and rehabilitate the economic and social conditions, the effects of Yolanda are likely to significantly reduce prospects for achieving the growth, poverty reduction and employment creation objectives of the PDP.

The results framework also enables monitoring of the impact of recovery and rehabilitation activities towards the goal of fully restoring economic and social conditions in Yolanda-affected areas. More than 10,000 individual programs and projects are anticipated for implementation as part of the overall recovery and rehabilitation efforts. The results framework links inputs to outputs, outputs to outcomes, and outcomes of the overall goal of the PDP.

2.1 Impact

The overall intended impact of the Yolanda recovery and rehabilitation program is to establish sustainable, resilient regions with high and sustainable growth that are able to withstand and recover from disasters faster and better.

⁹ Results frameworks enable stakeholders to discuss and establish strategic development objectives and then link interventions to intermediate outcomes and results directly related to those objectives. This is especially relevant for large-scale, multi-agency development programs that require action across multiple sectors and in different locations, such as in post-disaster situations. See: Designing a Results Framework for Achieving Results: A How-to Guide. http://siteresources.worldbank.org/EXTEVACAPDEV/ Resources/designing_results_framework.pdf.



Figure 2: Summary Results Framework for Yolanda Recovery and Rehabilitation^a

Figure note: "Detailed specification of indicators, targets, assumptions and risks for the results framework are presented in Annex 2.

This longer-term objective incorporates the objective to restore and reestablish the development conditions prior to Yolanda. The significant infusion of resources for the recovery and rehabilitation program also creates a window of opportunity to build back better and achieve a higher level of development outcomes in some of the poorest areas of the country.

2.2 Outcomes

The recovery and rehabilitation program is anchored on the achievement of four main outcomes in the short- to medium-term:

- *Livelihood and business development* Sustainable incomes are restored or established for households and businesses adversely affected by Yolanda
- *Housing and resettlement* Yolanda-affected families have access to affordable, disasterresilient housing, and families located in unsafe zones are resettled to safer areas

- *Social services* Yolanda-affected communities are able to access education, health, and social protection services
- *Physical infrastructure* Public and privately-owned infrastructure facilities affected by Yolanda are reconstructed or rehabilitated according to improved disaster resilient standards

2.3 Outputs

For each of the four outcomes, OPARR is integrating a detailed set of sectorally- and spatiallybased plans into a Comprehensive Master Plan for Yolanda recovery and rehabilitation. These plans provide detailed information on the various outputs that will result from the application of specified inputs.

Outputs for the recovery and rehabilitation program cover not only the provision of physical assets (e.g., housing unit constructed, roads rebuilt, classrooms constructed) but also other, less tangible but equally important, outputs (e.g., working capital for small businesses, personnel, regulations).

2.4 Cross-cutting issues

Consistent with national policies, gender, environment, and disaster risk reduction and mitigation will be mainstreamed in the plans, programs, and activities of the recovery and rehabilitation program.

Gender and vulnerable groups. Just as the recovery and reconstruction program needs to rebuild physical assets, the specific needs of women and vulnerable social groups need to be addressed to ensure a full and sustainable economic recovery.

Recovery and rehabilitation activities need to address specific findings from the PDNA including the fact that more women than men are engaged in the informal economy, with small-scale and local traders (mostly women), relying on local agriculture or fishing, and suffering significant economic setbacks. The PDNA also showed that poorer families, and especially women, are engaging in negative coping strategies and limiting food intake. Moreover, although both men and women are involved in farming and fishing, they have different roles. Thus, recovery and livelihood support are needed to enable both men and women to restore their income and food generating activities. With regard to women's health, the PDNA found a high prevalence of nutritionally at-risk pregnant women. Maternal and neonatal mortality were also high. The reported rates for physical and sexual violence in typhoon-affected areas were higher than the national average; and access to birth control and feminine hygiene supplies was limited.

Environment. While there is a lack of hard data regarding the environmental impact of Yolanda, several significant impacts to the environment were documented and assessed in the PDNA, including damage to mangrove habitats and other important fisheries, such as coral reefs, fish sanctuaries and seagrass beds, coastal erosion, damage to upland forest and habitats, watersheds, including erosion and siltation of rivers and waterways, water contamination and waste management problems.

The PDNA highlights a number of policy recommendations, including: improving baseline data collection and geographic information systems capability, improved hazard mapping, improved environmental assessments, and watershed monitoring and rivers for early warning for floods; reestablishment of environmental assets (e.g. forests, mangroves, marine habitats) to provide protection against future hazards; development of environmental management plans and updating land use and management plans to guide long-term planning and development; integrating disaster risk reduction, climate change and environmental measures into reconstruction programs; and reestablishing livelihood based on ecosystem services, to build resilient households and income generation and enhance food security.

Poverty. Many areas affected by Yolanda had key development indicators below the national average prior to the disaster. The recovery and rehabilitation program offers a window of opportunity to address the development deficit of Yolanda-affected areas, through implementation of a concerted, coordinated, and adequately resourced set of poverty reduction interventions based on clear results.

With the significant input of planned resources and the commitment of all stakeholders to help affected communities to build back better, there is an opportunity to push forward with investments that will not only restore economic and social conditions to pre-disaster levels but will also put Yolanda-affected areas on a higher, more sustainable, and inclusive growth path consistent with the goals of the PDP.

Disaster risk reduction and mitigation. Reducing future disaster risks in Yolanda-affected areas will be achieved through implementation of an integrated approach to disaster risk reduction management, with specific reference to climate change.¹⁰ Structural or environmental measures such as shoreline protection, levees and restoration of mangrove forests will address hazard risks. Improved spatial planning, land use zoning and property acquisition will reduce exposure to risk. Vulnerability will be managed through a broad range of measures, including improved community preparedness, hazard warning systems, geo-hazard mapping, and emergency response procedures.

¹⁰ See, for example 2012. IPCC. A Special Report of Working Groups I and II of the Intergovernmental Panel on Climate Change (IPCC). pp. 65-108. Cambridge.

Outcome-driven implementation

Reconstruction Assistance on Yolanda (RAY) emphasized the need to adopt an outcomedriven approach to the recovery and rehabilitation process that is focused on responding to the priority needs highlighted in the post-disaster assessments. This means ensuring that all the necessary resources—not only budgetary resources but also technical, institutional and managerial resources—are combined effectively to realize planned outputs, and that these outputs are provided at a sufficient scale to achieve intended outcomes.

Many important recovery and rehabilitation needs can be met by the appropriate government agencies through their regular programs, supplemented where necessary to meet expanded post-disaster needs, e.g., Department of Public Works and Highways (DPWH) and Department of Transportation and Communications (DOTC) for infrastructure; Department of Education (DepEd) and Department of Health (DOH) for education and health services, respectively; National Housing Authority (NHA) for housing; and LGUs for local services. Local plans based on the PDNA and plans drawn up by national government agencies already reflect many of these needs. Once validated, these plans will provide a solid basis for addressing the core investment needs for recovery and rehabilitation. However, given the unprecedented scale of the damage and loss caused by Yolanda, additional policies and operational programs are likely needed above and beyond currently planned activities.

Given the scale and complexity of post-disaster interventions, this section highlights the major policy, planning, and implementation challenges likely to arise in achieving the four main recovery and rehabilitation outcomes for livelihood and business development, housing and resettlement, social services, and infrastructure.

3.1 Livelihood and business development

RAY highlighted that 90 percent of the total damage and loss caused by Yolanda was to privatelyowned assets and incomes. These include all types and sizes of business enterprise, from the self-employed and family businesses to micro-, small-, and medium-sized enterprises and larger corporations that employ many people.

A critical part of the recovery and rehabilitation program is to put in place policies and programs that enable and encourage the private sector to recover, re-invest, and re-start their business activities. However, as it is neither cost-effective, feasible, nor desirable for government to attempt to provide for all private needs through its own resources, government will seek to establish partnerships with the private sector, civil society organizations, and local communities to leverage public resources and capacity. To respond to the diverse needs in the productive sectors, government support will be provided through three main channels: (i) direct interventions through specific economic investments; (ii) indirect interventions, primarily through the provision of additional enterprise finance; and, (iii) promotion of an enabling environment to encourage private sector investment.

3.1.1 Policy Issues

To reenergize the local economy, two key policy issues are identified to promote recovery and restore economic activity:

Financing for recovery and reconstruction. The banking sector plays a critical role in providing financing so that households can rebuild homes and enterprises can re-establish operations in Yolanda-affected areas. While there is a need to carefully assess the balance between sound monetary policies and liquidity in the banking sector, there is also the need to provide incentives for banks and microfinance institutions (MFIs) to extend credit at affordable interest rates and on favorable terms to boost lending in a risky environment. This may require consideration of further bank guarantees (such as extending operations of the Small Business Guarantee and Finance Corporation in Yolanda-affected areas), establishment of a disaster loan fund to provide needed liquidity to lending institutions in resuming their credit operations (through a government bank such as the Land Bank of the Philippines), and revisiting previously announced measures introduced by Bangko Sentral ng Pilipinas (BSP) to facilitate credit flow to the disaster-affected areas. In the longer term, the expansion of insurance against disasters should be explored, particularly cost-effective insurance products against disasters arising from natural hazards as part of the ongoing national microinsurance development initiative.

Property and business tax relief. In many countries, 11 temporary, time-bound tax relief schemes are put in place to reduce the indebtedness of groups such as households, small traders and micro-enterprises, following a disaster. In the Philippines, these groups often face acute shortages of cash, and often take loans (both formal and informal) to finance day-to-day expenditures. However, property and business taxes provide an important source of operating revenues for LGUs, which may be at risk if local people are unable to pay on time. In the interest of reducing personal and enterprise indebtedness, and to reduce the uncertainty of future, locally-generated revenues for Yolanda-affected LGUs, an important policy recommendation would be to introduce a time-bound program of resource transfers to LGUs to enable them to provide temporary tax holidays on property and business taxes to affected households and enterprises, while at the same time providing certainty of income to the LGUs.

3.1.2 Planning and implementation

Livelihood. In the immediate aftermath of Yolanda, livelihood was severely disrupted, and people were unable to earn income to support their families. An estimated 14.9 million people across nine regions were affected by Yolanda (about 16 percent of the Philippine population), of which 5.6 million workers (40 percent women and 20 percent youth) in the four most-affected regions had their incomes permanently or temporarily impacted. Forty-three percent of workers affected were self-employed and unpaid family workers and considered vulnerable, with inadequate income and no or limited access to social safety nets. For the 1.9 million self-employed workers,

¹¹ Global Facility for Disaster Reduction and Recovery (GFDRR). 2011. DaLA Guidance Notes: Volume 3. Washington DC. (p. 20-21)

income losses of PhP9.6 billion per month were estimated following the disaster. Similar losses are estimated for private sector wage-workers.¹²

Planning for livelihood programs requires an analysis of existing livelihood strategies, the vulnerabilities of people affected, their skills, and a knowledge of labor markets. To avert hardship, livelihood support needs to prioritize workers in the informal economy and vulnerable groups of workers, such as parents of child laborers, women, youth, persons with disabilities, and indigenous peoples.

Evidence from previous disasters also highlights the risk that poor families resort to negative coping mechanisms, such as increased debt to meet daily needs and decreased spending for food and other basic necessities.¹³

Agencies, including the Departments of Labor and Employment (DOLE), DPWH, Agriculture (DA), Social Welfare and Development (DSWD), and NGOs, have already provided frontline support through temporary cash-for-work schemes for clean-up operations to assist those who suffered job and income losses as a consequence of the disaster. Targeted livelihood programs have also been supported by many NGOs in specific communities to provide vulnerable groups, such as unemployed poor, seasonal and low-wage workers and women with skills training, livelihood start-up assistance, and worker benefits. As the recovery process moves from immediate, short-term relief, it is necessary to provide wide range of options for targeted poor families to receive the support they need to establish the basis for more sustainable livelihood. This support will need to be tailored to the specific source of livelihood from which families derive a living, including farmers, fishers, and informal workers in urban and rural areas.

Skills development. The recovery and rehabilitation program presents opportunities to develop new or enhance existing skills. Reconstruction activities planned for Yolanda require a considerable increase in the number of skilled workers, particularly for the construction industry for reconstruction of housing and public investments. This will require skills in carpentry, masonry, tiling, roofing, concrete fixing, welding, electrical installation, plumbing, basic furniture making, and repair work. Skills in boat repair and maintenance are also needed to restore livelihood, as well as technical training courses for the private sector and LGUs for activities, such as the preparation of local land use plans. Joint assessments of labor market information on the supply of and demand for skilled workers by government agencies, in collaboration with accredited private training institutions, will inform the development appropriate strategies to maximize opportunities for skills development.

Agriculture. A total area of about 600,000 hectares of agricultural lands were affected by Yolanda, 80 percent of which were in Region VIII. Principal crops affected were rice, corn, coconut, and other field and plantation crops. Household gardens were also destroyed. In addition, significant damage was incurred to livestock, equipment, post-production facilities and fishing vessels, as well as to public sector facilities, including irrigation systems and rural infrastructure.

¹² These income losses were taken into account in determining the private losses for the agriculture and industry, trade, and services sectors in the RAY damage, loss and needs assessment.

¹³ Institute of Philippine Culture. 2011. The Social Impacts of Tropical Storm Ondoy and Typhoon Pepeng: The recovery of communities in Metro Manila and Luzon. Manila: School of Social Sciences, Loyola Schools Ateneo de Manila University (December 2011).

Direct assistance provided to farmers and fishers by DA and related agencies has been important to re-establish production. For example, DA, with Food and Agriculture Organization's (FAO) assistance, provided seeds and necessary inputs to Yolanda-affected farmers to replant the rice crop, which has averted a collapse of agricultural activity and food shortages in badly affected areas. Similar assistance is being provided to other farmers (such as coconut farmers) and fisherfolk (to repair/replace lost boats and tackle). Further support is targeted at the livestock sector and to rebuild rural infrastructure. To comprehensively address the scale of the disaster's impact on the agriculture sector, this type of support will likely need to continue for the next few years.

Recovery and rehabilitation of agriculture requires the re-establishment of agricultural value chains, including possible assistance to input suppliers, processors, and traders, to facilitate a strong and sustained rebound of the rural economy. The post-disaster situation also provides an opportunity to expand and institutionalize productivity-enhancing interventions for agriculture through improved technology, and the adoption of different institutional arrangements and modes of engagement with agriculture sector stakeholders. These include strengthening agricultural cooperatives; enhancing stakeholder participation in planning and program design (including producers, processors and traders); and establishing partnerships with trade associations to enhance the effectiveness of traditional agricultural extension programs.

Given the large number of coconut farmers affected by Yolanda, most of whom were poor, the disaster recovery process provides an opportunity to accelerate implementation of the Philippine Integrated Coconut Industry Poverty Reduction Roadmap that was recently launched to support poverty reduction in coconut-growing regions. The components of the program include: market development through agro-enterprise development; social protection; fast tracking of land reform; and institutional reforms and innovations. Implementation of the roadmap would fast-track agricultural reforms and innovations to benefit typhoon-affected farmers and the agricultural sector in general. This and similar opportunities for other agricultural sub-sectors, including fisheries and livestock, should also be explored.

Industry, trade, and services. Yolanda caused widespread physical damage to manufacturers, processors, service providers, cottage industries, and informal businesses. These resulted in losses in employment and income, as well as disruption of markets and supply and value chains. About 24,200 enterprises were affected, about 10,000 of which were totally damaged, affecting more than 140,000 workers. The largest proportions of enterprises affected were micro- and homebased, which comprise about 93 percent of all enterprises.

The disaster affected different types of enterprises in various ways. Although each subsector requires a recovery strategy tailored to its specific needs (e.g., traders have a different set of needs to tourism enterprises), enterprise recovery has many common needs. These include: financial assistance to recapitalize and/or replace lost equipment, facilities and inventory necessary to re-start operations; re-engaging or training up skilled labor; support from LGUs to assist with licenses, permits, and tax liabilities; and assistance in business planning and improving resilience to future disasters.

Small business support. Special assistance is required for home-based, micro and small enterprises to enhance their chances of successful recovery. This assistance may include one or more of the following: soft-term credit (or grants) for recapitalization, replacement of lost equipment and facilities, payment of wages and production recovery; rebuilding to disasterresilient standards; development of business planning; skills training; processing business

documentation (e.g., licenses and permits); and temporary relief of business and/or property taxes. Assistance will also need to be targeted at specific business sub-sectors, such as tourism (hotels and restaurants), food processing, garment manufacturing and small traders.

Gender. As women run many small businesses and work in specific industries the particular needs of women have to be addressed. Initiatives such as Project Bagong Araw¹⁴, which aims to re-establish 2,000 *sari-sari* stores in Eastern Visayas, provides a good example of an assistance model for small entrepreneurs. In other countries, significant employment opportunities have been created for women after disasters by the private sector through the establishment of new enterprises that women can take advantage of, such as garment manufacturing and light assembly plants.

Credit. Ensuring adequate liquidity for financial intermediaries to provide new loan funds is critical for accelerating economic recovery. The widespread destruction and damage to assets created an acute shortage of liquidity. Lending resources of community-based lending institutions including rural banks, financial cooperatives and MFIs were depleted because: (i) borrowers are unable to meet loan repayment and interests payment; (ii) savers withdraw deposits, and stop making deposits; and, (iii) needs to finance rehabilitation have surged.

Whereas larger businesses are more likely to have had insurance policies to cover their losses and are generally able to access the capital necessary to rebuild assets, MSMEs have much lower insurance coverage and, with many of their assets partially or total destroyed, lack the necessary collateral to access new sources of capital.

To respond to this situation, immediately after the disaster struck, the Bangko Sentral ng Pilipinas (BSP) announced a number of policy actions to facilitate credit flow to the disasteraffected areas, allowing an extension of the existing loans without classifying them as restructured loans and extending the period in categorizing arrears over the usual 30 days, both of which have reduced banks' risk assets and increased their lending capacity. BSP has also extended the depreciation period for writing off bad loans in the affected areas, which has eased banks' cash position aiming to augment their risk-taking appetite. Through these measures, BSP has improved credit flow to business rehabilitation needs in the disaster-affected areas, keeping a balance between financial prudence and increasing liquidity to assist the recovery process.

To assist recovery in the business sector and provide additional loans to MSMEs, DTI has partnered with three banks, the Small Business Corporation, the Development Bank of the Philippines and the Land Bank of the Philippines. Although the government has provided loan guarantees to cover these operations, higher levels of guarantees may be needed to cover the increased volume of lending and number of borrowers.

Access to financial services. The recovery represents an opportunity to increase access to financial services for underserved MSMEs and households. Expanding access to finance for underserved groups and communities can play a transformative role in creating new economic opportunities, especially for women. This is particularly the case for agri-finance and fisheries where value chain financing, intermediated by both formal and informal local financial service providers that had existed before the disaster, declined following the disaster.

¹⁴ Majority of the *sari-sari* stores are run by women, through private sector collaboration between Philippine Business for Social Progress and other NGOs, as well as Department of Trade and Industry (DTI),

Scaling up existing support would enable MFIs and rural banks to design new or expand existing emergency and disaster-related products (e.g., flexible term loans, leasing); promote savings and disaster insurance; and mainstream new clients into core operations. Another opportunity is the promotion and expansion of cost-effective crop and microenterprise insurance against disasters arising from natural hazards as part of the ongoing national micro-insurance development initiative through MFI-owned insurance companies and cooperatives.

3.1.3 Outcome and output indicators

Outcome indicators are suggested for livelihood, as well as the three main sectors within the livelihood cluster comprising agriculture; industry, trade and services; and financial sector (Table 3.1). These indicators summarize the desirable outcomes from each of the sectors, in terms of recovery of employment, economic activity and access to credit to pre-Yolanda levels. These also highlight the opportunity for the regions to catch up with the rest of the country in terms of development outcomes. Achieving the desired outcomes will contribute to the overall goal to restore economic and social conditions within Yolanda-affected communities.

Output indicators will need to be agreed at the individual project/program level that align with, and clearly contribute to, the sector performance (outcome) indicators in Table 3.1. For agricultural production, output indicators may include physical measures of project or program outputs (such as areas of crops restored/replanted, number of fishing boats replaced, number of livestock restocked, and number/type of infrastructure repaired). For trade, industry and services, output indicators include number/type of enterprise benefitted/assisted under each project or program, and the number of jobs created. For finance, output indicators include measures of volume of lending and/or number and size of loans by program/financial institution. For livelihood, outputs include the number of beneficiaries benefitting from livelihood programs.

Livelihood	Employment restored beyond pre-typhoon levels, especially for women, with generated employment levels meeting or exceeding national PDP targets
Agriculture	Agricultural production is restored beyond pre-typhoon levels, with growth rates meeting or exceeding national PDP targets
Industry, trade and services	All classes of enterprises in the trade, industry and services are restored to beyond pre-typhoon levels, with growth rates meeting or exceeding national PDP targets
Financial sector	Liquidity in the banking sector is enhanced to enable banks and MFIs to extend credit at affordable interest rates and on favorable terms in a risky environment

Table 3.1: Outcome indicators for livelihood and business development

3.2 Housing and resettlement

Yolanda is estimated to have totally damaged 490,000 homes and partially damaged 520,000 homes. The damage to the housing stock affected by Yolanda adds significantly to the national housing gap, which was estimated at 3.7 million units in 2010, and projected to grow to 5.6 million units by 2016.

The inadequate quality of construction was a significant reason for the high number of houses damaged or destroyed. Houses in Yolanda-affected areas were predominantly "non-engineered"¹⁵ types, composed of vernacular houses, semi-permanent homes and makeshift dwellings usually inhabited by poorer families. About 40 percent of homes, particularly those located along the coastal areas, were non-permanent homes. Most houses are owner-built, with less than one percent being publicly-owned housing.

3.2.1 Policy issues

The extent of the destruction caused by Yolanda, the high level of poverty among affected households, and the need to relocate some households out of hazard-prone areas, requires a sustained, well-coordinated effort to meet overall housing needs. Two priority policy issues have been identified as essential for being able to move forward on the housing challenge.

Implement an owner-driven approach to housing. Owner-driven housing reconstruction has proved successful in restoring houses after disasters. DSWD has implemented community-driven approaches for housing recovery and reconstruction in the past. However, these programs were not of the scale warranted by Yolanda, and the government has yet to fully adopt a policy on self-recovery approach/community-based reconstruction as a means to meet the scale and efficacy necessary in Yolanda-affected areas. If adopted, such decision should define the scope, nature, and extent of government's role in supporting communities to recover, as well as the roles of the private sector and NGOs. Many of the operational aspects of such program are already embodied in existing government programs, including the implementation procedures for community-driven development (CDD).

Reassess demarcation of "no-build zones" and involuntary resettlement. A clear policy, based on a risk mitigation approach, using detailed hazard mapping and community consultations, as opposed to a single rule-based approach, would minimize the need for large-scale relocation for Yolanda-affected communities, while maximizing the disaster risk reduction benefits. Natural disasters invariably raise the need to relocate people from within hazard-prone to safer areas. While enforcing the currently mandated 40-meter setback in Yolanda-affected areas will ensure that communities are moved away from shorelines, across-the-board implementation would potentially require involuntary resettlement of hundreds of thousands of households, many of whom are poor and depend on the seas for their livelihood.

3.2.2 Planning

Assessing detailed housing needs is complex, given the different types of housing affected by Yolanda and various formal and informal patterns of home ownership. Over the past six months, government, development partners, private donors, and NGOs have committed to provide 200,000 housing units, with about 30,000 units from private contributions. However, an estimated gap of around 190,000 housing units remains for homes that were totally damaged. The government is also considering the option of providing more housing repair kits to assist a portion of the approximately 520,000 partially damaged houses

¹⁵ Non-engineered housing are those buildings spontaneously and informally constructed in a traditional manner without any or little intervention by qualified architects and engineers in their design.

As housing is predominantly a privately provided service, it is primarily the responsibility of each household to find suitable housing. The government's objective for housing is to provide sufficient support to poor families to enable them to either repair or rebuild damaged houses in the same place as they were before. For poor households that need to be relocated, government intends to implement resilient mass housing in delineated safe areas, in cooperation with local governments and communities.

Established government-housing providers have a major role to play in meeting overall housing needs. A contractor-driven approach may rapidly deliver a large volume of housing using a standardized approach, but experience suggests this is relatively costly and does not always respond effectively to homeowner preferences. Supervision to ensure adequate quality is also challenging.

The current gap in planning for housing highlights the need to consider alternative approaches to mobilize the collective capacity and resources of government, local communities, and the private sector. Public provision to meet all private housing needs would be prohibitively expensive, so options for leveraging resources with homeowners, civil society organizations, and the private sector will be explored. Experience from other countries suggests that other stakeholders are willing and able to provide cash and in-kind contributions, which can significantly leverage limited public funds.

Effective, massive owner-driven housing reconstruction programs in other countries (e.g., Indonesia, Pakistan, India, Sri Lanka, Colombia) have recognized the value of mobilizing households to play a central role in reconstructing their own homes. In these cases, the government has facilitated the restoration of homes by providing greater access to financing, through programs such as cash grants to household groups. Such support will enable them to hire contractors and access technical know-how. These programs include mechanisms to ensure the transparent use of government support and adoption of disaster-resilient parameters set by government.

Recent experience in rehousing informal settler families in Metro Manila and other ownerdriven housing programs, as well as international experience,¹⁶ provides considerable knowledge from which to develop new housing programs for Yolanda-affected areas. Many of the elements needed to implement owner-driven approaches are already available in the Philippines. For example, the community-based mortgage program implemented by Social Housing Finance Corporation (SHFC), which empowers communities to identify and develop their chosen location and to collectively pay mortgages under low-cost financing conditions. The Kapit-Bisig Laban sa Kahirapan - Comprehensive and Integrated Delivery of Social Services (KALAHI-CIDSS), national CDD project of DSWD, provides a good model of community participation. Communitybased programs implemented by Partnership of Philippine Support Service Agencies Incorporated (PHILSSA) in Naga City¹⁷ and other areas, demonstrate that there are home-grown models and practices that can be harnessed to scale up in Yolanda-affected areas.

Resettlement. The need to resettle some families out of hazard-prone areas creates an added complication for the Yolanda recovery effort. Involuntary resettlement due to zoning for

¹⁶ See for example, Jha A., J. Duyne Barenstein, P. Phelps, D. Pittet and S. Sena. 2010. Safer Homes, Stronger Communities: A Handbook for Reconstruction after Natural Disasters. Washington DC: The World Bank and the Global Fund for Disaster Risk Reduction.
¹⁷ PHILSSA/DFID. 2012. Institutionalizing Local and National Partnerships to Address Urban Poverty and Homelessness in the Philippines: Program-End Evaluation. Partnership of Philippine Support

hazards must be balanced with the social and economic impacts of relocating large numbers of people. As part of the immediate response to Yolanda, under provisions of the 1976 Water Code, Department of Environment and Natural Resources (DENR) has sought to enforce the application of a 40-meter buffer zone from all shorelines. If fully enforced, the 40-meter "nobuild zone" will necessitate a high level of involuntary resettlement, which will especially affect those who depend on the seas for their livelihood. However, experience shows that large-scale resettlement should be minimized due to the considerable challenge of not only meeting the direct housing costs, but also the accompanying needs to create jobs and services.

Policies that uphold communities' preference for on-site relocation have been adopted in the past to resolve the issue of no-build zones. In the informal settler families program in Metro Manila, government acknowledged that resettlement should be the last option, and would be resorted to only when houses are exposed to multiple hazards, and where mitigation measures are not economically or physically viable.

Cross-cutting issues. Other social and environmental issues are also important when planning for housing. Women's and men's needs and preferences for housing are different. To avoid the risk of women being marginalized in the planning process for housing, efforts will be made to ensure they have adequate opportunities to participate in discussions concerning design, financing, and ownership of housing, and that, wherever possible, women are included in any legal documents that define ownership.

A key objective of the housing initiatives for Yolanda is to reduce exposure to disaster risk by providing opportunities for people to live in improved, more disaster-resilient housing. Affordable and effective disaster-resilient design standards consistent with the national building code need to be incorporated into all publicly-supported housing projects, including consideration of environmental factors, such as green building design, sustainable water use, and harnessing renewable energy sources.

3.2.3 Implementation

Design. Housing interventions do not just entail the construction of houses, but require the establishment of socially and environmentally sustainable communities that foster a sense of identity and stability, which are crucial for achieving long-lasting recovery. In addition to a range of physical infrastructure (e.g., construction of housing units, access roads and connections to water and electric utilities) and other non-structural support that relates to land, assured access to construction materials, and financing, any resettlement plans must also ensure proximity to livelihood and basic social services, especially for households that may need to be relocated. Community planning also needs to include consideration of access and traffic management, air quality, storm-water management, solid waste and sewage disposal, and related environmental issues.

Experience from Indonesia, following the 2004 Tsunami, highlights these issues. Houses had to be built in line with specific standards; they had to be earthquake resistant.¹⁸ Reconstructed settlements required the basic infrastructure needed for evacuation and disaster mitigation. Housing design as well as spatial planning had to involve the local community to ensure a sense

¹⁸ BRR. 2009. BRR Book Series, Book 7, Housing: Roofing the Pillars of Hope. The Executing Agency of Rehabilitation and Reconstruction for Aceh and Nias. Indonesia. [http://www.recoveryplatform.org/assets/publication/BRR%20Book%20Series%20-%20 Book%207%20-%20Housing.pdf]

of community ownership that would consequently guarantee sustainability of maintenance of the housing and settlement infrastructure.

Coordination. Restoration of destroyed homes is typically the most difficult and complex component of any post-disaster recovery program, because of the high level of coordination, resources, and implementation capacity required. Developing a mechanism to foster coordination, common standards, information on financing and linkages between the social, infrastructure, and livelihood agencies and LGUs, as well as the private sector, NGOs, development partners and service providers in Yolanda-affected areas will be essential to ensure an integrated approach to housing, as well as access to other essential public services and livelihood opportunities.

Financing. The sheer scale of reconstruction needs for housing requires a multi-faceted approach to financing, which needs to maximize access to new and existing programs. These include: (i) a community-based approach, providing conditional grants for community groups to support repair, reconstruction, and relocation, anchored in DSWD or housing agencies; (ii) government housing finance through agencies such as NHA for low-cost standardized disaster-resilient housing units (through contractor-built, NGO- or owner-driven reconstruction); (iii) government incentives to promote private sector construction through guarantee programs such as the Home Guaranty Corporation (HGC) to protect housing loans from credit default risk, and the purchase of mortgages by the National Home Mortgage Finance Corporation (NHMFC) using proceeds from the issuance of Bahay Bonds; (iv) banks and existing socialized housing finance channels of Pagibig or other financing institutions like SHFC, with consideration of concessionary funding and ability for Yolanda-affected households to access Pagibig funds as non-members; (v) private sector contributions through possible corporate social responsibility funding of housing schemes and (vi) donor contributions to develop community-based housing schemes.

Land use planning. Only some LGUs in Yolanda-affected areas had approved Comprehensive Land Use Plans (CLUPs)¹⁹ prior to the disaster. In badly affected areas, the impact of Yolanda necessitates the formulation of entirely new land use plans. In other areas, the recovery and rehabilitation process provides an opportunity, consistent with HLURB's zero CLUP backlog project, to expedite the completion and submission of CLUPs to HLURB for approval.

Pushing forward with the preparation of CLUPs is a critical instrument to accelerate the recovery and rehabilitation process on the ground, although it is likely that there will be some issues related to lost title documents with competing claims over land ownership and some uncertainty about the definition of hazard zones that are considered not suitable for housing and settlement. Completion of revised CLUPs will not only provide a framework for zoning of areas for new housing, but will also clarify hazard zones, and areas suitable for commercial and industrial use.

Technical and research institutions in Yolanda-affected areas can be engaged to supplement capacity at the national level to fast track the delineation of high-risk zones. Options for balancing the desire to minimize disaster risk and the need to minimize resettlement need to be drawn up to inform a revised policy on setbacks and resettlement.

¹⁹ See Housing and Land Use Regulatory Board Guide Books on Comprehensive Land Use Planning [http://hlurb.gov.ph/local-government-units/?tabgarb=tab3].

Land ownership. Households that have lost legal documentation of land and property title may encounter legal disputes over ownership of land tenure. These groups will require support from local or provincial government resources to recover these assets. The UN Multi-Cluster/Sector Initial Rapid Assessment identified households that had lost legal documentation of land and property title as among the most vulnerable groups.

Lessons from other recovery programs point to the need to ensure that re-building of housing respects pre-disaster land and property rights to ensure that: (i) there is a high degree of confidence that every house is built on the right property for the correct owner; (ii) survivors and/ or heirs do not lose rights; (iii) absentee owners' rights are protected - especially from renters and informal/illegal occupants who may claim ownership over untitled lands; and, (iv) land grabbing and land speculation is avoided.

Re-establishing land ownership typically relies on mobilizing communities to identify the location of households and their plots prior to disaster. This participatory approach that draws on collective knowledge and memory can be validated by documents that are available from other sources, typically government agencies, e.g., Land Registration Authority (LRA), DENR, DA, Department of Agrarian Reform (DAR), and the National Irrigation Administration (NIA), (e.g., for irrigated plots, lands distributed under agrarian reform).

Monitoring. Ensuring adequate monitoring and supervision of multiple housing initiatives is challenging. Regular government-led field monitoring, local governments and national government agencies, and independent audits, carried out by the Commission on Audit, of the physical and numerical progress will need to be supplemented by independent, community-based monitoring to provide feedback on performance. Considerable additional human resources will be required for design, supervision and project management to perform these functions. A clear grievance redress mechanism will also need to be established, independent from the implementing agency.

3.2.4 Outcome and output indicators

Based on indicators from the PDP, as well as qualitative indicators that pertain to access and resilience, indicative outcomes indicators are presented to monitor and assess progress (Table 3.2).

Housing	Yolanda-affected families have access to affordable, disaster-resilient housing
Resettlement	Families located in unsafe zones are resettled and housed in safer areas

Table 3.2: Outcome indicators for housing and resettlement

For partially damaged housing, output indicators may include: percent of partially damaged houses that are rebuilt; percent of partially damaged houses that receive housing repair kits; and percent of homeowners who receive training on disaster-resilient construction.

For totally damaged housing, indicators may include: percent of totally damaged houses that are rebuilt; percent of totally damaged houses that receive rebuilding kits; percent of homeowners who receive training on disaster-resilient construction; percent of new houses built to disaster-resilient standards.

For resettlement, indicators may include: percent of households resettled to governmentassisted resettlement areas; percent of households resettled under owner-driven housing schemes, with training on disaster-resilient construction; percent of homeowners who receive training on disaster-resilient construction; and percent of new houses built to disaster-resilient standards.

3.3 Social services

Regions IV-B, VI, VII and VIII lag behind the national targets for many of the Millennium Development Goals (MDGs), particularly in poverty, education and health.²⁰ It is within this context that recovery and reconstruction of social sectors in Yolanda-affected areas present an opportunity to ensure all public education and health facilities have the requisite inputs to provide effective services, and social protection schemes address the needs of the most vulnerable groups.

Significant assistance was provided to restore social services as part of the immediate response to the disaster. Schools and medical facilities were repaired and education and health services re-started. Food aid was provided and short-term cash-for-work schemes werer implemented by government agencies and NGOs.

Moving beyond the humanitarian response phase, there is a need to make permanent repairs and/or rebuild all schools and medical facilities to provide sustainable services to the communities. As with other sectors, there is a window of opportunity to build back better and achieve a higher level of development outcomes in some of the poorest areas of the country.

A significant part of the needs for education and health are for the reconstruction or repair of facilities—mainly classrooms in the case of education, and hospitals and other health facilities in the case of health. Rehabilitation needs for education and health include a premium for incorporating disaster-resilient standards as agreed with DPWH. Effective restoration of education and health services also requires the adequate provision of staff, materials, and equipment.

Expanded social protection programs, both short-term (e.g., cash for work) and medium-term (e.g., conditional cash transfers), are important for social sector recovery, implemented in close cooperation with planned livelihood initiatives (see Section 3.2.2) to provide opportunities for the poor to meet basic needs, restore social services to pre-disaster levels, and access incomeearning opportunities.

3.3.1 Policy issues

Managing the transition from relief to recovery and reconstruction. There is a need to develop a framework and operational guidelines for effective planning, coordination and harmonization of activities in the social sectors, to ensure that there is an effective link and hand over of activities from the relief to the recovery and reconstruction phases of a disaster.

Determining the mix of social protection programs for disaster response. A variety of social protection programs currently exist, including cash-for-work, conditional cash transfers and emergency employment schemes. While the opportunities exist to use these mechanisms across a number of agencies, there is a need to strengthen the process of identifying the appropriate mix of social protection programs needed, the mechanisms required to put them in place and the

²⁰ 2010. Philippine Progress Report on the Millennium Development Goals

coordination arrangements between programs in order to respond quickly to future disasters of varying scale and scope.

Multipurpose evacuation centers. Typhoon Yolanda, as well as other recent disasters, raised questions about the effectiveness and appropriateness of using schools as evacuation centers. Given the concerns raised during the PDNA, policy review of options needs to be undertaken to consider alternatives to schools for the establishment of evacuation centers at the community level.

3.3.2 Planning

Convergence. As communities plan and begin to recover from the effects of Yolanda, there is an opportunity to realize synergy in the planning and implementation of social services. As new facilities are planned, old ones upgraded, and social safety net programs enhanced in response to the disaster, an integrated approach that recognizes the close links between how households, especially poor households, access and benefit from education, health, and social protection services, will help to maximize combined social sector outcomes. Because social sector projects and programs are closely linked at the community level (e.g. nutrition programs in schools), similar linkages should exist at the program level between line agencies to coordinate the planning and effective delivery of recovery and development interventions.

Transition to recovery and rehabilitation. In responding to a disaster of the scale of Yolanda, the UN, bilateral and international humanitarian agencies provided much-needed, specialized assistance to national agencies and LGUs in the relief effort. Considerable resources were mobilized over a very short timeframe to provide financing, food, supplies, equipment and expertise for the relief phase to alleviate the human suffering and to restore basic services. These efforts are now winding down as the process moves into the recovery and reconstruction phase. Many initiatives in health, education and social protection sectors must be continued to ensure communities continue to recover. At the planning level, a mechanism is needed for the government to review the transition of assistance from response to recovery. This should identify community needs, assess the scale and coverage of continuing assistance to be provided and identify supplemental financing and resources required to continue the recovery process.

Social protection. Current social protection programs may need to be expanded to respond to the scale and the likely impact of the disaster on increasing poverty risks. The conditional cash transfer program that targets poor households, various cash- and/or food-for-work schemes help the most vulnerable households and those unable to earn a living, community block grants, through the KALAHI-CIDSS National CDD Project, all aim to support communities to rebuild, create meaningful work and leverage community resources. Other social services such as trauma counseling and interventions that support the specific protection needs of women, children, the elderly, and people with disabilities are also needed.

Schools as evacuation centers. While schools are often one of the few large public facilities in a community, concerns about the disruption to teaching, and inadequacies in terms of the conditions for some evacuees have raised questions about the adequacy and appropriateness of using schools as evacuation centers. In the period immediately following the disaster, many schools were used as temporary evacuation centers. As noted in the PDNA, when people were accommodated in evacuation centers for extended periods of time, health and safety issues became a concern as many evacuation centers were also damaged by the typhoon. Extended use of the centers not only delayed the restarting of classes, but the school administrations were

also faced with considerable costs for cleaning up the schools. The PDNA highlights the need to reconsider the use of schools as evacuation centers, and to consider the building of multipurpose structures in each barangay (for sports, cultural events and other community purposes) that could serve as evacuation shelters when needed.

3.3.3 Implementation

Coordination. The different institutional arrangements that exist for education, health, and social protection across different levels of government pose a challenge to effective coordination. Closer convergence of effort across the social sectors requires that institutional mechanisms for inter-agency coordination exist to regularly bring together national government agencies, LGUs, and other stakeholders to discuss and agree on how to coordinate social sector interventions at the point of delivery in affected communities.

3.3.4 Outcome and output indicators

Outcome indicators suggested for education, health, and social protection are consistent with PDP objectives of universal coverage in education and health and include treatment and enrolment, respectively, as outcome measures (Table 3.3).

Outputs for education and health comprise physical and service delivery-related indicators. Social protection output would be measured in terms of grants disbursed to target affected populations.

Education	Education facilities in the public and private sectors are built to agreed disaster-resilient standards
	Net enrolment and cohort survival in pre-school and basic education restored to at least pre-disaster levels
Health	Health facilities in the public and private sectors built based on disaster-resilient standards
	Enrolment in the National Health Insurance Program resumed to cover disaster-affect- ed families
	Decline in maternal mortality rates, infant mortality rates, under-five mortality rates, prevalence of malnutrition of children under 5, malaria and TB morbidity rates arrested to at least pre-disaster levels
	Access to affordable essential drugs restored
Social Protection	Coverage of conditional cash transfer program expanded in disaster-affected areas
	Employment and livelihood via social programs (e.g., cash for work) increased

Table 3.3: Outcomes indicators for social services

3.4 Infrastructure

In the context of an integrated approach to disaster risk management, the process of restoration of infrastructure needs not only to repair or reconstruct the assets, but also to consider why damages or failures occurred. This should lead to the use of improved disaster resilience or "build-back-better" standards for project design, and ensure that infrastructure will better withstand the effects of future disasters.

Under RAY, most of the infrastructure repairs and reconstruction will be undertaken through the usual operations of relevant government agencies. The exception occurs in electricity, where local electricity cooperatives and private sector enterprises are mostly responsible for distribution and generation respectively; and water supply and sanitation, where local water districts are responsible for service provision. However, agency's capacity to procure, and both agency and contractor's capacity to implement a very large number of projects across a very wide area, raise a number of policy and implementation issues.

3.4.1 Policy issues

Raising the quality of building construction. With the urgency to rebuild, there is a risk that public and private buildings and structures may not be built or renovated to standards that comply with established national building codes, including provisions for disaster resilience. Given the need to "build back better," appropriate capacity and resources must be provided to deliver this outcome, especially at the local level.

In the medium term, it is desirable to review and update the national building code to ensure that it is appropriate for potential disaster events, and reflect international best practice standards,²¹ appropriate for the Philippines context.

Zoning for hazards. Where DENR-Mines and Geosciences Bureau (MGB) and DOST have assessed that construction sites are vulnerable to hazard; but the property owner or government believe that mitigation measures could make the site safe for occupancy, DPWH will need to provide guidance on: (i) the type and standard of site-specific technical evaluations that must be conducted to determine if relocation of infrastructure or mitigation measures are appropriate; (ii) the standards required to deem a site fit to be occupied; (ii) procedures for approval of mitigation measures; and (iv) where a site has an identified hazard and mitigation measures are proposed, the mitigation measures undertaken must be certified by a competent engineer, to the satisfaction of DPWH.

3.4.2 Planning

Plans and resources. Most infrastructure needs fall within the usual mandates of either national government agencies for nationally-managed infrastructure or LGUs for local infrastructure. Planning for infrastructure rehabilitation and recovery will therefore follow investment planning and budgeting processes that have already been established by government agencies, with the addition of design standards to improve disaster resilience. National government investments of more than PhP500 million will follow established requirements for NEDA Board approval. Investment proposals from LGUs will need to be reviewed by relevant national government agencies before funding is provided.

Governance. The recovery and rehabilitation program for infrastructure is significant in terms of size and scope, as well as the number of people that will be reached. Mechanisms will need to be established to allow for public consultation and participation in determining priorities and sequencing of infrastructure investments.

²¹ See for example, International Code Council. 2012. International Building Code. Washington DC, updated every three years. [www. iccsafe.org].

Effective budget management will ensure sufficient resources are made available in a timely manner, especially considering the potentially high cost of some infrastructure investments.²²

Cross-Cutting Issues. Agencies will incorporate existing guidelines on gender, disaster risk reduction, and environmental sustainability in planning and implementing their investments. DENR will have an important role in coordinating, implementing and monitoring the rehabilitation of environmental assets identified under the PDNA, such as mangroves and coastal protection works.

3.4.3 Implementation

Coordination. Effective coordination is imperative for successful post-disaster implementation. As much as possible, coordination should be managed through existing legally-mandated structures (e.g., local development councils, national government agencies). However, given the scale, diversity, and speed of the Yolanda recovery and rehabilitation effort, additional mechanisms are needed to enable closer, more regular coordination, and to agree on specific roles and responsibilities to ensure a consistent, well-coordinated approach. These mechanisms may take the form of memoranda of agreement to define partnership arrangements, institutionalizing venues for stakeholder participation, or more formal issuance of government directives. Implementation plans shall include details of the mechanisms to ensure effective coordination.

Design. The essential principle for engineering design after disasters is to enhance resiliency to future calamities (i.e. to reduce the hazard through appropriate design or structural enhancement). Special attention should be paid to the following issues to address the need to "build back better":

- Raising the height and span of bridges to accommodate the highest possible river/tide levels, and protecting bridge approaches to avoid erosion.
- Providing adequate drainage capacity for road culverts and ancillary drainage works, and slope protection to avoid landslides.
- For partly damaged infrastructure, repairs or rehabilitation are needed but not necessarily full reconstruction (e.g when a road surface is partially damaged, only re-surfacing may be sufficient). However, the cause of damage needs to be identified, such as inadequate road drainage, which would need to be rebuilt.
- Where only parts or sections of a structure are fully destroyed, this may indicate faulty design or insufficient design data. After a disaster, such weaknesses are exposed, and disaster-resilient criteria should be adopted for the total structure.
- For damaged flood control structures, the capacity of such structures should be increased to prevent similar events in the future, following technical standards set by DPWH.
- For houses, schools, health centers, government offices and other public infrastructure, new construction should withstand 250 kph wind speed and other disaster-resilient features, as per DPWH standards of "build-back-better."

Procurement. Public procurement is governed by the provisions of RA 9184.²³ Following the state of emergency declared by the President, the Government Procurement Policy Board issued Resolution No 34-2013 for Yolanda recovery: (i) relaxing Board approval for contracts below

 $^{^{\}rm 22}$ See Section 4.1 for a discussion of DBM's financial tracking system

²³ An Act Providing for the Modernization, Standardization and Regulation of the Procurement Activities of the Government and for Other Purposes (22 July 2002)
PhP500 million for any permitted procurement method with approved budgets; and (ii) permitting departments and agencies the authority under Section 53.2 (Emergency cases) to directly negotiate contracts for the procurement of goods and infrastructure projects, for the purpose of providing rescue, recovery, relief, and/or rehabilitation efforts for, and to continue to provide basic services to victims, up to PhP500 million. The Board retains the right to review all procurement.

Capacity. Successful reconstruction depends not only on revised and upgraded designs but also on the capacity to implement. As public sector agencies rely on private contractors, the significant size of the rehabilitation program will likely stretch the implementation capacity of private contractors. Pre-qualification and lists of potential contractors, as well as other options, may be considered to speed up the procurement process; the Philippine Government Electronic Procurement System (PhilGEPS),²⁴ maintained by DBM, provides considerable capacity to manage a range of procurement processes, and should be employed by all government agencies, utilizing the full range of procurement capabilities of this system.

Other potential capacity constraints include: (i) the availability of essential construction materials, and the capability of local manufacturers to produce to standards and specifications set by DPWH may be limited; (ii) the technical complexity to retro-fit infrastructure to increase disaster resilience may require special engineering support; and (iii) the planning and supervision capacity of LGUs needs strengthening.

Scheduling. The implementation of infrastructure projects should be scheduled to consider the impact of timing on the well-being of the affected communities as well as the need to sequence works to ensure timely completion of key infrastructure. Priorities include restoration of: (i) production and distribution of electricity supplies; (ii) water supply, sanitary disposal of sewage and solid waste to ensure public health; (iii) water supply systems at the earliest possible time to provide water to the affected population and to the commercial and industrial users; and (iv) national primary arterial roads and bridges, and sections of the other national roads that provide critical access to activities in the affected areas.

Land use planning. A key aspect of reducing exposure to natural hazards is consideration of geo-hazards associated with key infrastructure. This will require technical examination, and, possibly, additional costs. For example, relocation of electrical system components or power lines, water supply and sanitation facilities, and roads and bridges to reduce future risks or improve site conditions should ensure that the cost of rehabilitation and relocation includes the cost of land acquisition.

Finance. Repair and/or reconstruction of public infrastructure will largely be funded from the national government budget. However, for private sector service providers, such as water and electricity, additional financing may be needed to ensure the financial sustainability of these enterprises. Additional private sector financing needs for electricity and water supply and sanitation will be channeled through the Department of Energy - National Electrification Administration (NEA) and Local Water Utilities Administration (LWUA), respectively. Incentives for electric cooperatives to rebuild to a higher degree of resiliency will be considered. However, even with financing, it may take some years before badly affected utilities are able to re-establish a revenue stream. Transparent and time-bound subsidies to enable service providers to operate will be assessed.

²⁴ https://philgeps.gov.ph

3.4.4 Outcome and output indicators

Outcome indicators for infrastructure are drawn mainly from the PDP's key outcome indicators (Table 3.4). To ensure that recovery efforts restore the affected area to at least pre-disaster levels, agencies shall provide baseline figures and annual targets against these indicators in relation to the assessed public and private needs.

Most recovery and rehabilitation needs for infrastructure can be met through the provision of physical outputs. However, given the significant scope and scale of outputs required, careful planning will be undertaken, not only of the technical and financial requirements, but also the social considerations for implementation, such as mechanisms for stakeholder consultation. While some important infrastructure had already been rehabilitated, larger, more complex infrastructure projects will require longer to design and implement and, in some cases, will take some years to complete.

Roads and bridges	Percentage increase in the length of paved roads
	Percentage increase in the length of permanent bridges along national arterial roads
Flood Control	Decrease of areas vulnerable to flood (in hectares)
Airports	Increase in cargo throughput (metric tons per annum)
	Increase in number of passengers
	Increase in number of aircraft movements
Ports	Increase in cargo throughput (metric tons per annum)
	Increase in number of passengers
	Increase in number of vessels
Telecommunications	Percentage increase in municipalities covered by cellular mobile telephone system
Electricity	Percentage increase of households provided with electric power supply
Water supply	Increase in the percentage of households with level III connection
	MDG Target: Eliminate the number of waterless areas
Sanitation	MDG Target: Increase percentage of population with access to basic sanitation (percent population)
	Increase in percentage of households covered by septage management systems (percent of HH)
Irrigation	Improved cropping intensity (ratio of the net area sown vs total cropped land)
Government buildings	Increase in number of households with ready access to government services

Table 3.4: Outcome indicators for infrastructure

Oversight and performance monitoring

The Yolanda recovery and rehabilitation program is designed as an outcome-driven, resultsbased program, as described in Section 2.4. The Results Framework, based on the Results Matrices of the Philippine Development Plan, succinctly describes the recovery program in terms of a "results chain," as well as the inputs and the targets. The following section describes the key elements of the program performance monitoring system that provides a systematic approach to monitor and evaluate the recovery program.

4.1 Agency roles

NEDA has lead responsibility for Thematic Area 4: Rehabilitation and Recovery under the National Disaster Risk Reduction and Management Plan (NDRRMP, 2011-2028). These two mandates will guide NEDA in its overall oversight responsibility of the Reconstruction Assistance on Yolanda (RAY). Specifically, NEDA will (i) prepare the conceptual planning framework for the RAY (this document), and (ii) will monitor and evaluate the impact and outcomes of RAY (as described in this document).

The Presidential Assistant for Rehabilitation and Recovery (PARR) was appointed on 6 December 2013 under Memorandum Order no. 62 to serve as the overall manager and coordinator of Yolanda rehabilitation, recovery, and reconstruction efforts. PARR, among other duties, is required to formulate plans and programs for the rehabilitation, recovery and development of the affected area; propose funding support for the implementation of the plans and programs; and submit status reports to the President on implementation. OPARR is currently finalizing the Comprehensive Master Plan for the Yolanda recovery and rehabilitation program.

The Department of Budget and Management's (DBM) primary role is to manage the government's financial resources in accordance with the approved projects and the national budget, and to manage the national accounting system. To do this, DBM is developing an online system to reform the National Disaster Risk Reduction and Management Framework (NDRRMF) approvals process by streamlining, automating, and creating a ticketing system; link four existing systems with each other²⁴ and the new NDRRMF ticketing system, with progress data to be published online. The website will become operational in July 2014, and will provide OPARR the tools to monitor project financial expenditure. As of this writing, only DPWH's project management system is aligned with the Open Reconstruction system. Other government agencies are being encouraged to expedite their alignment with this system and the national Results-Based Budgeting system so that Yolanda funds may be used effectively.

²⁴ These systems are: UACS/eBudget; PhilGeps bid number; NGAs/PMS Project ID; and MDS.

4.2 Regular progress monitoring

The monitoring and evaluation of the achievement of targets will take place at two distinct but closely connected levels as shown in the Results Framework (Annex 2).

The first level focuses on the outcomes of the government's recovery efforts, which are the changes in the overall conditions that the government aims to achieve through the planned interventions. Such outcomes incorporate the production of outputs and the contributions of partners. Monitoring at this level will be the responsibility of NEDA, through its Monitoring and Evaluation Staff.

The second level focuses on the outputs, which measure the specific infrastructure, livelihood, social sector and housing products that result from processing inputs through planned projects. This second level is consistent with the normal responsibilities of Departments and Agencies and will remain so under the RAY. Departments and Agencies will share their monitoring data with OPARR to facilitate PARR's responsibility under Memorandum Order No. 62 to exercise oversight over the relevant government agencies with respect to the implementation of the plans and programs.

In preparation of the Cluster Programs, Projects and Activities, each Cluster will identify the baseline and the short-, medium- and long-term targets for all government funded projects. OPARR, in its role as coordinator of the recovery and rehabilitation effort, will include details of projects funded by international organizations, the private sector and other non-government organizations in the Comprehensive Master Plan.

4.3 Periodic progress evaluation

OPARR will submit to the President status reports on the implementation of the plans and programs at the frequency required by the President. The information shall be drawn from OPARR's management information system (under development), as well as DBM's Open Reconstruction portal. The report may include key implementation constraints and issues that were resolved or need to be addressed by NDRRMC and other government agencies.

NEDA will prepare periodic evaluation reports to summarize and evaluate the achievement of sector outcomes by the recovery and rehabilitation program over the reporting period. Results should be reported at the sector and province level (where possible) as well as at the national level, highlighting key development constraints and other issues, to be submitted to NDRRMC and the President.

NEDA and OPARR will work closely together so that, whenever possible, the reporting interval for routine reports to the President is harmonized, there is continued close cooperation to ensure consistency of data, and reporting information is shared to ensure visibility and accountability of the rehabilitation and recovery efforts.

Annex 1

Reconstruction Assistance on Yolanda (RAY) and Post-Disaster Needs Assessment (PDNA) Estimates

RAY provides a comprehensive, overall estimate of the total economic damage, loss and needs on Yolanda covering both public and private needs. The PDNA estimates focus mainly on government financing needs, mostly in relation to physical reconstruction costs. The PDNA estimates are therefore considered as part of the overall financing needs for the recovery and rehabilitation program (Table A.1).

	RAY	PDNA
Damage	424.3	89.6
Loss	146.8	42.8
Needs	360.9	104.6

Table A.1: Comparison of Damage, Loss, and Needs in RAY and PDNA (PhP Billion)

Some of the main differences between RAY and the PDNA are as follows:

- The PDNA focuses on providing greater detail on that part of the overall financing needs that require government funding, mostly in relation to physical reconstruction costs. This represents about 30 percent of the total needs PhP104.6 billion out of PhP360.9 billion.
- The PDNA does not include a detailed assessment of damage/loss and needs to the trade, industry and services sector which RAY estimates account for about 20 percent of total needs.
- Apart from the enterprise sector, the PDNA highlights the continuing gap in financing for housing (PhP36.8 billion indicated in the PDNA compared to PhP183.1 billion in RAY) with current public sector capacity and financing insufficient to fully meet housing needs.
- The PDNA's more up-to-date information highlights increased needs over RAY in the roads cluster (PhP1.6 billion) and for agriculture (PhP4.7 billion), as well as for disaster-risk reduction (PhP5.2 billion) and environmental management (PhP3.8 billion).
- RAY included estimates for social protection needs of PhP18.4 billion (e.g. cash for work, increased conditional cash transfers, special needs programs).

Annex 2

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Typhoon Yolanda Results Framework for Recovery and Rehabilitation

The following results framework is based on the Results Matrices of the Updated Philippine Development Plan (PDP) and Regional Development Plans for 2011-2016, as well as the Comprehensive Rehabilitation and Recovery Plan (CRRP) for Yolanda. Unless otherwise specified, data are national figures and not specific to Yolanda-affected areas. Missing data and other updates will be reflected in subsequent editions of this document, which will be made available in the NEDA website (http://www.neda.gov.ph).

RESULT	PERFORMANCE TARGETS AND INDICATORS	BASELINE	SHORT- TERM (2014)	MEDIUM- TERM (2015-2017)	DATA SOURCES AND REPORTING MECHANISMS	ASSUMPTIONS AND RISKS
Philippine Development Plan (PDP) Objective ^a Poverty reduction and creation of quality employment, with equal development opportunities for women, children and men (spatially, sectorally focused strategies)						
Impact (long-term)						
Sustainable, resilient regions affected by Yolanda with high and sustainable growth, able to	Per capita GRDP in the affected areas restored to pre-typhoon levels (Baseline: average growth rates 2002-2012)	*	*	*	NEDA NEDA GRDP reports	Assumption: Continuing budgetary resources are made available in a timely and sufficient manner to meet recovery and rehabilitation needs.
withstand and recover from disasters faster and better	GRDP growth rates achieve national PDP targets					
	Reg. IV-B: MIMAROPA (%) ^a	4.2	3.2-4.2	5.2-6.2	NEDA, PSA	Assumption: External environment
	Reg. VI: Western Visayas (%)ª	7.5	6.1-7.5	7.3-8.8		remains positive and conducive to
	Reg. VII: Central Visayas (%)ª	9.3	8.9-11.2	10.1-12.5		growth.
	Reg. VIII: Eastern Visayas (%)ª	-6.2	4.5-5.5	4.6-5.6		Risks: Other disasters arising from natural hazards may again hit the regions and reverse gains.

^a Source: Philippine Development Plan 2011-2016 Midterm Update with Revalidated Results Matrices

* Values to be determined

RESULT	PERFORMANCE TARGETS AND INDICATORS	BASELINE	SHORT- TERM (2014)	MEDIUM- TERM (2015-2017)	DATA SOURCES AND REPORTING MECHANISMS	ASSUMPTIONS AND RISKS
Outcome (medium-term)	-					-
Economic and social conditions in regions affected by Yolanda restored and poverty reduced	Regional poverty rates decreased	*	*	*	 PSA National House- hold Targeting System for Pov- erty Reduction (NHTS-PR) Impact studies 	Assumptions: Continuing budgetary resources are made available in a timely and sufficient manner to meet recovery and rehabilitation needs.
Outcomes (short-term)						
Livelihood and local econor	nic development					
Sustainable incomes restored or established for households and	Number of fatalities due to disasters arising from natural hazards declines over time	*	*	*	OCD	
businesses adversely affected by Yolanda (including self-employed workers, micro-, small-, and	Labor productivity increased					Assumption: External environment remains positive and conducive to growth.
medium-sized businesses)						Risk: Other disasters arising from natural hazards may hit the regions.
	Agricultural and fisheries sector ^a	PhP57,797 (2012)	2.0% - 5.0% (2014)	PhP62,561- 70,253 (end-of-Plan target)	DA PSA-BLES Yearbook of Labor Statistics	Assumptions: Budgetary allocations are assured and reforms in the sector are implemented.
	Industry and services sectors ^a	4.9% (2012)	3.9% - 4.7% (2014)	4.7% - 5.5% (end-of-Plan target)	DOLE • PSA • Reports	 Assumptions: Macroeconomic fundamentals/ indicators remain stable. Infrastructure development continues to be pursued. Projects/programs are implemented on time.

RESULT	PERFORMANCE TARGETS AND INDICATORS	BASELINE	SHORT- TERM (2014)	MEDIUM- TERM (2015-2017)	DATA SOURCES AND REPORTING MECHANISMS	ASSUMPTIONS AND RISKS
Outcomes (short-term)						
Livelihood and local econor	mic development					1
Sustainable incomes	Emergency employment					
restored or established for households and businesses adversely affected by Yolanda (including self-employed workers, micro-, small-, and medium-sized businesses)	Annual damage and losses (crops and properties) due to disasters arising from natural hazards, environmental hazards, human induced and hydro-meteorological events decreased ^a	PhP19.27 billion for 193 incidents (2004 to 2010 average)	Decreasing per year (2014)	Annual damage and losses decreased (end-of-Plan target)	CCC, NDRRMC NDRRMC Accomplishment Report	Risks: The projections of climate change impacts based on current climate change scenarios can be more adverse than projected. Climate change adaptation and mitigation activities are not enough to build capacities of ecosystems and communities to withstand projected climate change impacts.
	Number of tourist arrivals ^a	3.5 million (2010)		6.3 million (end-of-Plan target)	DOT, PSA (StatDev)	
	Number of farmers with risk insurance increased ^a	311,388 (2012)	795,259 (2014)	2,035,864 (end-of-Plan target)	PCIC DA-PCIC Report	Assumption: Climate change adaptation programs are integrated into the regular planning and budgeting process and implemented in all programs of the government.
Resettlement						
Yolanda-affected families have access to affordable, disaster-resilient housing,	Percent increase of families resettled from unsafe zones to safer areas	*	*	*	NHA, DILG, and LGUs	Assumptions: Land identified as safe for resettlement is adequate and funds for resettlement are made available.
and families located in designated unsafe zones resettled to safer areas	Percent of families located in unsafe zones reduced	*	*	*	 DSWD (to identify families to be resettled) DOST, DENR-MGB, DILG, and LGUs (to identify safe and unsafe zones) 	Risk: Housing stock is not adequate to withstand possible future disasters.

RESULT	PERFORMANCE TARGETS AND INDICATORS	BASELINE	SHORT- TERM (2014)	MEDIUM- TERM (2015-2017)	DATA SOURCES AND REPORTING MECHANISMS	ASSUMPTIONS AND RISKS
Outcomes (short-term)						
Social services						
Yolanda-affected	School enrollment rate (%):					Assumptions: Continuous progress
communities are able to access education, health,	Kindergarten ^a	57.2 (2010)	89.7	100		towards attaining national PDP targets for education, health, and social
and social protection	Elementary ^a	95.9 (2010)	97	99	DepED	protection.
services	Secondaryª	64.7(2010)	68	71		
	Infant mortality rate per 1,000 live births (%)ª	22 (2011)	20	17	DOLL	
	Under-five mortality rate per 1,000 live births (%)	*	*	*	DOH	_
	Number of patients treated in health facilities ^b	30 (2008)	28	25.5	DSWD	
	National Health Insurance Program coverage rate increased	*	*	*		
	Coverage of conditional cash transfer	*	*	*		
Physical infrastructure						
Effective and disaster- resilient public and privately owned	Annual increase in the number of passengers transported by air	37,960,765	49,344,076	56,084,528	DOTC	Assumption: Projects will be completed as scheduled.
infrastructure facilities achieved	Increase in broadband coverage (%)					
	NGAs	*	*	*		
	LGUs	*	*	*		
	State universities and colleges (SUCs)	*	*	*		

^a Source: Philippine Development Plan 2011-2016 Midterm Update with Revalidated Results Matrices
 ^b Source: Yolanda Comprehensive Recovery and Rehabilitation Plan

* Values to be determined

RESULT	PERFORMANCE TARGETS AND INDICATORS	BASELINE	SHORT- TERM (2014)	MEDIUM- TERM (2015-2017)	DATA SOURCES AND REPORTING MECHANISMS	ASSUMPTIONS AND RISKS
Outcomes (short-term)						
Physical infrastructure						
Effective and disaster- resilient public and privately owned infrastructure facilities achieved	Power demand met, i.e., ratio of dependable capacity to total peak demand with required reserve is maintained above 100% ^a	108.14	103.86	104.39	DOE	 Assumptions: Projections based on 7.0% gross domestic product growth Actual commercial operation dependent on private sector decision Private sector investment in the subsector increased Private sector operations are efficiently and effectively managed
	Water demand in critical areas met (in % ratio of water supplied in million liters per day [MLD] to water demanded in MLD) ^a	116.06	90	92	MWSS/ concessionaires/ LWUA/water districts (WDs)/ DENR-RBCO and NWRB	 Assumptions: Scheduled projects are implemented without delay Sector investment increased and management for the water system by LGU/private sector satisfactory
	Coverage of 24/7 water supply services in cities increased (in %) ^a	77.59	88.62	90.12	MWSS/ concessionaires/ LWUA/WDs/DENR- RBCO and NWRB	 Assumptions: Average of 559 WDs and 2 MWSS concessionaires Sector investment is increased and LGU/private sector management for the water system is effective
	Tourist destination areas (TDAs) with improved water system increased (in % of total number of identified waterless TDAs) ^a	N/A	100	100	DPWH/DOT/LWUA/ WDs	 Assumptions: Covers only 26 TDAs which are identified as waterless areas Private sector investments in tourist areas are increased and management is efficient and effective
	Ratio of classroom to pupil improved					Assumption: Projects to be completed/ implemented as scheduled
	Primaryª	1:39	1:32	1:30	DepEd	
	Secondary ^a	1:54	1:47	1:45		

RESULT	PERFORMANCE TARGETS AND INDICATORS	BASELINE	SHORT- TERM (2014)	MEDIUM- TERM (2015-2017)	DATA SOURCES AND REPORTING MECHANISMS	ASSUMPTIONS AND RISKS
Outcomes (short-term)						
Physical infrastructure						
Effective and disaster- resilient public and privately owned infrastructure facilities achieved	Access to information and communications technology in public schools increased (in % of total number of public schools)					 Assumptions: Government allocates sufficient budget for connectivity of primary/ secondary schools. Return of investment to the private
	Primaryª	61	90	91	ICTO/DepEd	sector for broadband infrastructure is good/attractive.
	Secondaryª	88	91	91		• By 2014, all energized schools shall
	Ratio of water and sanitation facilities to pupil improved					be provided with computer packages and connectivity.
	Primaryª	1:58	1:52	1:50		• Investment by private sector for broadband infrastructure increased
	Secondaryª	1:108	1:65	1:50	DepEd	and management efficient and effective.
	Households (HH) with electricity increased (in % of total number of HH) ^a	72.07	79.43	86.20	DOE	Assumptions: Private sector investments are increased and management is efficient and effective.
	Sitios with electricity increased (in % of total number of sitios) ^a	68.65	91.18	100	NEA	Assumptions: Private sector investments are increased and management is efficient and effective.
	HH access to water supply increased (in % of total number of HH) ^a	84.8	86.48	88.21	DPWH/MWSS/ LWUA/WDs/ concessionaires/ water service providers/DILG/ NAPC/DSWD	Assumptions: Private sector investments increased and management efficient and effective.
	Irrigation services coverage as % of total potential irrigable areas increasedª	56.01	69.01	73.8	NIA, DA, DAR	 Assumptions: Total irrigable area of 3.126 million hectares assumed in 2010 was reduced to 3.021 million in 2011 due to converted and permanently non- restorable areas. Potential areas to be irrigated are restorable and not converted. Irrigators associations manage the irrigation systems effectively.

IMPLEMENTATION FOR RESULTS

RESULT	PERFORMANCE TARGETS AND INDICATORS	BASELINE	SHORT- TERM (2014)	MEDIUM- TERM (2015-2017)	DATA SOURCES AND REPORTING MECHANISMS	ASSUMPTIONS AND RISKS
Outcomes (short-term)						
Physical infrastructure						
Effective and disaster- resilient public and	Treated municipal wastewater increased	*	*	*		
privately owned infrastructure facilities achieved	Proportion of HH covered by sewerage systems increased ^a	1.28	7.87	18.49	MWSS/ concessionaires/ DPWH/LWUA/WDs/ LGUs/SEZs	
	Physical vulnerability of public and privately owned infrastructure due to damages caused by disasters arising from natural hazards reduced	*	*	*		
Outputs						
Resettlement						
Housing units constructed (for families to be resettled)	Reconstruction of 494,000 partially damaged and 519,000 totally damaged houses	*	*	*	DSWD surveys and reports	 Assumptions: Materials and finance are available to homeowners to rebuild homes.
	Construction of 20,960 temporary housing (bunkhouse) units for displaced families by 2014	*	*	*	DPWH progress reports	 Housing units have disaster-resilient designs. Risks: More typhoons set back reconstruction efforts. Temporary repairs not built to appropriate standards.
	Number of resettlement housing units constructed	*	*	*	NHA	
Resettlement communities established	Number of resettlement areas established	*	*	*	NHA	

RESULT	PERFORMANCE TARGETS AND INDICATORS	BASELINE	SHORT- TERM (2014)	MEDIUM- TERM (2015-2017)	DATA SOURCES AND REPORTING MECHANISMS	ASSUMPTIONS AND RISKS
Outputs						
Livelihood and local econor	nic development					
Agricultural crops, livestock and fisheries produced	Value (output x price) of main crops, livestock, and fisheries	*	*	*	DA, DAR, BFAR, BAI and DENR progress reports DTI, LGUs	 Assumptions: Supply chains for key products are reestablished. Stakeholders in affected areas full participate and get involved in local
MSMEs actively trading	Number of businesses registered	*	*	*		economic development efforts.
	Number of farmer/fisherfolk borrowers/MSMEs obtaining loans from formal sources ^a	57 (2008)	*	85 (end-of-Plan target)	ACPC, GFIs DA-ACPC small farmers and fisherfolk credit accessibility survey	Risk: Investments do not promote sector modernization and inclusive growth
	Number of businesses registered/operational before Yolanda and re-opened after Yolanda	*	*	*	DTI, LGUs	
	Number of new businesses registered and operational after Yolanda	*	*	*	DTI, LGUs	
	Yield of major commodities increased (in metric ton per hectare)ª				DA, PSA PSA-BAS Countrystat/ Selected Statistics on Agriculture	Assumption: Farmers and fisherfolk, and their organizations, adopt sustainable yet productivity-enhancing technologies and innovations
	Palay	3.84	4.4	4.53		
	Corn	1.7 (white)	1.8 (white)	2.08 (white)		
		4.09 (yellow)	4.6 (yellow)	5.16 (yellow corn)		
	Banana	20.36	23.2	24.57		

RESULT	PERFORMANCE TARGETS AND INDICATORS	BASELINE	SHORT- TERM (2014)	MEDIUM- TERM (2015-2017)	DATA SOURCES AND REPORTING MECHANISMS	ASSUMPTIONS AND RISKS
Outputs						
Livelihood and local econo	mic development					
MSMEs actively trading	Yield of major commodities increased (in metric ton per hectare)ª				DA, PSA PSA-BAS	Assumption: Farmers and fisherfolk, and their organizations, adopt sustainable yet productivity-enhancing
	Coconut	0.88	0.9	1	Countrystat/ Selected Statistics	technologies and innovations.
	Pineapple	41.06	43.1	45.66	on Agriculture	
	Sugarcane	61.34	62.8	71.2		
	Coffee	0.74	0.8	0.88		
	Cacao	0.52	0.6	0.7		
	Cassava	10.23	16.4	20.23		
	Volume of production ^a					
	Livestock					
	Нод	1,974	2,057	2,172		
	Chicken	1,479	1,651	1,852		
	Fisheries					
	Commercial Fisheries	1,042	1,102	1,169		
	Municipal Fisheries	1,281	1,332	1,392		
	Aquaculture Fisheries	2,542	2,657	2,784		
Social services						
Education facilities rebuilt or rehabilitated to improved disaster-resilient standards with necessary staff and materials		*	*	*	DepEd progress reports	Assumptions: Government agencies are able to program and spend available budgetary resources effectively. Risk: Government agencies and private sector service providers and contractors do not have sufficient capacity and resources to plan and implement a large-scale recovery and rehabilitation program.

RESULT	PERFORMANCE TARGETS AND INDICATORS	BASELINE	SHORT- TERM (2014)	MEDIUM- TERM (2015-2017)	DATA SOURCES AND REPORTING MECHANISMS	ASSUMPTIONS AND RISKS
Outputs						
Social services						
Education facilities rebuilt or rehabilitated to improved disaster-resilient standards with necessary staff and materials	Replacement of equipment, furniture and materials	*	*	*	DepEd progress reports	Assumptions: Government agencies are able to program and spend available budgetary resources effectively.
Health facilities rebuilt or rehabilitated to improved disaster-resilient standards with necessary staff and materials	Reconstruction and rebuilding of 296 barangay health centers, 97 rural health units and 38 public hospitals following "build- back-better" principles, by 2015	*	*	*	DOH progress reports	Risk: Government agencies and private sector service providers and contractors do not have sufficient capacity and resources to plan and implement a large-scale recovery and
	Replacement of medical equipment and supplies	*	*	*	_	rehabilitation program.
	Restoration of barangay, municipal and provincial medical services to pre-disaster levels	*	*	*		
Vulnerable families and communities served by social protection programs	Number of families enrolled in key social protection programs (e.g., conditional cash transfer program, cash-for-work)	*	*	*		
Physical infrastructure						
Public and private infrastructure	Number of partially damaged facilities repaired ^b					
reconstructed or	Education					
rehabilitated	Elementary and secondary classrooms	17,335	*	*	-	-
	SUC buildings	22	*	*	-	-
	Science high school buildings	15	*	*	-	-
	Technical/vocational schools	*	*	*	-	-

^b Source: Yolanda Comprehensive Recovery and Rehabilitation Plan
 * Values to be determined

RESULT	PERFORMANCE TARGETS AND INDICATORS	BASELINE	SHORT- TERM (2014)	MEDIUM- TERM (2015-2017)	DATA SOURCES AND REPORTING MECHANISMS	ASSUMPTIONS AND RISKS
Outputs						
Physical infrastructure						
Public and private infrastructure reconstructed or	Number of partially damaged facilities repaired ^b					
	Health					
rehabilitated	Government hospitals	42	*	*	-	-
	Health units	95	*	*	-	-
	Health stations	454	*	*	-	-
	Transportation and mobility					
	National roads	*	*	*	-	-
	National bridges	*	*	*	-	-
	Local bridges	*	*	*	-	-
	Airports	11	*	*	-	-
	Seaports	16	*	*	-	-
	Municipal ports	*	*	*	-	-
	Farm-to-market roads	11	*	*	-	-
	Agriculture and fisheries					
	Demo farms	*	*	*	-	-
	Production facilities	174	*	*	-	-
	Post harvest facilities	6	*	*	-	-
	Agricultural warehouse	14	*	*	-	-
	Laboratories	4	*	*	-	-
	Slaughter house	64	*	*	-	-
	Fish ports	3	*	*	-	-
	Terminals/bagsakan	2	*	*	-	-
	National irrigation system	26	*	*	-	-
	Communal irrigation system	147	*	*	-	-
	Diversion dams/small water impounding project (SWIP)	100	*	*	-	-

RESULT	PERFORMANCE TARGETS AND INDICATORS	BASELINE	SHORT- TERM (2014)	MEDIUM- TERM (2015-2017)	DATA SOURCES AND REPORTING MECHANISMS	ASSUMPTIONS AND RISKS
Outputs						
Physical infrastructure						
Public and private infrastructure reconstructed or rehabilitated	Number of partially damaged facilities repaired ^b					
	Government and administrative buildings					
	Provincial halls	4	*	*	-	-
	City/municipal halls	115	*	*	-	-
	Barangay halls	*	*	*	-	-
	NGA offices	*	*	*	-	-
	Halls of justice	52	*	*	-	-
	Police stations	*	*	*	-	-
	Fire stations	*	*	*	-	-
	Jail facilities	*	*	*	-	-
	Number of totally damaged facilities repaired ^b					
	Education					
	Elementary and secondary classrooms	3,600	*	*	-	-
	SUC buildings	13	*	*	-	-
	Science high school buildings	*	*	*	-	-
	Technical/vocational schools	*	*	*	-	-
	Health					
	Government hospitals	42	*	*	-	-
	Health units	95	*	*	-	-
	Health stations	454	*	*	-	-
	Transportation and mobility					
	National roads	*	*	*	-	_

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 * Values to be determined

RESULT	PERFORMANCE TARGETS AND INDICATORS	BASELINE	SHORT- TERM (2014)	MEDIUM- TERM (2015-2017)	DATA SOURCES AND REPORTING MECHANISMS	ASSUMPTIONS AND RISKS
Outputs						
Physical infrastructure						
Public and private infrastructure reconstructed or rehabilitated	Number of totally damaged facilities repaired ^b					
	Transportation and mobility					
enabilitateu	National bridges	*	*	*	-	-
	Local bridges	*	*	*	-	-
	Airports	1	*	*	-	-
	Seaports	*	*	*	-	-
	Municipal ports	*	*	*	-	-
	Farm-to-market roads	*	*	*	-	-
	Agriculture and fisheries					
	Demo farms	*	*	*	-	-
	Production facilities	5	*	*	-	-
	Post harvest facilities	*	*	*	-	-
	Agricultural warehouse	*	*	*	-	-
	Laboratories	*	*	*	-	-
	Slaughter house	7	*	*	-	-
	Fish ports	*	*	*	-	-
	Terminals/bagsakan	*	*	*	-	-
	National irrigation system	*	*	*	-	-
	Communal irrigation system	*	*	*	-	-
	Diversion dams/SWIP	*	*	*	-	-
	Government and administrative buildings					
	Provincial halls	*	*	*	-	-
	City/municipal halls	8	*	*	-	-
	Barangay halls	*	*	*	-	_

RESULT	PERFORMANCE TARGETS AND INDICATORS	BASELINE	SHORT- TERM (2014)	MEDIUM- TERM (2015-2017)	DATA SOURCES AND REPORTING MECHANISMS	ASSUMPTIONS AND RISKS		
Outputs								
Physical infrastructure								
Public and private infrastructure reconstructed or rehabilitated	Number of totally damaged facilities repaired ^b							
	Government and administrative buildings							
	NGA offices	*	*	*	-	-		
	Halls of justice	38	*	*	-	-		
	Police stations	*	*	*	-	-		
	Fire stations	*	*	*	-	-		
	Jail facilities	*	*	*	-	-		
	Percent of partially and totally damaged infrastructure that is reconstructed or rehabilitated according to improved disaster- resilient standards (average of completion rates for individual infrastructure sectors)	*	*	*	-	-		

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 * Values to be determined

Reconstruction Assistance on Yolanda: IMPLEMENTATION FOR RESULTS

Published by:

National Economic and Development Authority

12 St. Josemaria Escriva Drive, Ortigas Center, Pasig City Tel: +632 631 0945 to 68 www.neda.gov.ph

ISSN: 2243-7576