



IT HAPPENED

Learning from Typhoon Yolanda



About the cover

Viewed from an orbiting weather satellite, the dark immensity that is typhoon Yolanda barrels towards the archipelago looking ominous and huge. The artist captures this instance, and for the title, uses the font (appropriately enough) called **Storm**.



IT HAPPENED

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MESSAGE



My warmest greetings to the National Disaster Risk Reduction and Management Council (NDRRMC) on the publication of *Y (It Happened)* and the Commemoration of the First Year Anniversary of Typhoon Yolanda.

The past year has borne with it a challenge to revitalize areas ravaged by the series of disasters that struck our homeland. Through the efforts of stakeholders and partners around the globe, the survivors of Typhoon Yolanda have gained a small measure of recompense for their unfathomable loss. But many individuals still struggle to regain their economic footing, and it is our duty to restore their dignity and stability. May this book be an authoritative testimony of our need for vigilance and accountability and inspire its readers to participate more meaningfully in our rehabilitation efforts.

Our countrymen deserve the best that a culture of equitability and inclusiveness can offer. Let us work even harder to rebuild their homes and protect their families. The lessons we have learned through this ordeal must teach us to be more compassionate and urgent in our decisions; may the NDRRMC, together with our partners among other governing agencies, act in solidarity to identify the most important issues in disaster risk prevention, preparedness, and recovery, and form definitive and effective contingencies to safeguard our people.



Benigno S. Aquino III

MESSAGE

It was on the 8th of November 2013 when Typhoon Yolanda, with an international name of Haiyan, swept through a number of provinces in the central part of the Philippines. Several lives were destroyed, livelihoods, properties, and communities severely damaged. It further overwhelmed the capability of both the national and local government units due to disasters that transpired prior to Yolanda.



This “Y (It Happened)” publication highlights the lessons learned – learnings which have become our responsibility to share to the whole world.

Yolanda (Haiyan) has taught the Philippines of our need to step-up our efforts for disaster prevention, mitigation, and preparedness way beyond “business as usual.” The call to be more proactive and responsive in our respective roles as council members has become imperative now, more than ever; thus, we should be more visible and aggressive in delivering what is due for our country.

The impact of the disaster underscored a number of gaps in the existing DRRM system and set of capacities from the National to the Local DRRM Councils and related institutions and organizations. With which, this publication for Typhoon Yolanda was crafted.

The documentation for Typhoon Yolanda likewise provides good practices and challenges in the DRRM community. It further identifies gaps under existing DRRM set-up, mechanisms and policies of RA 10121, our framework and plan. Using the stories gained in the field and other offices, we continue to extract lessons which serve as inputs to recovery efforts in the aftermath of Yolanda.

With this and other disasters of similar strength, key stakeholders, especially members of the local and international communities, civil society organizations, local government units and national government agencies, need to further ponder and evaluate on what happened and identify how best we can work together and build back better and move forward, not only in the areas directly hit by Yolanda, but more importantly, in the institutional mechanisms, policies and programs. Such effort will enable our country to better reduce the risks of disasters especially to the most vulnerable.

May this book be a guiding document not only in the Philippines but also to the ASEAN community and to the global DRRM community.

Thank you and Mabuhay!

A handwritten signature in black ink, appearing to read "Voltaire T. Gazmin".

Voltaire T. Gazmin
Chairperson, NDRRMC

MESSAGE



With scores of millions of people affected and damages worth hundreds of millions of US dollars, Typhoon Haiyan was the most powerful typhoon on record.

In the face of the massive destruction left by the typhoon, ASEAN Member States immediately responded by sending much needed life-saving materials, supplies, personnel and equipment. Further affirming its commitment, ASEAN is also supporting the recovery initiatives of the Government of the Philippines. The collective action of ASEAN Member States is a testament of the region's determination and ability to stand with one another in times of distress.

This publication chronicles the journey and documents the valuable lessons the Philippines has learned from Typhoon Haiyan. Such narration complements ASEAN's own documentation of its learnings in the book "Weathering the Perfect Storm". By capturing these lessons, ASEAN is better equipped to face more complex disasters in the future and build more resilient communities.

The efforts of the Government of the Philippines are truly noteworthy. We commend the efforts and dedication of all the national and local government agencies and the international community that supported the affected communities.

Le Luong Minh
Secretary-General of ASEAN

MESSAGE



Typhoon Yolanda (“Haiyan”) serves as a tipping point, when everything and all things either fall apart or come together all at once. As we mark the first year anniversary of the landfall of one of the strongest typhoons ever recorded in history that hit the country, super Typhoon Yolanda, the National Disaster Risk Reduction Council produced *Y It Happened*. This book captures the Philippine experiences and lessons learned in our implementation of our disaster risk reduction and management system.

Written in a narrative but straightforward manner, the stories are based on first-hand account of the survivors, rescuers, and volunteers, extensive interviews, community conversations and focused group discussions. It unveils interesting insights as to what actually happened on the ground without hiding behind the niceties when confronted with facts.

Typhoon Yolanda taught us that the institutional state of disaster risk reduction and management in the country leaves more to be desired, while the law, framework and plans are in place, its implementation remains a challenge both at the national and local levels. The book provides important analyses and evaluations of our actions before, during and after Typhoon Yolanda which are all meant to assist in the formulation of DRRM policies that will address the identified gaps.

The *Y It Happened* is a reminder to everyone that while we cannot prevent natural hazards from occurring, we can avert disasters from happening. May this book bear witness to the rekindling of our commitment to our collective mission of building safer, climate change adaptive and resilient Filipino communities.

Undersecretary Alexander P. Pama

*Administrator, Office of Civil Defense
/ Executive Director, NDRRMC*

PROLOGUE

It took only a few hours on 8 November, 2013 for typhoon (TY) Yolanda (international name: Haiyan) to obliterate towns and cities in the Visayas region, drastically altering lives and reshaping thoughts about disasters and how these impact on the country's preparedness capacity.

It will take time for the stark reminders of that calamitous event to completely vanish from a people's collective memory even as the process of healing and recovery has begun.

Part of that process was the need to grapple with the realities of what really happened on the ground and the lessons that could be mined from the experiences of people and communities battered by the typhoon and those who responded to the aid of a stricken land.

One particular articulation of this process was the decision of the National Disaster Risk Reduction and Management Council (NDRRMC) together with other government agencies and the regional offices of the Office of Civil Defense (OCD) to set in motion this project to reflect from the experience with the end in view of improving the disaster risk reduction and management (DRRM) practices, systems, and policies in the country.

It specifically aimed to: 1) document the Yolanda experience (including good practices and/or case stories) using the four thematic areas as a general framework; 2) identify gaps under the existing DRRM set-up, mechanisms, and policies vis-à-vis RA 10121 and the National DRRM Framework Plan; 3) extract

key lessons which will serve as inputs to the recovery plan and possible revisions needed in the existing set of DRRM policies, plans, and programs in the country; and 4) identify and share key learnings and challenges with the wider international DRRM community, particularly in the ASEAN.

The concept of the project called, "Learning from Typhoon Yolanda" pointed out that, *'The impact of the disaster highlighted a number of gaps in the existing DRRM (Disaster Risk Reduction and Management) system and set of capacities from the national to the local DRRM councils and related institutions and/or organizations.'*

It further said, *'With this and other typhoons of similar strength, key stakeholders, especially members of the local and international communities, civil society organizations, local government units, and national government agencies need to reflect on what happened and identify how best they can work together and build back forward, not only in the areas hit by Yolanda, but more importantly, in the institutional mechanisms, policies, and programs so that the country can better reduce the risks of disasters to its people, especially the most vulnerable.'*

The framework and methodology in putting together this modest volume, which were anchored on the four thematic areas of the DRRM law: Prevention and Mitigation, Preparedness, Response, and Rehabilitation and Recovery, underlines the comprehensive scope of the project despite the challenge of a short time frame.

According to the National Disaster Risk Reduction and Management Framework (NDRRMF), through the National Disaster Risk Reduction and Management Plan (NDRRMP), the country will have “safer, adaptive, and disaster resilient communities towards sustainable development” to be achieved through the four mutually reinforcing thematic areas earlier mentioned.

The data-gathering process for this project essentially adhered to the proposition that each thematic area has its own long-term goal which, when put together, will lead to the attainment of the country’s DRRM goal.

The research was also guided by the following definitions of the four thematic areas in relation to priorities:


Prevention and Mitigation provides key strategic actions that give importance to activities revolving around hazards evaluation and mitigation, vulnerability analyses, identification of hazard-prone areas, and mainstreaming DRRM into development plans. It is based on sound and scientific analysis of the different underlying factors which contribute to the vulnerability of the people and eventually, their risks and exposure to hazards and disasters.

Preparedness are the key strategic actions that give importance to activities revolving around community awareness and understanding, contingency planning, conduct of local drills, and the development of a national disaster response plan. Risk-related information coming from the prevention and mitigation aspect is necessary for the preparedness activities to be responsive to the needs of the people and to the situation on the ground. Also, the policies, budget, and institutional mechanisms established under

the prevention and mitigation priority area will be further enhanced through capacity-building activities and development of coordination mechanisms. Through these, coordination, complementation, and interoperability of work in DRRM operations and essential services will be ensured. Behavioral change created by the preparedness aspect was eventually measured by how well people responded to the disasters. At the frontlines of preparedness are the local government units, local chief executives, and communities.

Response refers to activities during the actual response operations: from needs assessment and search and rescue to relief operations and early recovery. The success and realization of this priority rely heavily on the completion of the activities under both prevention and mitigation and preparedness aspects including, among others, the coordination and communication mechanisms. On-the-ground partnerships and vertical and horizontal coordination work among key stakeholders will contribute to successful disaster response operations and its smooth transition towards early and long-term recovery work.

Rehabilitation and Recovery cover areas like employment and livelihoods, infrastructure and lifeline facilities, and housing and resettlement, among others. These are recovery efforts done when people are already outside of the evacuation centers.

Although the stories that had emerged from the data-gathering process did not cover the fourth thematic area given the limited coverage of the research, a number of areas demonstrated initial gains in rehabilitation and recovery. 

Why IT HAPPENED?

“Any rational reflection about the present and future...must conclude that humankind faces unprecedented threats to its well-being, and perhaps even to its survival. The growing number of people on earth and the way we are already making demands on natural resources are undermining the ecosystems that support us...massive changes are going to be needed if we are to avert the threats to our future...”

*Communicating for Development: Human Change for Survival
by Colin Fraser and Sonia Restrepo-Estrada*

Typhoon Yolanda serves as a tipping point, that dramatic moment in time, when everything and all things either fall apart or come together all at once.

Behind this reflective narrative of human travails and endurance, of testing to the limits institutional frameworks and structures, is an attempt to capture elements of change that could propel faster the fulfilment of the new paradigm on disaster risk reduction embodied in the country's Disaster Risk Reduction and Management law. The gaps under the existing DRRM system are illuminated by some of the lessons from Yolanda.


Based on extensive interviews, community conversations and focus group discussions, the resulting amalgam of experiences and lessons shared provide ample material upon which revisions and possible policy recommendations can be made.

Written in a narrative but straight forward manner, the stories do not hide behind niceties when

confronted with facts. The stories were gleaned not from a single voice, but uncovering as far as possible, different perspectives. The stories unveil interesting insights as to what actually happened on the ground as told by those who experienced Yolanda first hand.

The whole narrative covers various styles of governance and DRRM levels from the national down to the regional and local levels and reflects direct knowledge and understanding not only about how the natural event occurred but about processes and protocols as well.

The “Y It Happened” is a reminder to everyone that while we can not prevent natural hazards from occurring, we can avert disasters from happening.

This publication hopes to contribute to the continuing discourse on further enhancing disaster risk reduction in the Philippines. Read on, join the conversation, and be counted. 



PART



Long Before Yolanda

*Toward Safer, Adaptive,
and Disaster-Resilient Communities*

Disaster Risk Reduction and Management in the Philippines

Exposure to Risks

The Philippines, an archipelago, is prone to geological and hydro-meteorological hazards due to its geographical and physical characteristics.

The country places third in the World Risk Index of 2013.¹ It is subjected to an average of 20 tropical cyclones per year and is highly vulnerable to disasters resulting from extreme natural events like tropical cyclones, monsoon rains, earthquakes, tsunamis, and volcanic eruptions.

This is aggravated by a rapidly increasing population density, environmental degradation due to urbanization and industrialization, and climate change.

From 1970-2013, the National Disaster Risk Reduction and Management Operations Centers (NDRRMOC) listed 856 tropical cyclones that entered the Philippine area of responsibility (PAR), 322 of which, or 38 percent, were destructive.

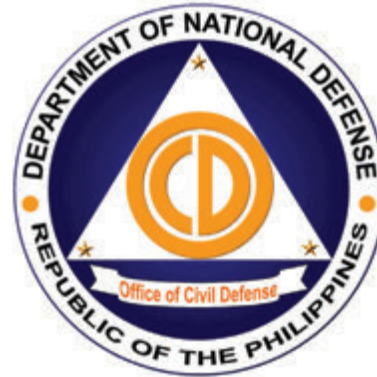
In the past 20 years, tropical cyclones claimed 17,119 lives and injured 51,068, with 5,198 still missing. It affected at least 24.8 million families or 122.1 million people and caused damages to agriculture, infrastructure, and private properties worth P354.7 billion.

¹According to the Alliance Development Works which ranks countries according to hazard exposure, susceptibility, and coping and adaptive capacities in its 2013 report.

From disaster management to disaster risk reduction

The highest policy-making, coordinating, and supervising body for DRRM in the Philippines is the National Disaster Risk Reduction and Management Council (NDRRMC). Its executive arm is the OCD, which has evolved through the years.

On 18 August 1954, the National Civil Defense Administration (NCDA) was created through the Civil Defense Act of 1954, which was repealed in 1972. The NCDA functions and personnel were then transferred to the OCD.



The primary role of the OCD is to lead in the continuous development of measures to reduce risks to communities and to manage the consequences of disaster through a comprehensive national civil defense and assistance program. The role widened to include coordination of government agencies and instrumentalities, private institutions, and civic organizations for the protection and preservation of life and property.

On 11 June 1978, Presidential Decree (PD) No. 1566 was promulgated to strengthen the capability of the OCD in disaster control, establishing the National Program on Community Disaster Preparedness with the OCD as the operating arm. It also served as the

secretariat of the National Disaster Coordinating Council (NDCC), which preceded the NDRRMC. Most of the plans and programs then were focused on emergency preparedness and disaster response.

In the mid-80's the needed reforms on PD 1566 were recognized, thus, the OCD, together with the civil society and other member-agencies of the NDCC, lobbied for the amendment of the disaster management law, or to even change it entirely. There was not much progress then, until typhoons Ondoy (international name: Ketsana) and Pepeng (international name: Parma) hit the Philippines in 2009, which somehow drove home the need to enhance the Philippines' disaster management law. The times demanded something more than a reactive law, but a proactive one that emphasizes prevention and mitigation.

The paradigm shift

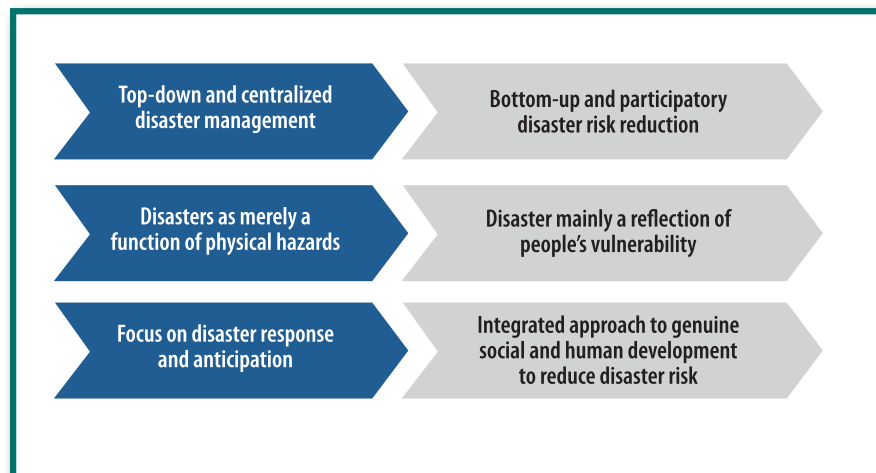
After more than three decades, PD 1566 was replaced by a new law: the Republic Act (RA) No. 10121, which was enacted on 27 May 2010. RA 10121 represents a more bottom-up and participatory approach in disaster risk reduction. It also changed the view of disaster as a mere result of a physical hazard to a perspective that addresses the notion of vulnerability.

Lastly, the law requires an integrated approach to sustainable social and human development.

Aside from a change in perception, there was also a major change of actors. From 19 NDCC member-agencies, it increased to 44 under the NDRRMC: four vice chairpersons, 14 departments, 12 government line agencies, two government financial institutions, one quasi-government agency, four leagues, one union of local government units (LGUs), four civil society organizations, one private organization, and the Office of Civil Defense as the executive arm of the council.

The Philippines is the first in Asia to enact its own law, which is also referred to as "The Philippine Disaster Risk Reduction and Management Act of 2010," that explicitly and categorically addresses disaster risk reduction and management. It is the official embodiment of the paradigm shift from disaster relief and response to disaster risk reduction and management.

The drafting of the implementing rules and regulations (IRR) proceeded at once. On 27 September 2010, the IRR was promulgated and took effect 15 days after its publication.



Adopting one frame

The proactive stance of the NDRRMC to address disasters is strengthened by the institutionalization of the new NDRRM Framework signed on 16 June 2011. The Framework is a conceptual paradigm on how the “whole of society” can work towards “safer, adaptive and disaster-resilient Filipino communities towards sustainable development.”

It ensures that the DRRM process is: comprehensive and integrated, covers all hazards, involves all sectors, and has a positive impact on communities. It also ensures that resources poured into disaster prevention, mitigation, preparedness, and climate change adaptation are worth the investment.

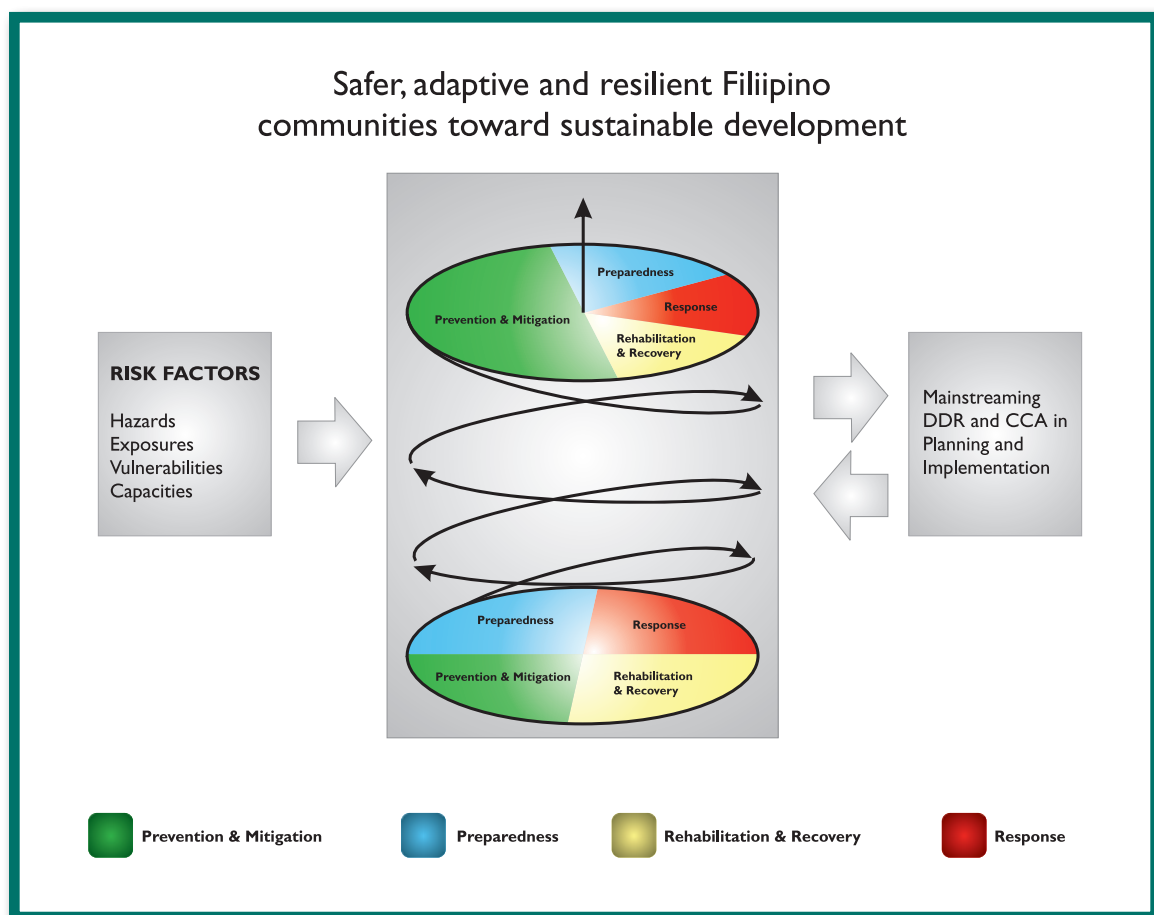
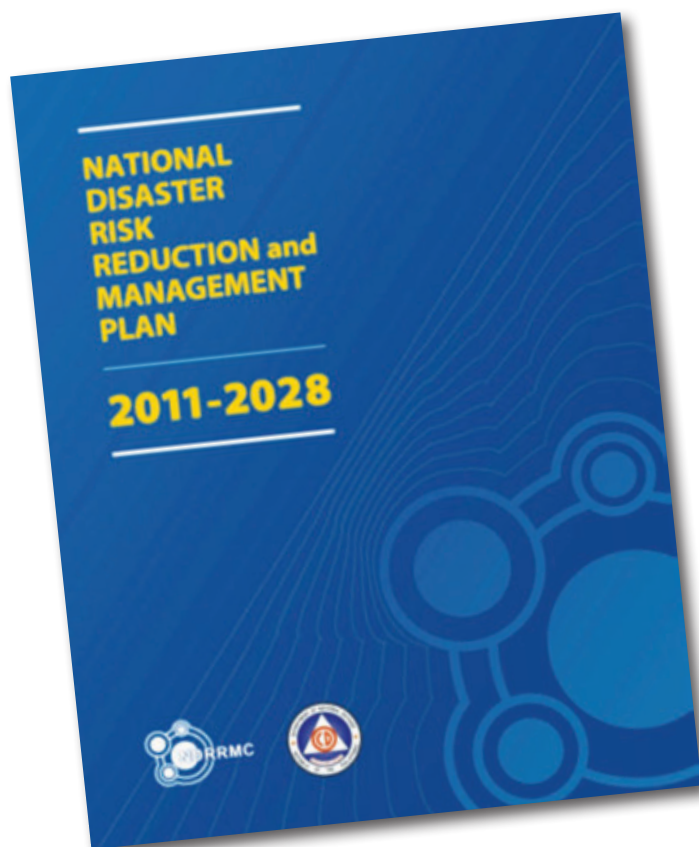


Figure 1.1 – NDRRM Framework



NDRRM Plan

The NDRRM Plan, which was approved on 7 February 2012 and launched on 10 October 2012, serves as the DRRM road map that includes building adaptive capacities of communities, increasing the resilience of vulnerable sectors, optimizing disaster mitigation opportunities, and promoting people's welfare and security towards gender-responsive and rights-based sustainable development.

The Plan outlines the programs and projects, timelines, lead and member-agencies for specific thematic areas, and resources needed. It highlights the importance of mainstreaming DRRM and climate change adaptation (CCA) into developmental processes such as policy formulation and socio-economic development planning.

The NDRRM Plan was formulated using the RA 10121 as the main guidepost, although it was also strongly influenced by the Philippines' Strategic National Action Plan for DRR (SNAP DRR 2009-2019) and international instruments such as the, Hyogo Framework for Action (HFA) and the ASEAN Agreement on Disaster Management and Emergency Response (AADMER).

The NDRRM's four long-term goals target four key priority areas, namely: Prevention and Mitigation, Preparedness, Response, and Rehabilitation and Recovery.

Key priority areas

Prevention and Mitigation

To strategically reduce the risks from hazards, the Council prioritizes early warning systems (EWS). Their design considers four basic elements: existing knowledge, monitoring, communication, and local response capacities. Prevention and mitigation also includes flood forecasting, monitoring, and multi-hazard mapping. The NDRRM's flagship projects on multi-hazard mapping had already been implemented.

The READY Project² in particular, which covered 28 provinces highly vulnerable to natural hazards, was completed and disseminated to local government units including areas affected by TY Yolanda.

² The READY project is a collaborative effort of the Government of the Republic of the Philippines, the United Nations Development Program (UNDP), and the Government of Australia Australian Aid (AusAID) which was formally launched on April 16, 2009. It involved hazard mapping and assessment for effective community-based DRRM.

Another concrete intervention is the Nationwide Operational Assessment of Hazards (Project NOAH) of the Department of Science and Technology (DOST). NOAH undertakes disaster science research and development through a multi-disciplinary approach. LGUs and the public can visit the website of NOAH and access the maps as a means of early warning and preparedness. In terms of multi-hazard mapping, the Mines and Geosciences Bureau (MGB) had already covered all municipalities and cities in the country in the scale of 1:50,000 for flood and rain-induced landslide hazards. Detailed 1:10,000 scale mapping of the same hazards nationwide is currently ongoing.

LiDAR Technology where high-accuracy and high-resolution digital elevation and surface maps are

generated was also used to aid a more accurate risk assessment for floods, landslides, and earthquake hazards. Moreover, earthquake-related hazards including tsunami and volcanic hazards have long been identified and disseminated by PHIVOLCS (Philippine Institute of Volcanology and Seismology).

Finally, prevention and mitigation includes mainstreaming DRRM in development planning. This is important in the physical framework planning at the province level, comprehensive land use plans (CLUPs) in select cities and municipalities, and in the infrastructure for the education and health sector. The Council provides inputs in CLUPs and helps enforce building and safety standards through engineering interventions.

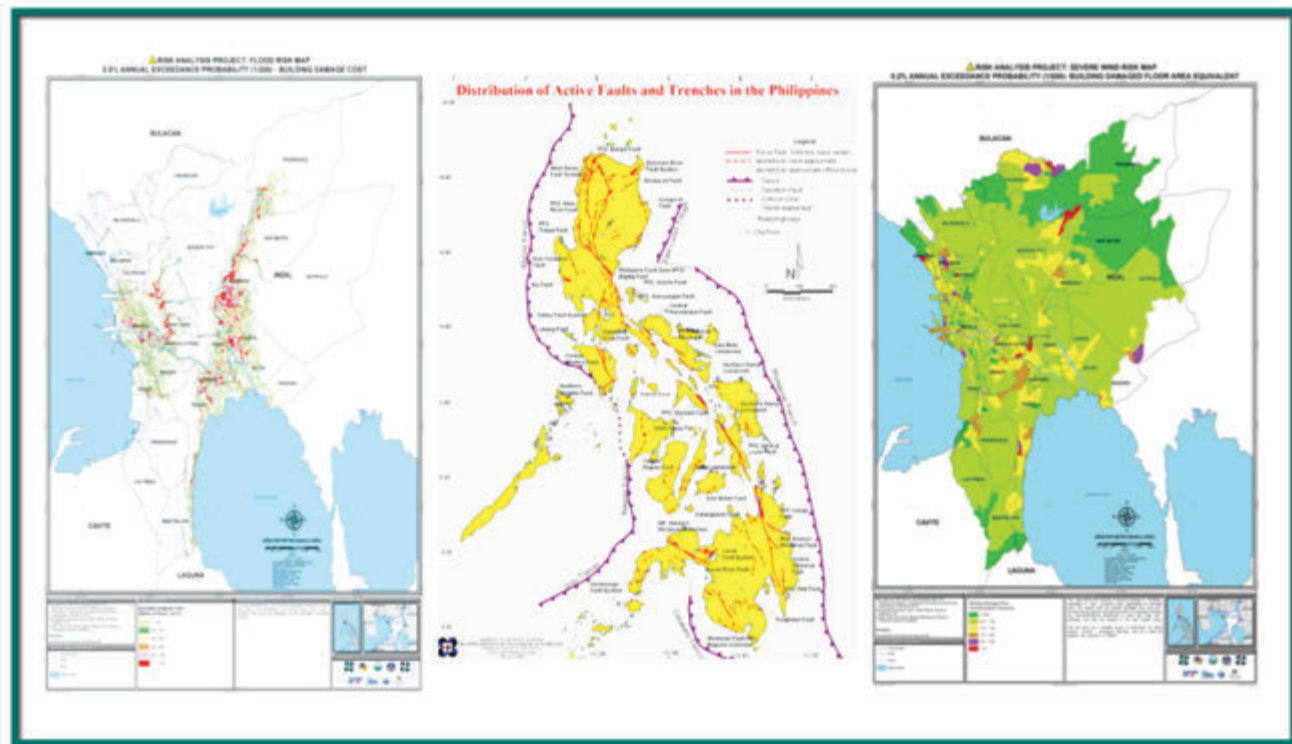


Figure 1.2 – Risk Maps

Preparedness

Preparedness includes contingency planning, training, and the setting up of policies and protocols.

The formulation and review of contingency plans have been continuing since the issuance of a National Contingency Planning Manual in 2007.

Agencies have also been pre-positioning equipment and supplies in preparation for anticipated events. The NDRRMC continuously upgrades its operations and coordination centers as it expands its capacity for organizing, training, and equipping responders.

The Council also facilitates, through the local DRRMCs, Community-Based Disaster Risk Reduction and Management (CBDRRM) trainings, recognizing the role and potentials of barangay leaders and community folks as “front-liners” in disasters. In CBDRRM trainings, the capacity of at-risk communities to actively engage in the identification, analysis, treatment, monitoring, and evaluation of disaster risks areas is enhanced.



Incident Command System (ICS) is another training program introduced to all member-agencies at the

national level and to DRRM officers including local chief executives. ICS as an on-scene disaster response and management mechanism under the Philippine Disaster Risk Reduction and Management System (PDRRMS), for which the NDRRMC provided implementation guidelines.³

NDRRMC also leads and coordinates the quarterly nationwide simultaneous earthquake drills.

The NDRRMC constantly provides guidance in the effective implementation of the NDRRMP especially at the local level, usually in coordination with other agencies. It facilitated two joint memorandum circulars (JMCs): one was the JMC No. 2013-1 for the Allocation and Utilization of the Local Disaster Risk Reduction and Management Fund (LDRRMF) signed on 25 March 2013. The circular serves as a guide to LGUs in the allocation and use of the fund and for transparency and accountability purposes. The other is JMC No. 2014-1: the implementing guidelines for the establishment of local DRRM offices (LDRRMOs) or barangay DRRM committees (BDRRMCs) in LGUs. Formulated in 2013 and signed on 4 April 2014, it also provides for the creation of plantilla positions for DRRM officers and staff positions in every province, city, and municipality.

Finally, the Gawad KALASAG (KALamidad Sakuna Labanan, SARiling Galing ang Kaligtasan) is the NDRRMC's recognition scheme for excellence in DRRM and humanitarian assistance. It promotes sustained commitment and support for the exceptional contributions of DRRM practitioners in strengthening adaptive capacities and community resilience. It also promotes the spirit of volunteerism during disaster response operations.

³ NDRRMC Memorandum Circular (MC) No. 4, 28 March 2014

Response

In the event of disasters, the NDRRMC immediately mobilizes search, rescue, and health services.

The Council provides temporary shelter, water, sanitation, hygiene, and financial assistance. It also makes sure that evacuation centers are efficiently managed to minimize disruption to the way of life of affected communities.

The uniformed services, namely the Armed Forces of the Philippines (AFP), Philippine Coast Guard (PCG), Philippine National Police (PNP), and Bureau of Fire Protection (BFP), play a substantial role in the mobilization of personnel. They conduct search, rescue, and retrieval operations during and in the aftermath of a disaster. Their transportation assets are also useful in bringing manpower, relief goods, and medicines by land, sea or air.



BaKasParangal, a form of recognition, is granted by the NDRRMC to groups or individuals for their outstanding display of valor and selflessness during a disaster.

It was launched on 11 September 2012 when 308 individuals and organizations were formally recognized by President Benigno S. Aquino III for their exemplary performance during the search and retrieval operations for the late Local Government Secretary Jesse Robredo.

Lastly, the “cluster approach” in disaster response had already been adopted since 2007 by the erstwhile NDCC, acknowledging the need for a harmonized, systematic, and coordinated action with national, local, and international players.




Rehabilitation and Recovery

Early recovery and rehabilitation efforts are undertaken to restore normalcy, and even “to build back better.” Reconstruction of damaged settlements is usually done unless resettlement is seen as a better option. Livelihood projects are provided while restoration and improvement of damaged facilities are being done.

The Post Disaster Needs Assessment (PDNA), a multi-sectoral and multi-disciplinary structured approach to assessment, is used as the main tool to account for the amount of damage and losses, provides for a recovery and rehabilitation framework,

and identifies appropriate projects for rehabilitation and recovery.

The PDNA training for OCD employees and selected Regional Disaster Risk Reduction and Management Committee (RDRRMC) X member-agencies was done after tropical storm (TS) Sendong (international name: Washi) hit Northern Mindanao on December 2011, with the help of the World Bank. The training included actual deployment. A similar exercise was done for typhoon Pablo (international name: Bopha) in Eastern Mindanao in 2012 and for the Zamboanga Crisis in September 2013. 

Year 2013: A Crescendo of Disasters

Year after year, the Philippines gets more than its fair share of disasters, both natural and human-induced. Thus, Filipinos are often characterized as “resilient” – they go through consecutive and sometimes even overlapping crises in any given year, trying to move on, hoping to get more lessons from the last.

But the year 2013 was particularly harsh, even for a country quite used to severe beating.

The Philippines typically gets 20 tropical cyclones a year, but for 2013 it was 25. TS Auring and tropical depression (TD) Bising came on January 2013 and affected 5,454 families or 16,801 individuals in at least five regions.



9 SEPTEMBER: Siege of Zamboanga City, a human-induced disaster

Troops from the Moro National Liberation Front (MNLF) arrived in Zamboanga City and tried to raise the Bangsamoro flag at the city hall on the morning



of 9 September. The military and police were able to hold the rebels at bay but at huge cost in human lives and damage to property and livelihood.

For the next three weeks, the nation's eyes were riveted on the events unfolding in Zamboanga City as the MNLF took almost 200 hostages, moving from one place to another and using the hostages as shields. The rebels also occupied several coastal villages, affecting more than 118,000 residents. Business ground to a halt.

When the military adventure was finally neutralized by 28 September, the human and physical costs were enormous. Two hundred forty-five people died (20 soldiers, five policemen, 12 civilians, 208 rebels) and 273 were injured (177 soldiers, 17 policemen, 79 civilians).

Damages amounted to P3.2 billion in infrastructure, social services, and in the productive (agriculture, tourism, culture, industry, trade, and service) sectors. Losses were at P2.9 billion, and the City needed P2.5 billion to recover.

PROVINCE	Agriculture				Infrastructure	GRAND TOTAL
	Crops	Fisheries	HVC	Corn		
Grand Total	3,172,229,008.20				130,320,949.20	3,302,549,957.40
	3,006,689,465.80	5,159,000.00	157,508,985.00	2,871,557.40		
Region I	3,415,130.00	-	-	-	-	3,415,130.00
Pangasinan	3,415,130.00					3,415,130.00
Region III	3,003,274,335.80	5,159,000.00	157,508,985.00	2,871,557.40	130,320,949.20	3,299,134,827.40
Aurora	88,102,091.00	5,159,000.00			1,100,000.00	94,361,091.00
Nueva Ecija	2,900,114,759.00		157,508,985.00	2,767,307.40	100,000,000.00	3,160,391,051.40
Tarlac	6,884,865.00					6,884,865.00
Zambales	8,172,620.80			104,250.00	29,220,949.20	37,497,820.00

11 OCTOBER: Typhoon Santi

TY Santi (international name: Nari), in 11 October caused flashfloods and mudslides, killing 15 persons and injuring 32.

TY Santi affected more than a million people, specifically, 1,273,150 individuals or 271,400 families from Regions I, II, III, IV-A, and V. It damaged 123,437 houses (21,053 totally; 102,384 partially). There were P3.3 billion-worth of damages to infrastructure and agriculture in Regions I and II.


15 OCTOBER: 7.2M Bohol Earthquake

Hardly had the country recovered from the pocket skirmish in Mindanao when a strong earthquake hit Bohol on 15 October, killing 220 and affecting 671,000 families or more than 3.2 million persons. Hundreds more were injured. It toppled centuries-old churches to the ground and damaged 78,229 houses (15,933 totally; 62,296 partially), 41 bridges, and countless roads in the Visayan region.

Seaports, airports, churches, buildings, schools, and hospitals were also damaged in the provinces of Bohol, Cebu, Iloilo, Negros Occidental, Negros Oriental, Siquijor, and Leyte in Regions VI and VII.

The quake, of tectonic origin with a depth of 33 km, caused landslides, making roadways impassable. Two weeks after, sinkholes manifested in Tagbilaran City in Bohol.

Damages reached P2.3 billion, with the provinces of Cebu and Bohol suffering the most.

Two months after the Zamboanga siege, and less than a month after Santi and the Bohol earthquake, and before millions of Filipinos could bounce back, the country would be visited by the strongest typhoon the modern world has ever seen. Her name is Yolanda. 





PART



In the Eye of the Storm

YOLANDA TIMELINE NOVEMBER 2013



1 Nov.

A low pressure area (LPA) is spotted over Caroline Islands, a small cluster of islands in the Western Pacific Ocean.

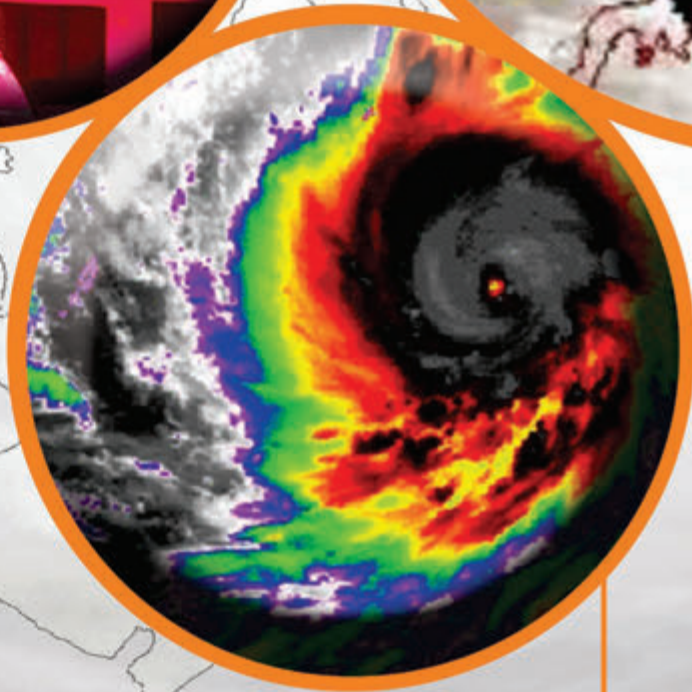


4 Nov.

The NDRRMOC raises its alert level to red.

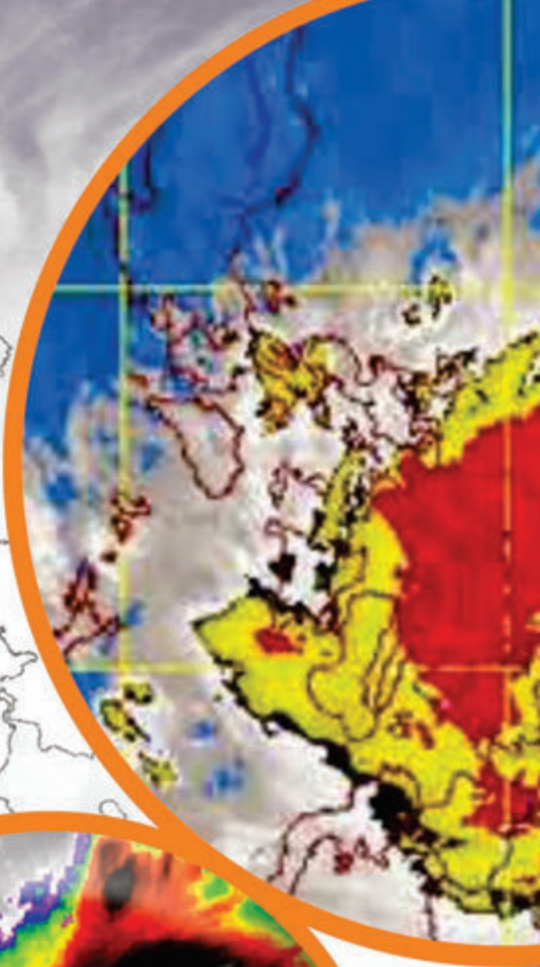
2 Nov.

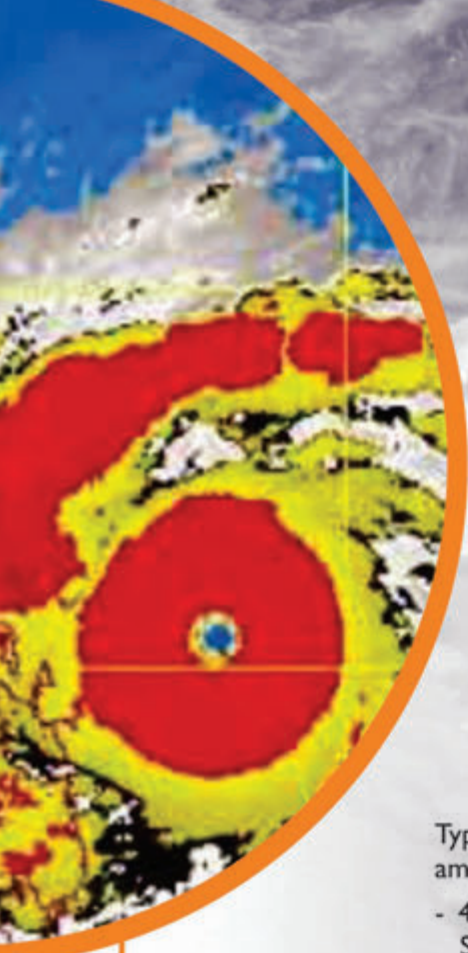
The LPA develops into a tropical depression which intensifies into a tropical storm and named Haiyan, its international code.



5 Nov.

PAGASA issues a weather advisory informing the public of the approaching storm.





8 Nov.

PAGASA issues auxiliary bulletin No. 5 at 1 a.m.

Typhoon Yolanda has an estimated rainfall amount of 10.0-30.0 and makes six landfalls:

- 4:40 a.m., first landfall, over Guiuan, Eastern Samar
- 7 a.m., second, over Tolosa, Leyte
- 9:40 a.m., third, over Daanbantayan, Cebu
- 10:40 a.m., fourth, over Bantayan Island, Cebu
- 12 noon, fifth, over Concepcion, Iloilo
- 8 p.m., sixth, over Busuanga, Palawan

6 Nov.

Haiyan is upgraded to a typhoon.

At 5 p.m., PAGASA warns public of strong typhoon and gives precautionary measures.

At 11 p.m., PAGASA releases severe weather bulletin (SWB) No. 1 even if the typhoon is not in the PAR. Haiyan heads towards the Visayas at 30 kph with maximum winds of 195 kph near the center, and gustiness of up to 230 kph. Public storm warning signal (PSWS) No. 1 is raised in several areas of Visayas and Mindanao.

The NDRRM Operations Center

disseminates SWB via short messaging system (SMS) and internet so that it reaches down to the municipal levels. The NDRRM Operations Center also directs their regional offices to undertake precautionary measures in their areas of responsibility (AOR) and initiate pre-emptive evacuation of families if situation warrants. The typhoon is given the name "Yolanda" as it enters PAR after midnight.

Yolanda further intensifies as it moves towards Visayas where it is expected to make landfall at 5 a.m. Due to the



PAGASA releases its final SWB and Yolanda leaves the PAR.

9 Nov.

strength and speed of Yolanda, PAGASA issues auxiliary bulletin No. 4A at 6 p.m.

NDRRM Operations Center advises the public that sea travel is risky over the seaboards of Northern Luzon and over the eastern seaboard of Central Luzon; alerts residents in low-lying and mountainous terrain under PSWS No. 4, 3, 2 and 1 against possible flashfloods and landslides. Moreover, those living in coastal areas under signal No. 4, 3, and 2 are alerted against storm surges which reach up to seven-meter high waves.

Key events

5 November. In anticipation of the coming storm Haiyan, the executive director of NDRRMC directed the chairpersons of regional DRRMCs of IV-A, IV-B, V, VI, VII, VIII, X, CARAGA, and NCR to plan and initiate all necessary actions, alerted all responder groups, and raised the alert status of RDRRM Operations Centers.

6 November. The Executive Secretary of the Philippines convened the NDRRMC member-agencies for an emergency meeting to discuss the preparations of each member.

- AFP was already on standby alert for possible deployment;
- BFP pre-positioned assets and alerted all provincial, city and municipal fire stations;
- DA pre-positioned buffer stocks of seedlings, rice, and corn;
- DENR reiterated flood and landslide risk hazard maps to LGUs;
- DepEd continuously monitored weather disturbance for possible cancellation of classes and readied all schools designated as evacuation sites;
- DOH activated Code Blue Alert and Code White for hospitals with standby response teams;
- DPWH alerted all DRRM teams of all DPWH districts along the forecasted typhoon path and pre-positioned heavy equipment and tools;
- DSWD already pre-positioned P195-million-worth of emergency relief resources consisting of standby funds; 83,203 family food packs; and other relief items;
- PCG directed all Coast Guard districts and all





major units to be on alert status and for possible deployment;

- PIA provided assistance in dissemination of advisories and provision of updates;
- PNP pre-positioned search and rescue (SAR) assets and prepared to provide security assistance in the communities;
- PRC alerted chapters likely to be affected by the typhoon; and
- DOTC held an emergency meeting with all its attached agencies and advised them to conduct necessary precautions/ contingencies and to issue the appropriate advisories

to transportation providers, passengers, and other stakeholders; all DOTC agencies were placed on Level 3 (full alert) status to mitigate the damages/ effects of typhoon Yolanda on transportation facilities and were reminded to secure their respective facilities (e.g. ensuring aircraft and vessels were properly secured at airports and ports) prior to arrival of Yolanda.

7 November. The NDRRMC chairperson and Secretary of Interior and Local Government proceeded to Tacloban City to monitor the preparations of the

region. Pre-emptive evacuation was also being conducted in Catbalogan, Samar; Salcedo, Guiuan, and Oras, all of Eastern Samar; Tacloban City and Tolosa, Leyte; Gigaquit, Surigao del Norte; and Gingoog City, Misamis Oriental. Classes were suspended in Regions IV-B, V, VI, VII, VIII, X, XI, and CARAGA; and domestic flights and sea trips were cancelled. The AFP troops, PNP, and BFP personnel in Eastern Visayas were on red alert.

In a special broadcast, President Benigno “Noynoy” Aquino III urged the people to follow the warnings issued by the weather bureau including the storm surge warning.



The Public Works Secretary issued instructions to all district engineers and regional directors to secure all public buildings by tightening the roof with dependable cables or ropes and anchor these to a permanent structure. He also directed to pre-position heavy equipment near landslide-prone areas and have equipment ready to be deployed.

8 November. Typhoon Yolanda made its first landfall over Guiuan, Eastern Samar.

By evening, a number of primary roads in Region VII had become only one-lane passable. It was only after four days that primary and secondary roads would become passable to the public. There were 1,221 DPWH manpower and 520 heavy equipment deployed in the response and relief operations.

9 November. TY Yolanda left the PAR.

The Social Welfare Secretary and

NDRRMC Executive Director brought additional relief goods to Tacloban City and established emergency facility with the AFP Joint Response Team.

The President met with key cabinet secretaries and presided over a meeting held at Camp Aguinaldo, Quezon City; Task Force Yolanda is created.

10 November. Yolanda caused such devastation and deaths that a number of meetings were convened to get a full picture of the catastrophe. Meetings were held morning, afternoon, and night of 10 November and a press conference was conducted to update the public on Yolanda and what government was doing on the ground.

The turmoil on the ground during and after the typhoon was compounded with loss of electricity and communications. Globe Telecom was the first to

restore its signal in some parts of the region. Meanwhile, the province of Antique and a number of municipalities were declared under state of calamity.

11 November. Power was restored in a number municipalities and cities of Regions IV-B and VI while 78 percent of Smart and Sun cellular signals in the Visayas were restored which greatly allayed the trepidation of relatives of typhoon victims.

The President declared a State of National Calamity through Presidential Proclamation No. 682.

A semblance of normalcy resumed as businesses came to life when all airports resumed commercial operations. Tacloban Airport was opened only to military, medevac, and commercial flight that used only turboprop or of lower category aircraft.

12 November. As donations poured in from local sources and from abroad, the NDRRMC activated the One-Stop-Shop (OSS) that will handle and facilitate the acceptance of donations.

13 November. The Guiuan airstrip and Ormoc airport in Region VIII were opened to C130s to land after these had been assessed by the Civil Aviation Authority of the Philippines (CAAP) and by the military to be capable of receiving aircraft.

14 November. The typhoon had totally wiped out or incapacitated all sources of power in hit areas that the Department of Energy (DOE) had to deploy at least 164 generators or temporary sources of energy.

One of the problems that faced government officials was in handling the bulk of relief goods coming in and the everyday preparation of basic needs of typhoon victims. Under memorandum order (MO) No. 60, the Finance Secretary was designated as the overall coordinator in the preparation of all relief packs/goods prior

to distribution with the TESDA director general as his co-coordinator. Under the same MO, the Secretary of the DOTC became coordinator for all transportation and other logistical needs.

15 November. Although donations continued to come in, there were supplies that needed to be procured and the NDRRMC-TMG and COA met to take up emergency procurement procedures.

16-17 November. Individuals and families received food and rice packs, water, and energy biscuits;

as 87 medical teams (43 foreign, 44 local) were deployed in Regions IV-B, VI, VII, and VIII.

On **18 November.** Eight task forces were activated to accelerate the different operations in Region VIII: A Combined Joint Task Force (CJTF) Yolanda was created and Multi-National Coordination Center (MNCC) was established on 20 November 2013.

The following clusters were created to handle the recovery and rehabilitation planning on 22 November 2013:

Lead Agency	Cluster	Lead Agency	Cluster
DSWD	Food and Water Distribution	DSWD	Food and Water (relief)
BFP MMDA	Cadaver Collection Debris Clearing and Cleaning	DPWH	Shelter and Reconstruction (including water utilities)
PNP DOH AFP	Law and Order Health Task Force Yolanda for HADR	DTI, DA, TESDA, and DOLE	Livelihood (agriculture, employment, and commerce)
DOE Leyte vice governor and city administrator, Tacloban City	Reconstruction Normalization	DOH and DepEd	Social Services (health and education)
		DILG	Peace and Order



Tales of Despair, Hope, Ruin and Resilience

Lessons from Local Areas

If the debris left by Yolanda could talk, they would most probably have described how they were flung around like deadly missiles by the horrific winds, flattening houses and people in their path. If they had the chance to talk among themselves they would probably have also narrated how they were blamed for blocking roads and making emergency response even more challenging.

But they would have also described how the people of Leyte and Eastern Samar used what they can salvage from the detritus, the flotsam and jetsam to start rebuilding their homes even before the typhoon had left.

If the debris could talk, they probably would have wept at the unimaginable destruction. At the same time they would have cheered the enduring spirit of a people who refused to be beaten by a super typhoon. – From the musings of a Yolanda survivor

Various assessment reports to determine the impact of TY Yolanda and draw up early recovery and rebuilding strategies were extracted from many local areas and communities in Region VIII. The region is a rich mother lode of experiences and anecdotes that, when stitched together, can provide critical information and insights that can be fed into policy reformulation and programming.

These local communities not only told of how the typhoon literally destroyed people's lives but also

how people demonstrated resilience in the face of a horrific natural event. From the devastation of these local communities emerged important lessons that should be diligently mined.

This chapter, as part of the whole narrative of the Y It Happened, also underlines and explores four thematic areas of disaster risk reduction and management: Prevention and Mitigation; Preparedness; Response; and, Rehabilitation and Recovery as articulated in Republic Act 10121 or the Philippine Disaster Risk Reduction and Management Act of 2010.

Prevention and Mitigation

LGU initiatives are crucial in lessening disaster risks

On 12 August 2013, the Department of the Interior and Local Government (DILG) released a memorandum circular directing all local governments to “provide general guidelines on integrating disaster risk reduction and management and climate change adaptation (DRRM/ CCA) in the local planning process.”⁴

The memorandum circular (MC) added impetus to the implementation of the National Disaster Risk Reduction and Management Plan (NDRRMP) especially at the local level. The NDRRMP stipulates the development and implementation of local plans that includes, among others, hazard mapping

⁴ Pursuant to Section 2(g) of Republic Act No. 10121, or the Philippine Disaster Risk Reduction and Management Act of 2010, provides that, “It is the policy of the State to mainstream disaster risk reduction and climate change in development processes such as policy formulation, socio-economic development planning, budgeting, and governance, particularly in the areas of environment, water, energy, health, education, poverty reduction, land-use and urban planning, and public infrastructure and housing, among others.”

and risk assessment. The plans should also be comprehensive enough to cover all aspects of DRRM such as:

- setting up of monitoring equipment and early warning systems;
- building multi-stakeholder platforms;
- creating DRRM offices;
- putting in place provisions for search and rescue and other response mechanisms;
- outlining steps for recovery and rehabilitation;
- appointing personnel; and
- allocating resources.

The effective implementation of these plans aims to reduce vulnerabilities and increase local capacities.

Since the enactment of RA 10121 in 2010, provinces and municipalities all over the country have come up with their respective DRRM and CCA plans in various stages of compliance and completion.

However, some plans were put together for compliance purposes only and were therefore lacking in substance. Others reflected ground realities such as comprehensive risk analysis that includes the mapping of potential hazards and assessing citizens' capacities and vulnerabilities. Such plans prepared some communities sufficiently for an emergency situation like the one created by Yolanda.

The Municipal Disaster Risk Reduction and Management Office (MDRRMO) of Tibiao in the northern part of Antique province was in the process of finalizing and refining its LDRRM plan when Yolanda struck. But the office was already functional and the plan, even in its rough form, proved valuable.⁵

⁵ It was organized on 24 March 2013 through Executive Order No. 4, Series of 2011, along with the organization of the MDRRMC. Ritchie G. Jermia, tourism officer of Tibiao, was designated LDRRM officer.

Long before Yolanda struck, the MDRRMO had already been conducting disaster risk reduction and management activities like hazard mapping, risk assessment, and DRR-related trainings at the municipal and barangay levels using the LDRRM plan as basis. When the alert for TY Yolanda reached the municipality, the MDRRMO sent out notices to the barangay DRRM offices on proper evacuation procedures. The town was confident it could face the typhoon.

The accidental hero

Yolanda reached Antique around noon, cutting wide swatches of destruction in its path, but by 2:30 p.m., the winds began to subside and was completely gone by 3 p.m.

Ritchie Jermia immediately began deploying the town's SAR team together with police and health personnel. They had to clear the roads of debris within 24 hours to facilitate the passage of relief convoys.

When the team reached the highway intersection, the sun came out against a bright blue sky. But Jermia felt uneasy and ordered his team to go back and seek cover. The police chief was bewildered and wanted to proceed with the clearing operations but Jermia knew something was amiss. He asked the members of the team to wait for 10 to 20 minutes before venturing out again. But before the 10-minute wait was up, the winds came howling, even stronger than before. They were in the eye of the storm. Jermia's years of experience, training, and acquired knowledge paid off.

A fourth-class agricultural municipality, Tibiao is one of the eco-adventure sites in Western Visayas taking pride in its crystalline river, seven-tiered Bugtong-bato waterfalls, and 100-hectare EBJ Rain Forest. EBJ stands for Evelio B. Javier, former Antique governor assassinated during the waning years of the Marcos regime for pursuing governance reforms.

But Yolanda was unforgiving. Tibiao's lush forests were decimated and what was left were a few patches of green. The whole province was directly in the typhoon's path, leaving 13 persons dead, 15 missing, and P1.18 billion in agricultural losses and P83 million in infrastructure damage.

Yet, a mere three days after Yolanda left, residents were already clearing the debris field and rebuilding their houses. In less than a week, those in the evacuation centers were back in their homes and Tibiao was on its way to recovery.

Inter-local cooperation for DRR

Libacao, a flood-prone municipality in the province of Aklan, installed a flood sensor and rain gauge as part of its early warning system monitored 24 hours by volunteers working in shifts. Downstream is the municipality of Banga which benefits from flood information relayed in advance by Libacao whenever the Aklan River swells even though it has its own water level sensor and rain gauge.

Inter-municipal cooperation in DRRM is also manifest in northern Cebu where the towns of Daanbantayan, Medellin, and Sta. Fe, and the city of Bogo have been jointly building each other's DRRM capabilities by establishing their

respective MDRRM councils, organizing trainings as well as sharing resources and strategies.



To bring the concept to smaller governance units and closer to the ground, the municipality of Bantayan initiated multi-area cooperation at the *barangay* (village) level. The MDRMC of Bantayan passed an ordinance that organized its 25 barangays into geographic clusters⁶: Urban/Poblacion; Coastal; Rural Park; Environmental Site; and, Island. The clusters have their respective crisis committees, officers, and members. They conduct their vulnerability and risk assessment per cluster including the DRRM orientation of newly-elected barangay officials, as instructed by the PDRRMO. After Yolanda, the MDRRMO shifted its focus to recovery and rehabilitation.

⁶ This is not to be confused with the cluster approach developed by the UN to facilitate humanitarian coordination.

Of being Bogo

Even before Yolanda, Bogo City's DRRM office in Northern Cebu had been implementing the Information Management in Preparation for Disasters (I.M. PrepareD) project, a family-focused online database of hazards including drought, earthquake, extreme heat, floods, home fires, landslides, typhoons, thunderstorms and lightning, tornadoes, and tsunamis. The database includes multi-hazard maps, weather forecasts, and access points for potential responders.

It also provides action guides before, during, and after the occurrence of a disaster, including a "Family Communication Plan" that provides advice on various ways to communicate with family members in different disaster situations. Finally, it gives instructions on preparing a "disaster kit" which every family must have. These guidelines are posted in the Bogo website and can readily be accessed by anyone. Apart from this, a team of the CDRRMO goes house-to-house regularly to teach families the importance of DRRM.

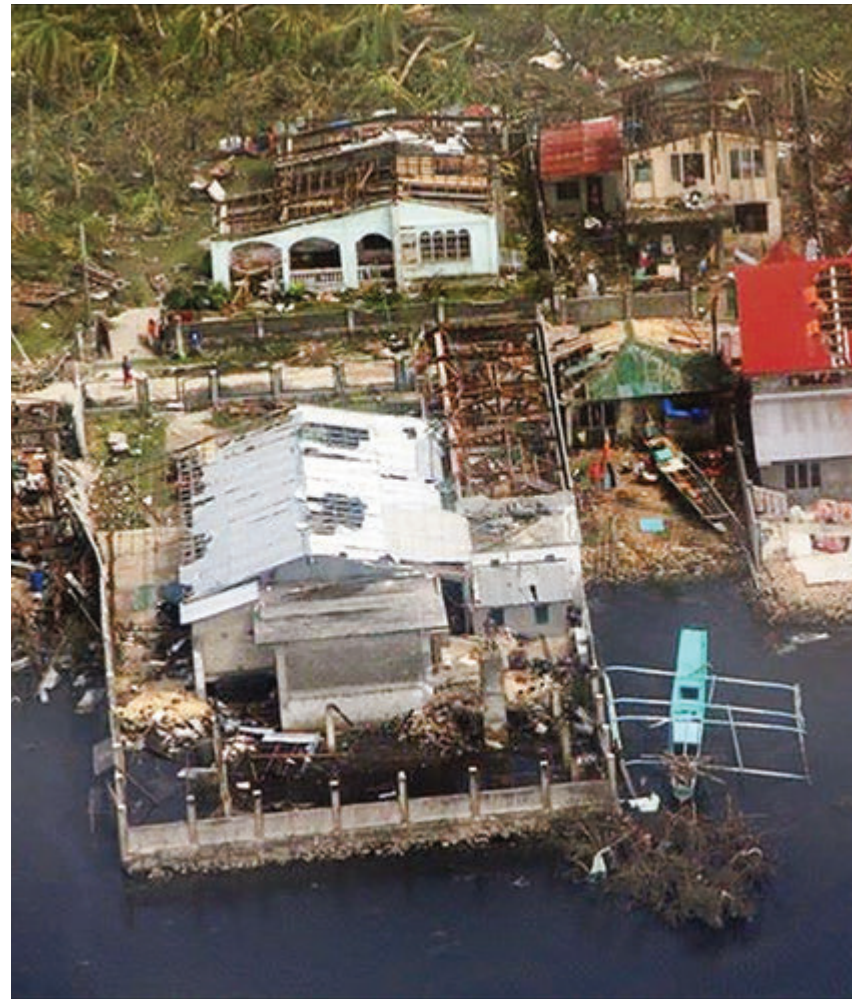
Eastern Samar's different setup

As the Philippines' "eastern gateway" and often the first province on which typhoons make landfall, Eastern Samar had been battered between 1948 and 2009 by 25 tropical depressions, 51 tropical storms, and 58 typhoons. It also recorded the highest rainfall in the country. From 2000 to 2011, there were five events of widespread flooding compounded by other hazards, including earthquake-induced landslides, tsunamis, ground shaking, liquefaction, and storm surges.

One of Eastern Samar's towns, Guiuan, is no stranger to hazards, a situation which early on had prompted local officials to cobble together a DRRM plan that

included emergency provisions and contingencies. The municipality has a DRRM handbook identifying local hazards and highlighting the salient features of the DRRM law. Surprisingly, however, Guiuan's DRRM plan makes no mention of storm surge.

By contrast, the DRRM plan of one of Guiuan's barangays, Victory Island, identified storm surge as a hazard. In fact, the BDRRM plan described it as the third biggest hazard with a probability of four in five hitting the island (five most probable), and with an impact of three out of five (with five having the heaviest impact).



Storm Surge account after 29 years, when will we learn?

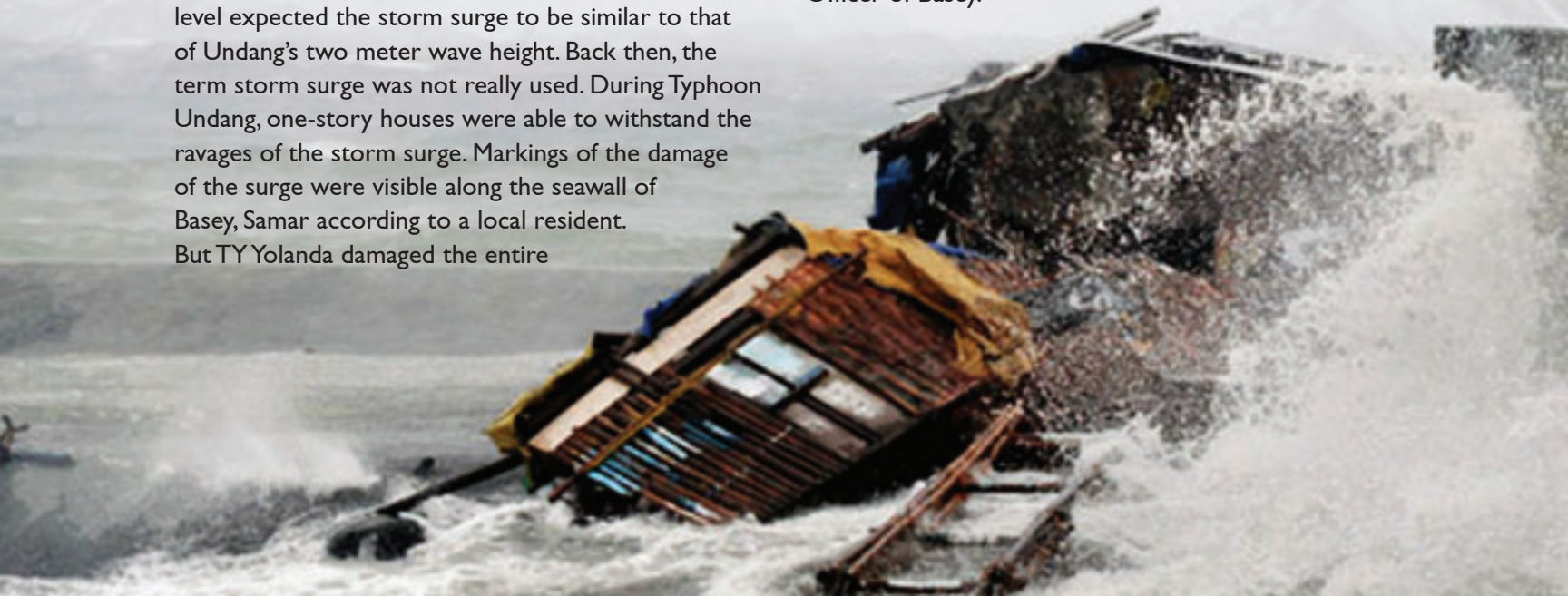
Storm surge is the sudden increase in sea water level associated with the passage of a tropical storm or typhoon. This is due to the push of strong winds on the water surface (wind setup), the piling up of the big waves (wave set up), pressure setup (storm central pressure) and astronomical tide moving towards the shore. This will happen at landfall or passage of a tropical storm or typhoon in a locality. This might be ahead, during or following the coming of a strong or high winds of the storm. — DOST-PAGASA

In 5 November 1984, TY Undang ravaged the Visayas Region of the Philippines, taking almost the same path as TY Yolanda of 2013. TY Undang's strength reached 230 kph, costing 895 lives and PhP. 1.9 Billion worth of damages. It entered the country through the municipality of Llorente, Eastern Samar then through the municipality of Talalora Samar. It slightly weakened but regained its strength as it crossed the Visayan sea, heading full-force to the islands of Carles in Iloilo. It struck the Panay Island the most.

Exactly 29 years later, Yolanda came with its 215 kph wind strength and gustiness of 250 kph. It took on the Samar and Leyte islands and killed thousands with its 5 to 7 meters height of storm surge. In Basey, Samar, those who were aware of the predicted rise in sea level expected the storm surge to be similar to that of Undang's two meter wave height. Back then, the term storm surge was not really used. During Typhoon Undang, one-story houses were able to withstand the ravages of the storm surge. Markings of the damage of the surge were visible along the seawall of Basey, Samar according to a local resident. But TY Yolanda damaged the entire

seawall. According to the stride team of PAGASA the recorded height of the storm surge in the province of Samar specifically in the two coastal barangays of Basey reaches up to 5.39 to 5.53 meters. The surge barreled everything on its path, it destroyed even the concrete houses and two-story buildings near the coastline. Stories from the locals said that before the big waves came in, the water level receded drastically at a very low level for about 15 to 30 minutes. It made disturbing sounds like that of a boiling water. They saw three big waves approaching the Jinamok Island, located just across the municipality. The blackish water rushed towards the business district of the town (Barangay Babay), taking 181 lives in Basey.

A few months before the onslaught of Typhoon Yolanda, the local officials of Basey were already aware of the term "Storm Surge" through the trainings and seminars they took for the development of their BDPs. They admitted that they were not able to imagine the severity of the impact. They prepared according to how they used to prepare from the previous storms. They may have prepared most of their limited resources with limited time, but it was not enough. "That was really the greatest mistake. We failed to expect the unexpected," said the LDRRM Officer of Basey.



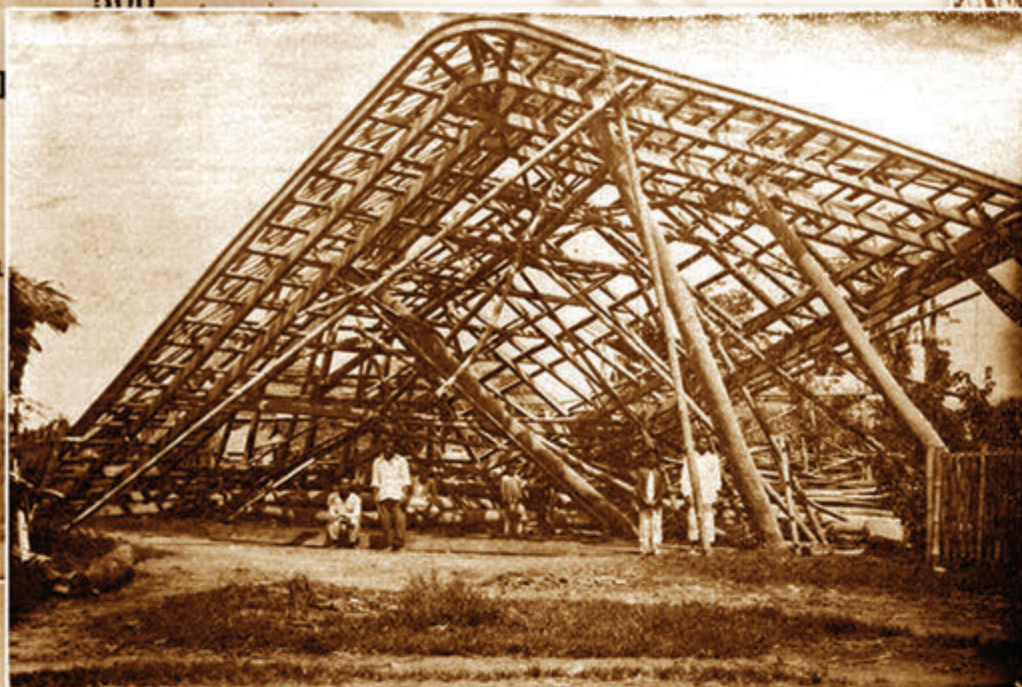
NÚMERO DE VÍCTIMAS DE LA OLA (1)

ISLA DE SÁMAR (2)

Población	Muertos
Quinapundan	12
Hernani.	166
Salcedo.	44
Mercedes	5
Guiuan	94
Balangiga	27
Vasey	500

ISLA DE I

Tacloban
V. S. Joaquín.
En el resto de la Provincia
<i>Total</i>





A book by P. Jose Algue, S.J.
of the Observatorio de Manila
entitled
*El Baguio de Samar y Leyte, de Octubre
1897* captures the experience of Leyte
and Samar. Approximately 1,299 died
in Samar and Leyte.

Human and financial resources in local DRRM

The Guiuan DRRM officer whom the mayor fondly calls *manong* (uncle or older brother), is well-regarded for his efficiency. Felipe Padual, however, is also secretary to the mayor, a member of the Bids and Awards Committee, and of the Mine Monitoring Team. Such multi-tasking would prove burdensome on *manong* to the detriment sometimes of DRRM which needs full time attention.

The same situation is faced by the DRRM officer of the municipality of Salcedo, who is also the Municipal Environment and Natural Resources officer (MENRO) and who has been with the LGU for more than 20 years.

The municipality of Coron in Palawan province has not established its MDRRM office and the municipal administrator also serves as DRRM officer. The “Bantay Coron Program” which is a coastal and forest environment protection initiative takes up the slack in disaster management mainly addressed through the Special Operations Group (SOG). The SOG is composed of 76 trained responders who also work with the Philippine Coast Guard Auxiliary. They were the ones who responded when Yolanda struck. The BDRRM Committees of the town were not functional and disaster response was carried out by *barangay tanod* (village watchmen).

On the other hand, Ritchie G. Jermia of Tibiao, Antique, has been holding the position of DRRMO for eight years and has acquired the necessary knowledge, skills, and experience along the way. He believes that MDRRMO officers should be

focused on DRRM, and should “not be replaced with every administration unless they are not functioning.” In other LGUs, the post is often co-terminous with the local chief executive, thus, creating continuity and sustainability problems and also a waste of resources used in training the officer.

The Tibiao MDRRMO personnel are all volunteers trained in DRR, response, and rescue techniques by the Philippine Red Cross (PRC) way back in 2008 lessening the need for close supervision during actual response. The office also has a fully-equipped command center staffed 24/7 by personnel who can be quickly deployed for damage assessment, road clearing, and search and rescue.

While the local chief executive serves as the chairman of the MDRRMC (composed of government agencies at the municipal level), the MDRRMO is primarily tasked with implementing the provisions of the Philippine Disaster Risk Reduction and Management law.

It is a full-time job that requires not only expertise but dedication since DRR is not solely focused on emergency response and rehabilitation. Equally important are the fundamental pillars of prevention and mitigation as well as preparedness that are processes crucial to the implementation of the law and the operationalization of the NDRRM plan. Typhoon Yolanda not only proved this truism but also highlighted the urgency with which LGUs need to establish dedicated DRRM offices and appoint a full-time officer or else suffer the consequence of complacency.

Local DRRM fund is important

On 25 March 2013 a joint memorandum circular (JMC) was sent to local governments guiding them on the “allocation and utilization of the local disaster risk reduction and management fund (LDRRMF).” As stipulated in the new law, at least five percent of the estimated revenue from regular sources should be allocated to the LDRRMF: 30 percent to be set aside for the quick response fund (QRF) and 70 percent for disaster prevention and mitigation, preparedness, response, rehabilitation and recovery.

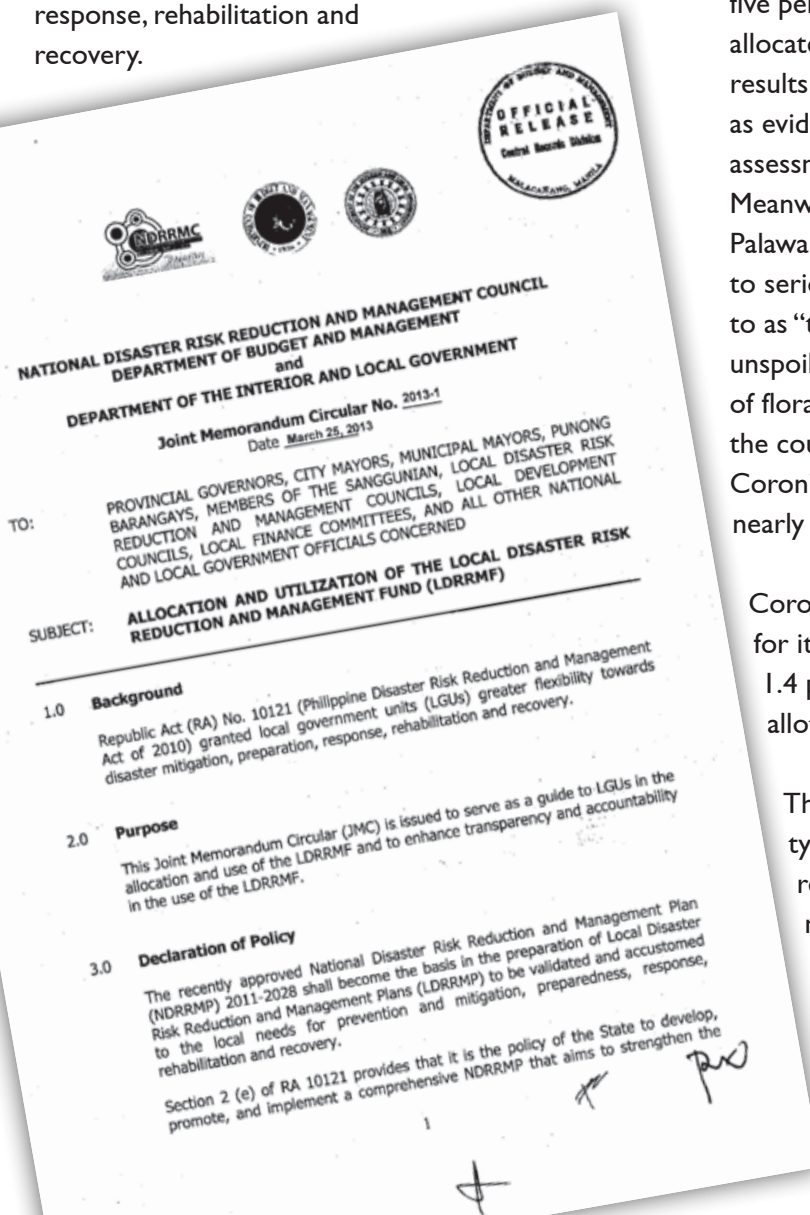
The circular, however, did not come out in time to guide local governments for the 2013 budget which, as customarily practiced, had already been finalized and approved in 2012. Hence many local governments had not yet fully integrated DRRM into their budgeting culture.

Municipalities that were hit by Yolanda showed varying levels of compliance:

Most of the municipalities covered by the study mainly kept within the range of the mandated five percent allocation. Tibiao, however, allocated more than eight percent and the results were, not surprisingly, quite impressive as evidenced by the findings of post-Yolanda assessments discussed earlier in this chapter. Meanwhile, Coron, a first-class municipality in Palawan, provides a telling example of the need to seriously invest in DRRM. Palawan, referred to as “the last frontier” because of its vast and unspoiled environment and diverse collection of flora and fauna, is a top tourism draw in the country with Coron at the forefront. But Coron’s thriving local tourism industry was nearly wiped out by Yolanda.

Coron allocated around P1.446 million for its 2013 LDRRM Fund, which was just 1.4 percent of its 2013 internal revenue allotment (IRA) of about P103.580 million.

The LDRRMF was still intact when the typhoon struck and was used as a quick response fund. However, what this meant was that none was allocated for prevention and mitigation measures that could have lessened the impact of Yolanda.



On the whole, fund allocation is always a strong indication of LGU commitment to disaster risk reduction and management as it reflects the priorities of a locality although it has yet to be fully embraced across the board. The challenge has always been the implementation of the law that mandates the allocation of at least five percent of the local budget to DRRM.

The NDRRMC, through the OCD as its secretariat, is strategically positioned to ensure this but needs to beef up its capacity to monitor compliance.

As had been pointed out in a post-Yolanda “reflection workshop” by different government agencies, the NDRRMC-OCD also needs to pro-actively identify funding gaps and engage the Commission on Audit (COA) to ensure fund accountability.

Another observation put forward is that the Council must make sure that local governments are aware that investing in DRRM is no longer simply an option but a priority given the painful lessons of Yolanda.

Municipality	Internal Revenue Allocation (IRA) (in pesos)	Local DRRM Fund (LDRRMF) (in pesos)	% of LDRRMF to IRA
Antique			
Culasi	75,593,598	4,164,497.16	5.66%
Tibiao	55,693,236	4,773,338.77	8.57%
Palawan			
Busuanga	70,521,630	3,736,109.10	5.30%
Coron	103,580,104	1,446,017.55	1.40%
Samar			
Basey	122,571,321	5,601,481.00	4.57%
Marabut	49,752,835	2,267,475.85	4.56%

Table 2.1 – Percentage of Local DRRMF to IRA

Risk financing

Recommendations gleaned from the different field assessments pointed to the need for LGUs to “go beyond the basic allocation of core budget” for DRRM as it requires more strategic investment by way of “risk transfer” commonly known as insurance.

The Philippine Crop Insurance Corporation (PCIC) under the Department of Agriculture (DA) provides insurance protection to the country’s agricultural producers against the loss of crop or non-crop assets due to natural calamities. It offers various insurance coverage packages for rice, corn, livestock, non-crop agricultural assets and fisheries, life and livelihood.

Through this program, 826 farmers and fisherfolk in Bantayan, Cebu received assistance and were immediately able to restore their livelihood. More than 3,000 farmers and fisherfolk, after realizing its crucial importance, have since availed of the program with the support of national and local government agencies and nongovernment organizations (NGO). The same trend was observed in Daanbantayan and Bogu City and northern Cebu.

Risk insurance is one area in DRRM that has yet to be fully developed and explored since few localities avail of it despite the opportunities available. Disaster experts say risk insurance should be promoted aggressively, especially in a country like the Philippines which is regularly visited by various forms of natural hazards each year.



Early warnings should be easily understood

Storm surge

Did they get the warning messages on time? If they did, were the messages understood and acted upon?

Yolanda had barely left Eastern Visayas when these questions began gaining traction not only in the news media but among government officials and disaster risk practitioners as well given the horrendous number of casualties attributed to a phenomenon called storm surge.

In the province of Leyte, Tacloban City alone accounted for about 2,678 of the total number of fatalities recorded in the entire region with many reported to have been killed by the storm surge.



Although the typhoon made its first landfall in the town of Guiuan in Eastern Samar, and the second in Tolosa, Leyte, the city of Tacloban bore the brunt of the horrific winds and devastating storm surge.

Facing the Pacific Ocean, Leyte has a rich history evident in such events as the holding of the first Catholic mass in the island of Limasawa and the landing of American forces in World War II in the town of Palo. The Philippines' longest bridge, San Juanico, connects Leyte with the island of Samar.

A Yolanda timeline prepared by the NDRRMC-OCD shows that the typhoon, then known by its international name Haiyan, was already being tracked one week before it entered the PAR. Weather advisories from the Philippine Atmospheric, Geophysical and Astronomical Services Agency (PAGASA) and NDRRMC were being regularly relayed to the regional OCD in Palo, Leyte. These were then disseminated to the provincial and municipal DRRM offices which in turn informed the public through various communications media including megaphones and loud speakers mounted on vehicles. Forecasts and warnings were also broadcast regularly on radio and television.

It was obvious, however, that the public and many local governments, could not imagine Yolanda's magnitude and proportions. Although they had been warned about the impending arrival of a super typhoon, many were not alarmed because they had experienced, and lived through, seriously strong and destructive weather events before. They said they were also warned about a possible storm surge but they did not know what it meant, let alone understood its deadly potential. Some emergency warning officers, in fact, avoided using the term storm surge as they themselves were hard put explaining it clearly.



Rafael Vincent Mooney, the former MDRRM officer of Palo, had an interesting, and eventually tragic, story to tell. He said that while he was discussing the idea of a storm surge during a DRRM orientation workshop in 2013, an old man in the audience cut him off, saying that all his life he had never heard of such a thing.

He never found out what happened to the old man or the other people in the workshop. The storm surge whipped up by the winds of Yolanda wiped out villages in Palo.

The indigenous and the modern

Iloilo is a first-class province in Western Visayas with 42 municipalities and two cities, Passi and Iloilo City. Iloilo was the last Spanish colonial capital of the Philippines when Manila fell under American colonial rule.

Situated in the northeastern part of Iloilo are the municipalities of Concepcion and Estancia. Fishing is the primary source of living and Estancia has in fact

earned the moniker “Alaska of the Philippines,” being a major commercial hub for the fishing industry, which also includes canning among others.

Yolanda made her fifth landfall in Concepcion, hitting the town with 215 kph maximum sustained winds with gusts of 250 kph. One hundred seventy nine died in the province of Iloilo, 94 bodies were recovered in Estancia, 24 of whom were locals while the rest were mostly fishermen from neighboring islands. The 19 fatalities in Concepcion, on the other hand, succumbed to hypothermia, illnesses, and severe injuries from flying or falling debris.

Iloilo’s fisheries sector suffered heavily. More than 80 percent of Concepcion’s fish sanctuaries and coral reefs were destroyed. After the typhoon, the mayor enlisted the help of the University of the Philippines (UP)-Visayas for the rehabilitation of the town’s coral habitat.

In Estancia, the power barge of the NAPOCOR ripped its moorings and slammed onto shore destroying a house and instantly killing its occupants. It also caused

a massive oil spill that contaminated other coastal barangays in Estancia and five hectares of mangrove forests in Batad. Residents had to be evacuated.

Both municipalities monitored the approaching typhoon a week before it hit land, mainly through PAGASA's weather stations in Jaro and Dumangas in Iloilo as well as from nearby provinces. Officials had sufficient time to inform the public, with each municipality using its own indigenous early warning system.

In Estancia, DRRMO staff used metal pipes to warn people and issued advisories and typhoon updates through the local radio station. In Concepcion, firetruck sirens were used to alert the people of impending danger, coupled with public announcements through *rekurida* (town crier system). Two-way radios were also used by barangay officials and watchmen.

Similar early warning methods were employed in Tibiao, which combined bells, sirens, and public address systems. Leyte additionally used the *bandillo* or the ringing of church bells, to alert the people.

Given that Guiuan in Eastern Samar has one of PAGASA's 20 field stations, it had more sophisticated equipment to rely on. It also has one of five conventional surveillance weather radars and one of the three Doppler radars in the country developed by the Japan Radio Company.

By contrast, Palawan province is still struggling to develop its early warning communications especially in isolated island barangays where indigenous people have no access to cellular phone technology. Warnings and other emergency communications had to be delivered by foot.

On the whole, the combination of these methods proved useful in alerting and preparing communities well in advance. While no one has anticipated the actual severity of the typhoon, the people in the affected areas had reasonably been alerted and had therefore achieved a certain level of preparedness, without which casualties and losses could have been higher.





Preparedness

Taking It from the Ants: Preparedness Means Hoping for the Best but Bracing for the Worst

Stockpiling food

“We should have secured our rice on the second floor,” said a municipal officer in Tanauan, Leyte after surveying the huge stockpile, now a useless mass of waterlogged cereal, prepositioned for possible relief operations.

Seawater and rains also damaged rice stockpiles in Tacloban City and Tolosa. But in Palo, response teams were a little better off as the police were able to secure the warehouse where rice and other goods have been stockpiled. Even then, the relief packets were not enough to feed all those who were affected by the typhoon.

Residents of Barangay San Roque in Tolosa, however, had to make do with whatever food

they can salvage. They sun-dried water-logged rice which they then cooked into porridge for sharing in the neighborhood through community feeding. The people of Tanauan did the same “even if the rice was yellowish...we had to eat it to survive.”

Noting that people desperate for food could become unruly, Corazon dela Cruz, a barangay captain, cut strips of paper she found in the dump and improvised food tickets. Food distribution went on smoothly.

Evidently, the kind of preparations to which people have been accustomed to in a disaster environment are no longer sufficient. But their inventiveness and initiative considerably helped them in adapting to adversity. This underlines the fact that the increasing intensity and unpredictability of disasters require more sophisticated systems for ensuring basic necessities for survival, chiefly food and water.

Pre-positioning equipment and personnel

Four days before Yolanda, the weather was fine over the towns of Basey and Marabut in the province of Samar and people were quite relaxed. Two days before the typhoon hit, the Marabut MDRRM Council convened only to realize that the DRRM office was not fully equipped for rescue operations. But, having weathered severe typhoons before, officials remained confident that they will be up to the task. After all, relief goods had already been stored in the municipal hall and the mayor had even called a rice retailer in Tacloban City to reserve a buffer of 300 sacks of rice.

But Yolanda had other ideas and all the goods the MDRRMO prepositioned were swept away and even the rice it had reserved in Tacloban ended up being looted.

Basey did put up a command center where response personnel stored emergency supplies and rescue

equipment. But this was set up on the coast and was one of the first structures wiped out by huge waves generated by the storm surge. Emergency response personnel barely had time to run for their lives.

The municipalities of Estancia and Concepcion in Iloilo already have rescue teams in place even before RA 10121 was enacted. This was when their offices were still called Municipal Disaster Coordinating Councils (MDCC) as mandated by Presidential Decree 1566 which was subsequently superseded by the Philippine Disaster Risk Reduction and Management Act of 2010.

Both rescue teams had been trained in basic life saving techniques including water, air and sea rescue although members said they still need further training on DRR. They also said they need to upgrade their emergency response gear and equipment.

Estancia's Disaster Preparedness Plan advises emergency personnel to improvise by using indigenous materials during rescue operations. It cited as an example the use of plastic containers tied together with ropes about 15-20 meters in length and then placed strategically in pre-identified houses near bodies of water.



Disaster-Proofing Evacuation Centers

In all the areas hit by Yolanda, many of the identified evacuation centers became death traps. In northern Cebu, roofs of evacuation camps crumpled and parts of buildings collapsed, endangering the evacuees.

The same was true in Iloilo and Samar where buildings used as evacuation centers like schools, day care centers, and gymnasiums were not able to withstand the strength of the typhoon. In Marabut, some 200 residents took shelter in caves situated on higher ground. They weathered the typhoon unhurt.

In San Roque, a coastal barangay of Tolosa, Leyte, the public school where people fled collapsed while in the city of Tacloban roof sections of the concrete behemoth called the Astrodome collapsed and lower portions were inundated. A number of fatalities recorded in the city were evacuees who were brought to the Astrodome that had withstood strong typhoons in the past. It was located on the coast.



Forcible Evacuation Is Sometimes Necessary

Evacuation is a process most inconvenient and difficult, and for understandable reasons, people would rather remain in their homes even during times of danger. They would rather stay to protect their houses from damage or secure them from theft. Or they simply refuse to go.

This poses a major challenge especially for local governments, as there are times when evacuation is imperative and urgent.

In Cebu, preemptive evacuation for the island barangays of Bantayan was done two days before the typhoon hit the country. In Daanbantayan, forced evacuation was done a day before. Policemen went around instructing residents to proceed to the nearest pre-identified evacuation centers including school buildings, churches, convention centers, and gyms. Some were hesitant but nevertheless complied.

The same was done in Guiuan, Eastern Samar from November 5 to 7, 2013. People were taken to evacuation sites identified in past drills. The evacuation was orderly and the centers were stocked with food and water.

Food packs were used as incentives in Tolosa, Leyte. Those who refused were asked to sign a waiver absolving the local government from any responsibility should anything happen to them. No one was willing to sign the waiver and eventually everyone complied.

Disaster Managers and Responders Must Have Multiple Modes of Communication

Mobile phones

Today, mobile phones and even the Internet had become the go-to modes of communication. Even in rural villages, it has become second nature for people to get information online. The speed and interactive nature of these devices and communication platforms had become favorable to human activities and transactions.

The technology is particularly valuable in disaster risk reduction and management with updates and other relevant information being generated and relayed in an instant. Communication has also become multi-directional with the added dimension of immediate feedback. Social media platforms, notably Facebook

and Twitter, have also become effective means of conveying information to the outside world and vice-versa.

Like most municipalities in Iloilo, Estancia and its island communities, rely heavily on mobile communications. Its Municipal Disaster Preparedness Plan has a master list of all residents' cellphone numbers that are used for "text blasting" (sending out messages simultaneously to multiple users). In Salcedo, Eastern Samar, the mayor has the mobile phone numbers of all the barangay captains and the leaders of the logistics, rescue and relief teams.

Both mayors, however, were not able to use their mobile phones after the typhoon knocked down cellular towers and power lines. They realized too late that they should have had back-up communications systems.

Two-way radios

The rise of mobile phone technology saw the diminished use of handheld two-way radios which were then popularly referred to as "walkie-talkies." The MDRMO of Tibiao, Iloilo has a limited number of radio sets that it uses to coordinate with a local radio group to facilitate communications in emergency situations. Using their radios, MDRRM officers were able send reports to the provincial DRRM office and assist neighboring municipalities send out theirs as well. Given its November 8, 2013 experience, Tibiao plans to install a repeater system⁴ to connect with other municipalities in the province and create some sort of communication web.

All the other affected municipalities realized the need to set up a two-way radio communications system as a back-up. In Marabut, Samar for example, the

acquisition of radio communications equipment and the establishment of communication centers in the barangays are already included in its recovery and rehabilitation program.

Response

Responders as Real Time Heroes

If there was anything positive that came out of typhoon Yolanda's devastation, it was the instantaneous response and willingness of people from all walks of life to help those in need. In fact, many observers have noted that response to the disaster was as overwhelming as the disaster itself.

Government may have been initially stunned by the severity of Yolanda, but as the mandated first responder it tried to get its act together as quickly as possible. Civil society organizations, already on the ground doing various projects long before Yolanda came, immediately helped government shore up the breach.

Even before the first reports of casualties and damage began to emerge from the ruins, the United Nations, international NGOs and donor organizations, the Philippine Red Cross and Red Cross societies were already pouring in help and sounding worldwide appeals for assistance.

Local and international volunteers literally swamped government and NGO offices with offers of help. Donations from individuals and various sectors kept pouring in seemingly without letup.

Yet from this immense outpouring of humanitarian assistance emerges one crucial lesson: there will be no dearth of responders and volunteers, the challenge is how to harmonize all these efforts to make response more effective but at the same time wide-ranging.

⁴ A radio receiver-transmitter combination, it can receive a weak or low-level signal and re-transmit it, boosted with additional power, so that the signal can cover longer distances without degradation.

Coordination an Absolute Must in Response

Relief goods poured into Libacao, Aklan from different sources and distribution was coursed through numerous channels. To facilitate more systematic delivery, the MDRRMO used the database of the Municipal Social Welfare and Development Office (MSWDO) derived from a previous census that included a list of families per barangay. The importance of a pre-existing database as reference cannot be overemphasized. Through the list, the MDRRMO was able to calculate the volume of food needed and the actual recipient families per barangay. Redundancy and deficiency were thus avoided.



Local government coordination was not a problem in Pontevedra, Capiz. The MDRRM officer was the mayor's brother and majority of the barangay captains were politically allied with them. Orientation and capacity building activities prior to Yolanda went smoothly and disaster response also proceeded without major snags.⁵

⁵ No information was obtained on the extent of participation and coordination with barangay leaders who were not allied with the municipal executive.



In contrast, Leyte, especially Tacloban City, was a picture of desperation and chaos during the first few days after Yolanda hit. Not only was the city practically erased from the map, it also became the center of acrimonious debate between local and national leaders on the issue of emergency response coordination. The chaotic situation was further exacerbated by reports of looting, jailbreaks, and outright lawlessness.

At the same time, it became the epicenter of humanitarian action with the Tacloban Sports Complex suddenly transformed as a response hub with practically all humanitarian agencies using it as headquarters, platform to receive and send out relief goods, and communications center.

Over the next few weeks things began to normalize and early recovery systems and smoother coordination among international and Philippines humanitarian began to be felt.



Leaders Should Be Seen and Heard

“You have to be there; the people have to see you,” said the mayor of Pontevedra, Capiz which was hit hard by Yolanda. A medical doctor, the mayor believed that he needed to be at the municipal hall during and immediately after the typhoon to show the people that the LGU is present and ready to serve. “If I had not been there, other officials would have also gone home to attend to their families.”

The province of Capiz is dubbed as the “Seafood Capital of the Philippines” with its 80-km coastline and wide expanse of swamp lands converted into fishponds. The Panay river basin contributes to the regular flooding of its low-lying areas exacerbated by the non-completion of a flood control project that would have addressed the problem.

Pilar, another Capiz municipality severely affected by the typhoon, is located at the northern part of Panay Island facing Pilar Bay, the largest and richest fishing ground in Western Visayas.

Its mayor said he also made sure that he was personally on top of emergency response operations including buying medicines, putting up an emergency water tank, cutting tree branches and installing a

generator set and used his Facebook account to warn people of impending danger. This was because people need to see that the leadership is functioning and that they are not alone.

In Tanauan, Leyte, the mayor even went around knocking on doors to convince residents to evacuate.

Safety of Responders and Their Families Should Be Considered

Municipal workers who also act as responders in times of disasters realized that sometimes in an emergency, especially when everyone is affected including them and their families, responding to calls for help becomes a dilemma.

When Yolanda hit Pilar in Capiz, the municipal social welfare officer was supervising the packing of relief goods inside the town hall. She was able to go home to check on her family only five days later. Luckily no one was injured “and they understood,” she said.

Not reporting for work in a disaster situation to look after one’s family, on the other hand, can have serious consequences. The municipal health officer in a town in Capiz learned this the hard way after administrative



charges were filed against her when she failed to report for work at the height of the typhoon.

But even duty holders have their needs and familial duties especially during calamitous events and Yolanda had shown how dangerous and difficult it could be for municipal workers tasked to respond to emergencies.

In Concepcion, Iloilo a flying galvanized iron roofing hit the leg of a rescue team member but with limited lifesaving equipment and with rescue vehicles flooded, aid came too late and he died from blood loss.

In Marabut, Samar the Municipal Planning and Development Officer (MPDO) and the Municipal Social Welfare and Development Officer (MSWDO) were almost killed when the second floor of the municipal building collapsed. The town's ambulance driver, on the other hand, did not leave his vehicle and just kept driving from one safe place to another while dodging flying debris.

But it was in Tanauan, Leyte where ignoring early warnings and orders to evacuate had terrible and tragic consequences. People who earlier refused to leave their homes realized too late that they were no longer safe and called for help. The local rescue team responded but by then the typhoon was at the height of its fury and the team's vehicle was swept away by the storm surge. Several rescuers did not survive.

People as Effective Responders

In Yolanda's aftermath, residents of Barangay San Jose, Palo, Leyte found nothing but devastation: fallen trees, flattened houses, mangled corpses. But perhaps taking courage from each other, they immediately conducted search and rescue operations on their own and buried the dead in a mass grave in front of the church. They also cleared the roads of debris in anticipation of the arrival of relief goods.



They said they acted immediately even before government help arrived because of the urgency of the situation and also because they can do it anyway.

Several days later, a busload of relief supplies arrived in the barangay from an association called Katilingban, whose members originally hailed from Palo but are now living elsewhere. The association hired a bus then loaded it with food, clothing, and other items and brought all these to Barangay San Jose.

The practice of bayanihan (sense of community) that happened in Barangay San Jose is a tale that was repeated almost everywhere — from Busuanga in Palawan to Pilar in Capiz, Marabut in Samar, and Estancia in Iloilo — with variations in details but nevertheless carrying a universal theme: solidarity with each other.

Recovery and Rehabilitation

Enhancing Donor Coordination

There were way too many new boats in Estancia, Iloilo after Yolanda. Some fisherfolk received two or three boats. Even tricycle drivers received their share of boats. The town saw an outpouring of assistance in the form of boats, much more than they actually needed.

The officials of Estancia admitted that they found it difficult to monitor the activities of donors, particularly those that channeled their donations directly to the communities without coordinating with the municipal government. As a result, there were lots of duplication and mismatch between assistance provided and actual needs. The most glaring example of this was the oversupply of donated fishing boats.

On the other hand, there were gaps in other areas such as housing and livelihood. In many coastal communities, marine resources have been heavily depleted, hence the irony of having too many fishing boats but very little fish to catch.

The damage to sources of livelihood was particularly pronounced in the oil spill-affected areas along the shorelines of Estancia in Iloilo. The spill, which also affected mangrove forests, caused respiratory and skin diseases among children and adults, forcing residents to move to temporary shelters in the “tent city” built on the grounds of the Northern Iloilo Polytechnic State College (NIPSC) West Campus. International NGOs put up breastfeeding areas and child-friendly spaces to serve affected residents.

In the nearby municipality of Concepcion, 2,000 persons were sheltered in 120 bunk houses in Barangay Bacawan Sur provided by government. Latrines and shower cubicles were available. Water supply was sufficient and electricity was supplied by generator sets. In addition to this, international non-government organizations provided solar panels and emergency lights.

Assessments of the coordination among different stakeholders have shown that given the complexity of the situation and the immensity of the immediate tasks, errors and missteps were bound to be committed. What had been underlined was the fact that the road to recovery will be easier and faster when the efforts of these stakeholders – government, civil society, private sector, international organizations, churches – are harnessed based on deliberate planning and accurate assessment of needs on the ground.

Building Back Stronger, the Sooner the Better

It took between two to three days before assistance from the Samar provincial government arrived in Basey and Marabut. Since the urgency of the situation demanded immediate action, Basey Mayor Jonjie Ponferrada sent handwritten letters requesting assistance to the mayors of neighboring municipalities less affected by the typhoon. Marabut Mayor Percival Otillo, meanwhile, tapped the media and his interviews aired by local and international television networks resulted in overwhelming assistance.

The deluge of assistance brought home the need for a plan. Recovery and rehabilitation plans at the municipal level are needed so that government budget allocations and external assistance can



come in. In fact, by original design, these should have been incorporated into the Local Disaster Risk Reduction and Management (LDRRM) plans of

each municipality. The devastation brought about by Yolanda underscored the importance of having such plans.




For Bogo City in Cebu, the plan took the form of barangay stewardship. Its community-based “Adopt a Barangay Project” (ABP) rehabilitation plan, which promotes tripartite participation, “is drawn out from the *bayanihan spirit*” where the private and the public sectors work together on projects that would benefit the adopted barangay. The city government maintains a “One Stop Office” that facilitates assistance provided by NGOs through data dissemination, document provision, and license and permit processing; as well as through project implementation, coordination, support, and supervision. It promotes the employment of local skilled labor. As of March 2014, there were at least four resettlement sites identified in the locality with over 1,400 houses to be made; 91 resettlement beneficiaries were awarded with new homes in the Yolanda Village in La Paz, Bogo City. For the repair project, the local government organized a team composed of city government employees, carpenters, engineers, architects, volunteers from the private sector, and NGO staff who went to the communities and fixed damaged houses.

In Aklan province, Libacao residents scheduled the fixing of damaged houses and buckled down to work as soon as the storm was over, using debris scattered all over. Later, government, the International

Organization for Migration (IOM), and non-government organizations came and provided more construction materials. In addition, since 90 percent of Libacao’s natural forest were damaged, the National Greening Program (NGP) was included through a cash-for-work initiative, making reforestation integral to the recovery and rehabilitation plan.

Cash-for-work was also widely implemented in Leyte through the programs of the Department of Social Welfare and Development (DSWD), Department of Labor and Employment (DOLE), and Overseas Workers Welfare Administration (OWWA), as well as intergovernmental organizations and civil society, such as UNDP, International Labor Organization (ILO), Catholic Relief Services (CRS), American Chamber Foundation Philippines, Inc. (ACFPI), and Oxfam, among others. The program benefited the residents of Barangay San Roque, the hardest hit barangay in Tanauan, Leyte. Gawad Kalinga also did its share in Tanauan by assisting in the construction of houses in Barangay Pago.

Rebuilding agriculture was a major program in Tolosa, Leyte, where the Department of Agriculture provided rice and vegetable seeds to farmers. The Bureau of Fisheries and Aquatic Resources (BFAR), for its part, distributed boats to local fishermen while TESDA provided skills training.

Various stakeholders also pitched in. Tzu Chi Foundation, the Buddhist charity organization, helped in the rehabilitation of the Tanauan Elementary School and government buildings; Japan International Cooperation Agency (JICA) helped in rebuilding the town’s processing center; international NGOs continued to operate within their respective areas of focus: Oxfam worked on water, sanitation, and health; ChildFund, Save the Children, World Vision, and Plan focused on children and youth; HelpAge focused on older people; and ASB focused on persons with disability. 





Lessons from the Regions

Rising from the ruins, learning from Yolanda after the end of days

“The Philippines is among the most vulnerable nations to natural disasters. But it is also showing leadership in improving preparedness and building resilience. The United Nations stands firmly with the country in these efforts.” – Ban Ki-moon, Secretary General, United Nations, during his visit to the Philippines, 22 December 2013.

If there is anything that can be said about the lasting impact of typhoon Yolanda on the four regions it ravaged with unprecedented fury in November 2013, it is the ability of both those who govern and the governed to pick up the pieces and begin rebuilding their lives and communities.

Nowhere had this been more acutely demonstrated than in the towns and cities of Regions IV-B, VI, VII, and VIII, described by first responders as “worse than war zones.” Even as TY Yolanda was leaving behind a trail of destruction, those who had been badly affected began to sift through the debris not so much for things that can be salvaged but for lessons that can be mined and used for reshaping the future.

A rapid field appraisal had identified critical elements that can enhance the four thematic areas as the lynchpin of Republic Act 10121 or the PDRRMA of 2010. The four thematic areas provide an opportunity for amplifying many of the lessons extracted from the TY Yolanda experience at the provincial and regional levels.

While the affected regions differ largely in terms of geography, demographics, and socio-cultural dynamics, they share a common denominator: all were in the regular path of typhoons and weather disturbances that affect the Philippines each year. MIMAROPA is an exception; of late, it has been affected by changing wind patterns and typhoons originating from the western part of the country. Given their topographic characteristics, all four are also susceptible to natural hazards like floods, tsunami, storm surges, earthquakes, and landslides as evidenced by the recent experience of Bohol province in Region VII.

Four of six provinces that comprise Region VIII, on the other hand, belong to the high-risk provinces in the entire country, according to an assessment conducted by the READY Project. These are Leyte, Southern Leyte, Northern Samar, and Eastern Samar.

From this tapestry of vulnerability, a long, hard look at future possibilities for “safer, adaptive and disaster-resilient Filipino communities towards sustainable development,” at least in the four regions, may be realized sooner than expected given the initial lessons from Yolanda.

Disaster prevention and mitigation: Separating myth from reality

Across the four regions, several key strategies and mechanisms were identified as potential lessons that can be used to improve disaster planning and programming.

In Region IV-B, for instance, RDRRMC member-agencies down to the other DRRM levels including the LGUs regularly received weather information from the Office of Civil Defense as a matter of protocol. The information system used text messaging via SMS and social media to ensure wide and timely dissemination. The local DRRM councils then used this information in conducting pre-emptive evacuation especially of coastal communities. However, fishermen who were already out at sea were not able to receive the advisories and accounted for some of the casualties.

The reflection workshop in early 2014 cited the “need to increase capacity of LCEs and DRRMOs in local risk knowledge, coordination of efforts and preparation based on policies in place.” This underlines the critical importance





of risk communication in disaster prevention and mitigation that should be clearly enunciated in the DRRM plan of the LGU and the different DRRM councils.

Nowhere was this truer than in Region VI where the series of training activities including understanding and using hazard and risk maps, monitoring functions, and information campaigns by the RDRRMC served the region well when TY Yolanda struck. This was also the result of having an operational Disaster Risk Reduction and Management Plan that even included the integration of DRR and CCA in development plans.

To illustrate, evacuation centers such as gymnasiums were constructed following disaster-resilient standards for structures and pre-emptive evacuation and relocation were quickly put in operation.

Yet the RDRRMC VI noted that the region still needs to “expand the knowledge of its constituents about storm surges with many people underestimating its impact because it is not part of their vocabulary,” which points out critical role of risk communication in disaster risk reduction.

Another challenge facing Region VI is how to “enhance local capabilities on EWS in detecting disaster risks,”

given the multiple hazards it faced brought about by Yolanda.

Region VIII, hit hardest by TY Yolanda, admitted that despite the availability of risk maps and the identification of no-build zones, public and commercial buildings were constructed in unsafe locations such as coastal areas. The regional assessment concluded that the “RDRRMC-VIII, through OCD, DOST and DILG, should ensure that the LGUs are complying with the hazard and risk data provided them. They should provide guidance in integrating DRR and CCA standards into their local development plans. They should also provide the appropriate training and information awareness campaigns so that the LGUs can make the right decisions especially in the construction of infrastructure and relocation of communities to safe areas.”

Disaster preparedness Were the structures and mechanisms in place?

While it had been widely recognized that there was a high level of awareness about the impending arrival of TY Yolanda, preparations varied across the different localities and even households in the four regions.

For Region IV-B, one of the important lessons from the typhoon was this: Regional Emergency Operations Centers (REOCs) provide more efficient coordination and mobilization of response mechanisms. Staffed by representatives from the member agencies of the regional DRRMC, the REOC stationed in the regional office of the DILG IV-B in Quezon City, was activated in preparation for TY Yolanda. It became the focal point for monitoring the effects of the typhoon and coordination of response activities in the region.

The regional assessment also noted that “inter-agency cooperation was vital to the collection of reports from LGUs and field offices for consolidation and submission to the NDRRMC. It also allowed the regional council to manage its resources more effectively.”

It also pointed out that pre-positioning vital resources in strategic locations allowed for quick deployment and distribution. It said, “In anticipation of typhoon Yolanda, the Regional Disaster Risk Reduction and Management Council of MIMAROPA held an emergency meeting to discuss the preparedness and prioritize response activities of the member agencies. One of the actions of the response agencies was to preposition resources in strategic locations to augment the needs of LGUs.”

Strategic pre-positioning also proved vital in addressing the immediate needs of isolated communities in Region IV-B, “Although additional supplies and equipment in the severely affected municipalities were required in the later days as the pre-positioned resources were already exhausted days following the typhoon.”

In Western Visayas, a well-organized DRRMC enhanced the region’s preparedness for TY Yolanda through the timely and wide-ranging dissemination of warnings to all RDRRMC member agencies. The field assessment report said, “Days before the typhoon, OCD Region VI convened the council to formulate the necessary objectives, strategies and tactics in dealing with the upcoming hazard. Through these organized activities by OCD Region VI, RDRRMC VI was able to undertake the appropriate preparedness measures such as the prepositioning of regional responders, stockpiling supplies, monitoring situation updates, and alerting the concerned local DRRMCs and activated the RDRRMC VI Operations Center staffed by RDRRMC VI focal persons which operated on a 24/7 basis.”

To prepare for this typhoon, OCD VIII convened the RDRRMC VIII member-agencies “to discuss response actions such as continuous monitoring of the situation, dissemination of warnings and reports, conduct of pre-emptive evacuation and prepositioning of goods, and coordination with humanitarian agencies.”

However, it was noted that there were limitations and inconsistencies in information sharing and coordination among the agencies. At the local level, poor communication and collaboration resulted in overlapping functions among responders. This highlights the need to strengthen the coordination of the DRRMCs at all levels and OCD should take the lead in ensuring that efforts of the RDRRMC VIII member-agencies are harmonized. This also underlines the need for “the entire regional council to provide guidance to local DRRMCs as to how they can better improve coordination on the ground.”

Disaster response Ready and willing but...

Five important lessons in disaster response were highlighted in the experience of Region IV-B with TY Yolanda. Each of this presents added insights as to how response mechanisms and systems can be enhanced at the regional level:

Transport of relief goods to affected municipalities posed a big challenge due to lack of air and sea assets. Given the geographic situation of the region’s severely affected areas which were mostly island communities in northern Palawan, the transport of relief goods and medical supplies proved very difficult. However, “through coordination with the Western Command of the Armed Forces of the Philippines and Philippine Coast Guard District Palawan, the Philippine Navy and Philippine Coast Guard were able to supply sea vessels and



facilitated the transport of relief goods to the island municipalities.” A number of island municipalities were also inaccessible to large sea vessels necessitating the unloading of goods in collection points from where smaller vessels like *bancas* can transfer.

Immediate restoration of lifelines is a must to provide basic needs to affected areas.

The communication network in Busuanga Island, which was the hardest hit in the region, delayed the transmission of reports by the municipal DRRMOs to the REOC. Through coordination with power utilities in neighboring LGUs, Coron and Busuanga were able to restore power and communication within a short time.



Institutionalization of the ICS is imperative.

Another factor that may have contributed to the delay in the delivery of relief and assistance is the novelty of procedures supposed to be observed in response and early recovery operations. The ICS, newly introduced to LGUs, was not yet fully operational in some areas. As a result, confusion arose as to who should decide on the prioritization of the transport of goods and augmentation of response staff. But it was also noted that the ICS, when used by the provincial DRRMC and some municipalities like Busuanga, resulted in a more efficient delivery of emergency response services.



Provincial government must be strongly committed to provide immediate emergency relief services. The private airplane of the governor was used throughout the emergency response phase. The immediate deployment of assessment teams led by the governor also resulted in the development of rapid damage assessment reports and provision of emergency assistance to the severely affected areas.

Psycho-social and stress debriefing training for assessment teams must be an SOP. One of the challenges for the response teams was to alleviate the fear and anxiety of communities because of the impact of typhoon on their lives. Many families lost their homes and have to stay in evacuation centers for extended periods. Response teams must have the necessary skills and capacity to help address the needs of these families.

Region VI noted that inter-agency mechanisms were essential for the swift delivery of response services. During the emergency phase, RDRRMC VI was able to immediately establish inter-agency mechanisms among the members which allowed the response teams to swiftly and collaboratively provide humanitarian assistance.

For example, OCD Region VI activated the ICS “in order to allow the responding teams, both civilian and military, to operate under a unified set of objectives.” The members of RDRRMC VI also activated the cluster approach to rationalize humanitarian assistance according to specific “clusters” such as food, shelter and WASH (water, sanitation and hygiene). Using these inter-agency mechanisms, information in real time among the key stakeholders and resources were efficiently utilized.

The RDRRMC VI, however, must provide appropriate capacity-enhancement activities for the disaster risk



reduction and management actors such as training, drills and exercises to sharpen response systems.

In Region VIII, response to TY Yolanda had been described variously as effective and overwhelmed and some of the points raised by various post-typhoon assessments had to do with information, communication, and coordination.

The RDRRMC VIII cited the sharing of information during the Rapid Damage and Needs Analysis (RDNA) as crucial in the efficient delivery of humanitarian assistance. It said, “In anticipation of the typhoon, the LGUs in Region VIII had prepared their respective population data. These data will be used as bases for identifying the target beneficiaries for humanitarian assistance. However, as the regional

response groups conducted RDNA, it was revealed that the data of the LGUs were outdated, incomplete or bloated due to different benchmarks. Hence, it was difficult for RDRRMC VIII to prioritize the most affected communities.”

It was also noted that since a number of agencies were conducting RDNA aside from the regional response groups, the affected people generally experienced “survey fatigue.” Different RDNA tools and methodologies were used for the same set of respondents. Thus overall, the efficient delivery of humanitarian assistance was not realized.

This points to the need to enhance information-sharing among agencies performing RDNA, and sector-specific assessment tools have to be developed

and standardized for all groups. In the meantime, regional response groups must collaborate with OCD VIII and provide all the pertinent RDNA reports since the OCD runs the Emergency Operations Center (EOC) at the regional level.

A disaster-resilient EOC will likewise ensure continuity in DRRM coordination amidst the devastation. The OCD VIII facility which served as the EOC of the RDRRMC VIII was heavily damaged by the typhoon, destroying computers and communication equipment. There were neither backup telecommunications nor radio and satellite phone systems. Typhoon Yolanda shut down the operations of the RDRRM EOC that led to ineffective coordination among regional agencies. In addition, OCD VIII was unable to provide updates to nearby regions and the NDRRMC due to lack of communication which points to the acute need to strengthen and upgrade the facilities of OCD VIII. It is likewise imperative to make the EOC disaster resilient and equipped with backup telecommunications equipment and systems.

In Region VIII, organized rescue groups and capacitated humanitarian actors proved to be crucial for effective disaster response.

Days before Yolanda made landfall, RDRRMC VIII had alerted the LGUs to prepare their rescue teams while the regional rescue groups were also prepared to augment the locals. But Yolanda overwhelmed both local and regional responders that some members also became casualties. Luckily, augmentation teams from other regions, national groups, and international contingents came to their aid.

The experience clearly shows the need to invest in human resources, to organize more regional and


local rescue teams while at the same time providing them the necessary training, tools, and equipment.

It is also important to enhance the operationalization of inter-agency mechanisms for better participation of DRRM actors and humanitarian groups at various levels. The RDRRMC VII likewise should spearhead the implementation of ICS and cluster approach systems and cascade these to all local DRRMCs.

Disaster rehabilitation and recovery Looking for ways forward

RDRRMC VI observed that aside from saving lives and properties, protecting economic interests of populations affected by disasters should also be of equal importance. Although its casualty count was only 259, the region suffered tremendous economic and livelihood dislocation so that one of the priority needs identified was the provision of livelihood assistance. The lack of funds was also cited as one of the reasons why the RDRRMC VI was not able to immediately proceed to initiate rehabilitation and recovery programs.

Region VIII recognized that the insufficiency of resources and pre-positioned goods during TY Yolanda can be attributed to lack of funds. While it is specified in RA 10121 that not less than five percent of the IRA of the LGUs must be used as local DRRM fund, many LGUs were unaware how to access this. They emphasized the need to simplify policies and procedures of the national government for acquiring their local DRRM fund.

The JMC of the DBM, CSC, and the NDRRMC should address the funding concern of the LGUs. RDRRMC VII, on the other hand, should guide the LGUs on how they can access, utilize, and maximize their local DRRM funds as provided for in the JMC. 



PART 
Into the Calm

Reflections of the Council

The impact of TY Yolanda highlighted a number of gaps in the existing DRRM system and set of capacities from the national to the local DRRM councils and related institutions.

To address future typhoons of similar strength, key stakeholders, especially members of the local and international communities, CSOs, LGUs, and national government agencies (NGA) needed to reflect on what happened and identify how best they can work together and build back forward, not only in the areas directly hit by Yolanda, but more importantly, in the institutional mechanisms, and policies and programs so that the country can better reduce the risks of disasters to its people, particularly to the most vulnerable groups.



level self assessments and helped member-agencies identify priority actions to be done. The workshop gave the participants to collectively reflect about their experiences, lessons learned, and also identify the different areas for improvement before, during, and after similar disasters happen.

Disaster Prevention and Mitigation

Vulnerability risk assessment and multi-hazard mapping

Typhoon Yolanda showed that the people who were most at risk were those living in high-risk areas. It also showed the importance of using local knowledge and incorporating historical accounts in hazard assessments. Last but not least, the discussion highlighted that the community and LGU officials should always be included in doing hazard and risk mapping. This will not only help them understand the importance and usefulness of the maps but will also help validate the information in the map and help them collectively identify high-risk areas and how best people should move away from there.



And so, on 27 February 2014, a NDRRMC Reflection Workshop was held gathering the decision-makers and leaders at the national government level who led the disaster mitigation, preparedness, response, and on-going recovery efforts and conducted organizational and council-



DRRM and CCA mainstreamed in various local policies, plans and programs

In most areas directly affected by the typhoon, risk and climate information have not really been mainstreamed into the various locally mandated plans and programs. Scientific forecasts and the different evolving risk factors that make people more exposed to possible disasters have not yet been taken into consideration in developing the policies, plans, and programs of LGUs, despite the enactment of RA 10121.

Environmental management

Comparing the areas directly along the pathway of the typhoon, those which had thick mangrove forests helped lessen the negative impacts brought about by Yolanda (e.g., had less deaths in coastal communities due to lesser storm surge). This showed that doing climate and ecosystem-smart DRRM programming reaps benefits and helps address the increasing levels of risks that people face amidst the changing climate. The P1 billion funding for mangrove rehabilitation nationwide will help enhance mangrove areas and increase their protection through reinforcement of no tree-cutting policy and no occupancy in mangrove areas, reef rehabilitation, and protection.



Infrastructure system

With the increasing strength of typhoons, reviewing and updating the Building Code have become more imperative. Ensuring that critical facilities like hospitals, schools, evacuation centers, and government structures are strong enough to withstand Yolanda-type typhoons will be a key determinant of life and death in the future.

Risk financing and insurance

The workshop recognized the need of providing access to crop insurance and other forms of risk insurance and the need to ensure implementation of and compliance to the provisions of RA 656 or the "Act to Create and Establish a Property Insurance Fund" which was enacted in 1951.

End-to-end early warning system

Over the years, huge improvements were seen in weather forecasting and typhoon monitoring especially at the national level. However, sending and relaying the information across in ways that were easily understood and accepted by LGUs and communities was a totally different story.

One of the reasons why people did not heed the EWS was due to the lack of understanding on what a storm surge meant when coupled with a wind strength like that of Yolanda's. It is important to develop warnings and use messages and multi-hazard warnings that people will easily understand and respond to. Yolanda showed the importance of using community-based warnings like church bells, sirens, drums, flags, whistles, SMS alerts, among others.

The typhoon showed how, in areas wherein end-to-end early warning system has been strictly enforced (from risk mapping to the development of information and communication protocols and the conduct of simulations and drills), the casualty count was lower.

However, for areas wherein EWS was equated to just waiting for last minute warnings, more people suffered.

Last but not the least, the group reflected on the need to intensify information and education campaigns to continually educate people on the importance and meanings of the different early warning messages, information, including signal numbers and colors. With the increased intensity and variability of our climate and weather systems, being prepared and regularly informed will be the key to building resilient and safe communities.

Recommendations and action points:

1. Use community and science-based multi-hazard maps at the local level as bases for developing their DRRM and CLUPs.
2. Hazards maps should not only be scientifically verifiable and these should be distributed and explained to LGUs and communities so they know how to use and apply them.
3. Make scientific forecasts accessible, understandable, and usable.
4. Include DRRM and CCA in all levels of education (K+12 to tertiary), including advance studies in DRRM.
5. Allocate budget for training of teachers in DRRM and CCA and to make state universities and colleges the information hubs for DRRM.
6. Construct evacuation centers in safe locations that can withstand multihazards.
7. Enhance mangrove area development and protection by strictly enforcing no tree-cutting policy and no occupancy in mangrove areas, reef rehabilitation and protection, utilization of new fund for mangrove rehabilitation nationwide.
8. Consider increasing buffer zones from not less than 40 meters away from shoreline.
9. Review and update the Building Code and use of standard construction materials for facilities like hospitals, schools, evacuation centers, and government facilities; penalize violators of the Building Code.
10. Identify areas where it is needed to construct seawalls and dikes.
11. Conduct community-based mapping for multi-hazards as basis for developing DRRM plans and CLUPs. Also, there should be stringent monitoring of efforts of local chief executives and local DRRM offices in DRRM and CCA specifically in the use of highly-detailed maps

(higher than 1:10,000) for floods and inundation in CLUPs and RDCs.

12. Provide access to crop insurance and other forms of risk insurance to farmers and other businesses.
13. Enforce strict compliance of all government units to RA 656 in the procurement of property insurance for government buildings or properties.
14. Expand social health insurance coverage that includes affected people and

responders via PhilHealth (inclusion in the agreements as add-on or insurance rider).

15. Establish a multi-hazard warning system for storm surge, floods, landslides, earthquakes, volcanic eruptions, and tropical cyclones. Further, adopt community-based early warning system, e.g., church bells, sirens, drums, flags, whistles.
16. Involve the youth in prevention and mitigation activities.



Disaster Preparedness

Risk awareness and understanding

People's lack of awareness and capacity of the communities to respond to the warnings issued by government were among the reasons why the typhoon caused such a huge number of deaths and damage to property. Although there was great improvement in some areas, such was not the case in a number of the most heavily-hit LGUs and communities. Most of the people still lacked awareness and understanding on the different factors

that made them at risk to disasters and acted belatedly when they were in the midst of the typhoon.

Skills and capacity of community

In areas like Camotes island and Albay province, people knew what to do as soon as they heard the warning and pre-emptive evacuation directives. They responded quickly and were able to move away from harm's way. However, in some areas, even when early warning message had already been issued, communities did not respond decisively but waited for the last minute to move – when it was already too late.

Local DRRM Council and offices

In a number of areas, the creation of local DRRM offices were still not part of the LGU's list of priority. Some established the office for compliance purposes and therefore were not equipped with people with proper DRRM capacity nor resources. Use of the local DRRM fund in some areas were not done based on risk assessments and so DRRM and contingency planning, stockpiling and operations center capacities were still based on traditional hazards and did not consider worst case scenarios and scientific forecasts.

Preparedness policies, plans and systems

Disaster-preparedness activities should be done

regularly and consistently and these should be based on clear protocols, systems, and procedures. One of the important learnings from Yolanda was that a number of disaster preparedness policies, plans, and systems were not yet fully ready for actual disasters. Officials and the community must be fully aware of the ICS – with clear identification of the command responsibility to mobilization of responders during big disaster events to information gathering and reporting, among others. With these in place, public quarelling and finger pointing will be avoided.

Most of the pre-identified evacuation areas were inappropriate vis-à-vis the ferocity of the typhoon and the impacts it brought. There is a need for LGUs to improve the mapping of evacuation centers based on worst case scenario; mainstream DRRM in the construction of evacuation centers. Children, women,

older persons, and people with disability-friendly spaces in evacuation areas should be provided.

Partnership and coordination among key players and stakeholders

Developing partnership arrangements (between and among LGUs, private sector organizations, academe, NGOs, etc) and other mechanisms to enhance the layers of disaster response were strongly recognized. Activities like having a database of capacities, resources and on-going activities can help dovetail initiatives and easily mobilize groups during actual disaster operations. This includes developing a system to accommodate volunteers to strengthen the network and making use of modern technology through the establishment of on-line (web-based) profiles of accredited categorized volunteers.

Recommendations and action points:

1. Improve information, education, and communication on various disaster preparedness and early warning messages.
2. Conduct regular (or more) evacuation drills and simulation exercises and first-aid trainings.
3. Conduct regular information dissemination campaigns on hazard awareness, warnings, and specific response at the community and individual levels.
4. Institutionalize five or more layers of responders with, for example, the last layer taking care of the families of the first responders.
5. Develop protocols to facilitate the documents of foreign volunteers, as well as in fast tracking the processing of goods/ equipment coming from both international and local donors.
6. Forge partnerships, through a memorandum of agreement (MOA) between government and the private sectors specifically on the use of private facilities/logistics during emergencies.
7. Establish joint-multipurpose relief shelter facilities that are disaster-resilient.
8. Formulate scenario-based contingency plans with appropriate technical assistance
9. Develop or strengthen implementing rules and regulations, protocols, policies for Incident Command System (ICS) to automatically activate and mobilize layers of responders in the local levels during disasters in the LGUs.
10. Invest in disaster-resistant communication equipment.
11. Enhance health facilities structural and functional capacity.
12. Institute a system of inter-LGU/inter-political unit assistance. Strengthen interlink both vertical and horizontal of LGU-to-LGU, regional-to-regional office.
13. Capacitate LGUs within containment ring of response or rehab.



- attend also to the security of rescue workers;
- make sure that the protocols on relief distribution is strictly followed, particularly on who should do what, where, when, and how.

On the other hand, members also identified good practices that helped a lot in doing their work more effectively and efficiently. Among these were the established inter-cluster coordination meeting and presence of known leaders from the different member-agencies that have good working relationships between and among each other.

Disaster Response

Disaster response operations

During the workshop, the reflections on what transpired during the disaster response operations were filled with emotions as members recounted what happened. The stories and learnings focused on how improvements can be made among which were:

- ensure that politics is not involved in life-saving actions;
- NDRRMC member-agencies should work together better;

Assessment and reporting of needs and damages

During disaster operations, the group recognized the need to urgently gather and consolidate assessment, documentation, and other related reports as these would help both government and other response organizations, including embassies and the UN agencies to immediately mobilize their respective teams in the distribution of food and non-food items. Without these information, sustaining the response operations (and moving into recovery and rehabilitation modes) will be problematic.

Recommendations and action points:

1. Actual use of the ICS – ensuring its compatibility and adaptability, implementation, strategic/operational and tactical functions, involving all agencies in the system and criteria – in the mobilization of regional support.
2. Establish coordination centers (e.g. military and civilian coordination center).
3. Develop, review, and/or enhance the following policies, systems, and protocols during emergency situations regarding:
 - a. access to and use of government transportation and other assets, resources;
 - b. civil-military coordination center;
 - c. clarify role of OCD and NDRRMC members in disaster operations at the strategic and tactical level;
 - d. consistency of information between national and local/regional agencies;
 - e. coordination mechanism among agencies across levels;
 - f. first responders;
 - g. foreign support – responders, medical teams, etc.;
 - h. government fees during disasters (wharfage, PPA fees);
 - i. logistics management;
 - j. media and handling disaster reports;

- k. media management;
 - l. national reservists including assets;
 - m. procurement system and warehouse management of relief goods;
 - n. search, rescue, and retrieval;
 - o. security;
 - p. transporting and receiving relief goods;
 - q. UNOCHA cluster system and INGOs vis-à-vis response operations;
 - r. visit of VIPs; and,
 - s. working together between agencies like DOH and DSWD.
4. Invest in additional information management equipment and develop Information Communication Technology Management System (ICTMS).
 5. Translate communications/information to local dialect (or ensure that a local translator is present during response operations).



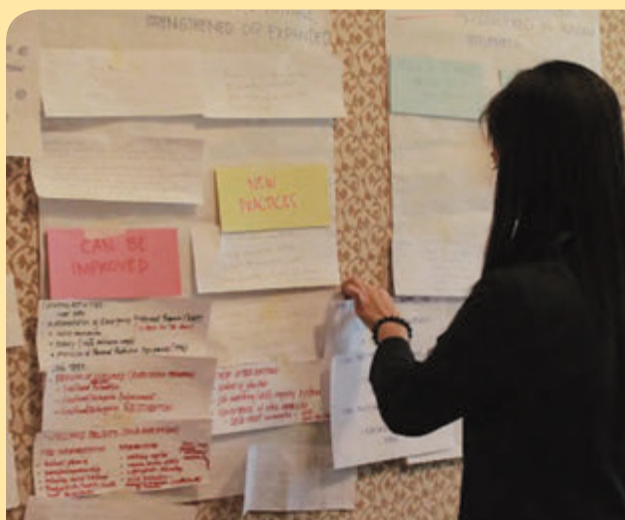
Recovery and Rehabilitation

Damages, losses and needs assessment

The group raised the possibility of institutionalizing post disaster needs assessment tools and systems, including a core group of people from different government agencies who are ready to be deployed. This will not only help get data faster but will also avoid bloating of costs, misreporting, and duplication of data. Partnerships with private sector groups and utilization of modern technology can help estimate costs faster.

DRRM and CCA elements mainstreamed in human settlements


The reflections revealed the need to improve on and adhere to international standards on human settlement. Most settlement areas were crowded and did not have enough facilities to accommodate all displaced community; some even had protection risks.



Recommendations and Action Points:

1. Conduct capacity-building activities to ensure the link of response and recovery initiatives.
2. Construct structures that can serve as warehouses to store materials for future use in rehabilitation and reconstruction.
3. Develop a consolidated framework for recovery, rehabilitation, and reconstruction which includes a list of priority actions and (to include prioritization of actions).
4. Develop and/or review policies, processes, protocols, including IEC materials related to the following activities during the rehabilitation phase:
 - a. project identification, approval, funding, implementation, and monitoring;
 - b. procurement rules;
 - c. relaxation of custom duties;
 - d. importation of construction materials;
 - e. development of rehabilitation plans at the LGU level;
 - f. housing design standards; and,
 - g. wind speed zoning maps.
5. Form a PDNA core team from different agencies ready to be deployed to conduct assessments immediately after a disaster.
6. Harmonize DSWD's Cash for Work and DOLE's Emergency Employment programs. The DSWD wage rate is 75 percent of the minimum wage rate, no provision on PPE and micro insurance, while DOLE's wages rate is 100 percent of minimum wage rate, with provisions for PPE and micro insurance (life and accident).
7. Institutionalize the conduct and/or use of the PDNA and ensure its link with other rehabilitation assessment tools/programs.
8. Integrate the Build Back Better principle in reconstruction of infrastructures.
9. Attend to the livelihood needs of farmers and fisherfolks.
10. Pre-identify resettlement areas in doing risk mapping and assessment activities.
11. Scale up good practices in the conduct of PDNA (e.g., DA-FAO-DIPECHO Project on Climate Risk Management and Disaster Preparedness in Agriculture and Fisheries)

In the end, if we can summarize all these learnings into four words, **Review, Revise, and Really Implement** already existing national policies, plans, and priority programs under RA 10121 and its accompanying framework and plan. The learnings were not new, in fact, they were even similar to those identified right after typhoon Ketsana that

hit Metro Manila in 2009 and were also identical to the priority actions identified by the National DRRM Plan adopted in 2011. These learnings also served as inspirations and challenges to the members and helped them to collectively realize that much needs to be done in DRRM, both as a council and as individual agencies. 



Y-Story in Education

At the end of the day, disaster preparedness is about people. It's about local government working with the local community and institutions to ensure that this is part of our culture and part of our everyday life. It's not only about structures; it's not only about coordination. It's about ensuring that people are prepared, not only with respect to skills but also with respect to a heart that allows them to go beyond themselves—to take care of others: before, during and after a disaster.

— Secretary Armin A. Luistro, FSC

A year ago today, the whole nation was abuzz over the arrival of TY Yolanda. Being deeply involved in disaster risk reduction management, the DepEd directed its officials and school heads to set in motion the preventive measures for TY Yolanda days before it made landfall.

Tracking of personnel, activating field offices, and strengthening communication lines

DepEd organized a search team for missing key

personnel and teachers immediately after TY Yolanda left the PAR. Despite the challenges in communications, the agency managed to establish a temporary command center for Region VIII in Ecotech Cebu, Lahug City and Baybay for the activation of offices in the affected areas. The temporary command center not only served as an alternative solution to revive the functions of offices but also as an effective venue to track missing DepEd personnel and teachers.



Personnel care

DepEd deployed hard copies of payroll forms to speed up payroll operations. It provided monetary assistance amounting to more than P7 million cash donations from employees and other donors. It also provided support to affected personnel who evacuated to Cebu and Manila. The Department submitted the names of more than 26,000 affected teachers to Presidential Management Staff (PMS) for financial assistance.

With the help of the DSWD, DepEd delivered two tons of relief packs to Region VIII and P2 million-worth of donations for Region VI.

Given the gravity of TY Yolanda's effect on both physical infrastructure and the mental health and well-being of the survivors in affected areas, DepEd provided psychological first aid (PFA) training for teachers, and engaged and deployed almost 3,000 volunteer teachers and personnel to administer PFA in affected areas. To boost the morale and mental disposition of the survivors, the public, through DepEd's encouragement, wrote more than 40,000

letters of hope that the agency delivered to affected areas. Together with the field officials, DepEd also delivered a Christmas Tree of Hope to the DepEd Tacloban City Division.

Back to school initiatives: Repair and rehabilitation

The classes in affected areas resumed in three waves -- November 11, December 2, and January 2. Prior to this, DepEd together with the support of unaffected divisions and regions (Regions V, VII, NCR, and IV-A) immediately set out to clean up schools and prepare the facilities for class resumption. In December 2013, the Department downloaded P40,320,000 for clean-up and makeshift classrooms to 1,344 schools to boost school operations and provide a safe and nurturing environment for the students.

Through the help of volunteers from unaffected regions, DepEd gave psychosocial intervention to its students and conducted a supplementary feeding program to learners to promote a sense of normalcy among them. The Department also assisted in the

transferring of 1,199 student records of graduating student transferees, and distributed 40 tablets to reconstruct school records.

The agency was also able to collect and distribute around 350,000 learning kits to the affected students. To speed up the process of reproducing learning materials, the Agency provided soft copies of these for faster reproduction by DepEd field offices and donors in January 2014. There is also ongoing printing and distribution of more than six million copies of textbooks and learning materials for provision to TY Yolanda-affected areas.

The aftermath of TY Yolanda might have left infrastructure at a rumble, but it proved to the


world that the Filipino hearts are unshakable. More than anything else, it fueled the Filipino spirit of bayanihan. With this, the Department solidified its partnership with the LGUs, other government agencies, private sector, and NGOs for the repair and rehabilitation of classrooms. The Education Cluster and other external partners provided more than 4,500 tents, tarps, and temporary learning spaces.

The Department targeted 2,313 new classrooms and 17,335 classrooms for rehabilitation in TY Yolanda-affected areas. Of the 2,313 targeted for new construction, 1,916 classrooms were funded by PAGCOR (P2 billion) and DepEd, while the rest were funded by external partners.



There is ongoing rehabilitation and procurement of around 6,000 classrooms within the 17,335 target classrooms for rehabilitation. The remaining target will be funded by DepEd using realigned funds after taking into account rehabilitation/repair interventions from external partners.

Moving forward, building back better

To ensure a safe and resilient learning environment for teachers and learners, the DepEd has upgraded safety standards classrooms in accordance with the Build Back Better direction issued by the Aquino administration. DepEd is in partnership with the DPWH in assuring that the newly built classrooms will endure Category A (earthquake intensity 9; typhoon with 250 wind velocity) hazards. 



Y-Story in Public Works

Reflections from DPWH

Restoring mobility was immediately initiated by DPWH; clearing operations immediately started to open the major arterial roads so that relief goods can reach the heavily affected areas. The resiliency and resourcefulness of the survivors were very evident when they used debris to construct makeshift shelters.

From the lessons learned from TY Yolanda, the Department formulated the following strategies:

- Implement “Structural Resiliency Program” in new construction and in the reconstruction of calamity-damaged



Zone	Basic Wind Speed
Zone I	250 kph
Zone II	250 kph
Zone III	150 kph

A school building has one to eight classrooms.



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PERSPECTIVE VIEW
SCALE 1/15

government infrastructures by upgrading and preparing disaster-resilient standards for roads, bridges and other public facilities (school buildings, hospitals, public housing, airports and seaports.)

- The Bureau of Design prepared the Minimum Performance Standards and Specifications (MPSS) for one-storey school buildings and multipurpose buildings. These can be viewed from the DPWH website. These design standards can handle 250 kph wind velocity.

After evaluating the reasons for thousands of homes left roofless, the following conclusions were presented:

Structure	Minimum Flood Return Period
Drainage pipe	15-year flood with sufficient freeboard to contain 25-year flood
Culverts	
Box	25-year flood with sufficient freeboard to contain 50-year flood
Pipe	15-year flood with sufficient freeboard to contain 25-year flood
Esteros/creeks	15-year flood with sufficient freeboard to contain 25-year flood
Rivers	50-year flood with sufficient freeboard to contain 100-year flood (principal and major rivers)
	25-year flood with sufficient freeboard to contain 50-year flood (small rivers)

- Strictly follow the minimum flood return periods to be used for the design of flood control and road drainage.
- Use geo-hazard maps for infrastructure planning.
- Upgrade and re-fleet equipment for disaster response and recovery. Y

Findings	Solution
1. Use of roofing nails in G.I. sheets	Use J bolt to secure G.I sheet
2. Connection of trusses is weak	Use gusset plate and bolt-in connection
3. Inappropriate rafter anchorage	Use of steel plate securely bolted to columns
4. Short-span roofing materials	Use long-span roofing materials



Y-Story in Transportation and Communication

On provision of transportation for disaster response/relief operations

The primary mandate of the DOTC is limited to ensuring the resumption of normal operations of airports, seaports, and railways as early as possible, and monitoring the availability of land transportation. In addition, the Philippine Coast Guard, an agency attached to the department, usually assists in search and rescue operations. For TY Yolanda, there was no actual system in place for DOTC to handle the provision of transport services for relief operations. Because DOTC had no transport assets, aside from operations, it



resorted to entering into agreements/negotiations with commercial transportation providers to transport relief goods/packs to affected areas.

DOTC is currently developing guidelines on the provision of transportation for disaster response/



relief operations to have an efficient and effective system to ensure the provision of required response/relief to areas affected by disasters in a timely manner. Further, the guidelines will ensure the resumption of normal operations at airports, ports, railways and other transport facilities which will be affected by the disasters and to establish dependable and coordinated transport arrangements.

NDRRMC's pre-disaster risk assessment

After TY Yolanda, a common practice of national and regional DRRM councils is the conduct of pre-disaster risk assessment. PDRA is a process to evaluate a hazard's level of risk given the degree of exposure and vulnerability in a specific area. PDRA presents the possible impacts to the populace and form as a basis to determine the appropriate level of response actions from the national level government agencies down to the local government units.

PDRA further plays an important part into policy formulation and decision making for both public and private organizations and other stakeholders in disaster risk reduction. PDRA looks into both historical data and probabilistic scenarios to address risks.

PDRA is based on the interoperability of four priority areas – prevention and mitigation,



preparedness, response, rehabilitation and recovery. These priority areas may overlap to attain our vision of safer, adaptive and resilient country. Scientific and technical government agencies such as DOST to include PAGASA and PHIVOLCS, DENR to include NAMRIA and MGB developed tools to assess risks in specific areas of the country to be utilized in the process. The PDRA will produce a hazard-specific, time-bound and area-focus probable impacts. The calibrated assessment will be officially disseminated to trigger the implementation of action plans and protocols of all concerned organizations/units, at all levels. **Y**

Civil Society in Disaster Risk Reduction and Climate Change Adaptation

Local voices, larger than life issues

Sometimes all it takes are small voices speaking as one to move mountains. Or reshape thinking. Or influence policy. Or, as in the case of the first Civil Society Organizations Summit on Disaster Risk Reduction-Climate Change Adaptation, roll out a collective advocacy and road map for more meaningful participation in disaster risk reduction and management.

Held in Cebu City on 26-27 March 2014, the Summit examined not only areas for expanded citizen participation in various aspects of DRRM-CCA but also explored strategies to reexamine the Philippine Disaster Risk Reduction and Management Act of 2010 or RA 10121 in the aftermath of TY Yolanda. The Summit noted that TY Yolanda, “Presented an opportunity to review in depth the gains and gaps of the Philippine Disaster Risk Reduction and Management Act of 2010 and which could examine new resilience standards.” It added that Yolanda, “Provided an opportunity to assess the Climate Change Act and to occasion the statute’s full operationalization at the ground level alongside DRR efforts for a truly integrated resilience building anchored on sound adaptation.”

The Summit was initiated by the Disaster Risk Reduction-Climate Change Adaptation (DRR-CCA) Coalition, a group of civil society organizations (CSOs) involved in disaster risk reduction and climate change work in the Philippines. Its core members



include Disaster Risk Reduction Network Philippines (DRRNetPhils), Ateneo School of Government, Center for Disaster Preparedness, World Vision, Aksyon Klima Pilipinas (AK), Christian Aid, and Oxfam.

It brought together more than 100 representatives of disaster risk reduction and climate change adaptation networks, organizations, and individuals and “through their shared learning, challenges, experiences, and expertise explore(d) solutions to help affected communities get back on their feet and provide input on how the country as a whole should improve its disaster preparedness and management capacities.”¹

¹ Documentation report on “Local Voices and Participation as Key to Building Resilience: CSO Summit on Disaster Risk Reduction-Climate Change Adaptation,” 26-27 March 2014, Cebu City, Philippines.



Disaster Risk Reduction Network Philippines DRRNetPhils

The DRRNetPhils is a national formation of civil society organizations, communities, practitioners, and advocates adhering to the Hyogo Framework for Action on Disaster Risk Reduction and Management and implementing community-based disaster risk management.

It institutionalizes disaster risk reduction and management through partnerships with national and local government units and communities in reducing vulnerabilities and enhancing capacities for disaster resiliency in the Philippines.

The Network helped in the passage and enactment of the Philippine Disaster Risk Reduction and Management Act of 2010 or RA 10121 and continues with its local advocacy in the promotion of Community Based Disaster Risk Reduction and Management (CBDRRM).

Its priorities are learning and sharing; monitoring the implementation of RA 10121; and, policy advocacy.

The current lead convener is the Center for Community Journalism and Development (CCJD),

with the Citizens Disaster Response Center (CDRC) as co-lead convener. Among the member-convener are: Damayan ng Maralitang Pilipinong Api, Philippine Rural Reconstruction Movement, World Vision Development Foundation, Inc., Center for Disaster Preparedness, Corporate Network for Disaster Response, Buklod Tao, People's Disaster Risk Reduction Network, Ateneo School of Government, Central Bicol State University of Agriculture (CBSUA), UPCSWCD, Oxfam, and ULAP.

In December 2013, the DRRNetPhils partnered with the media-led Citizen Action Network for LGU Accountability and Performance (CANA) in the launching of "Yolanda Citizen Watch," a citizen-based monitoring on the use of humanitarian assistance funds in areas devastated by Yolanda. The initiative highlights the need for transparency and accountability especially in focusing on disaster response funds, both international and local donations.

(CANA is being implemented by the Institute for War and Peace Reporting (IWPR), MindaNews, National Union of Journalists of the Philippines (NUJP), and the Center for Community Journalism and Development (CCJD) which is currently the lead convener of the DRRNetPhils.)

The Summit noted that TY Yolanda, "...will increase poverty in affected areas where poverty levels are already some of the highest in the Philippines, especially among poor women, subsistence farmers and fishers, elderly, persons with disabilities, and other vulnerable sectors."

Results of the two-day conference centered on ten (10) message points that highlighted the cross-cutting concerns of the DRR-CCA coalition and the directions it may want to pursue to further enhance and strengthen the preparedness, resilience, and adaptive capacities of the country.

Two of the more critical issues that emerged from the two-day discussions were transparency and accountability in the use of Yolanda funds and the need to review resilience standards as expressed in RA 10121.

Assessing CSO participation

Taking off from the keynote speech of CBDRRM guru Zenaida Delica Willison, in “The Imperatives for Peoples’ Participation in Building Resilience,” CSO groups focused their discussions on how to maximize and increase participation while at the same time exploring other avenues as well. Some of the key points were:

- o critical spaces for CSO participation:
 - DRRNetPhils to provide the pulse of DRRM and to provide a voice from the ground within the planned “Sunset Review” of RA 10121
 - regional consultations in relation to “grassroot participatory planning and budgeting process”
 - ongoing review of the Climate Change Adaptation Plan (CCAP)
- o disaster risk reduction and climate change adaptation should be treated as inseparable concepts on which the four DRRM thematic areas of prevention and mitigation, preparedness, response, and recovery provide a common framework
- o Current challenges:
 - more is needed on capacity building for CBDRRM (“what info is out there and where do we get it from”) to assist in knowledge management as a whole;
 - many local areas still do not have DRRM plans nor functional DRRM offices which also impacts on CSO participation;



Aksyon Klima Pilipinas

Aksyon Klima Pilipinas (AKP) is a national network of 40 civil society networks and organizations working on different climate change issues. As a network, AKP advocates for climate adaptation, mitigation, finance, and technology transfer both at national and international levels. Member organizations work with local authorities to ensure that climate change is built into their plans and programs.

Objectives:

- Monitor the United Nations Framework Convention on Climate Change
- Monitor the implementation of the Climate Change Act of 2009
- Initiate policy dialogues between policy makers, scientists and civil society and other actors on key policy issues
- Mobilize scientific and academic, civil society, and community involvement in the development of government policies on climate change and positions in international negotiations
- Support the initiatives of members and partners on climate change adaptation

- CSO accreditation and participation in the local DRRM councils should be pursued as they can help in the preparation of the LDRRM plan and in monitoring the use of the LDRRM fund; and
- budget tracking is a necessity such as links with key agencies, like NAPC and Climate Change Commission, especially in understanding use of DRRM-CCA funds.

CSO participation in formal structures of DRR-CCA

The Summit revealed the following:

- need to further strengthen NDRRMC-CSO coordination at various levels given their marginalization in the context of TY Yolanda recovery;
- limited presence of CSOs in fourth and fifth class municipalities;
- need for CSO capacity building, e.g., for inclusion in NAPC budgeting, for community organizing, and in dealing with LGUs;
- DRR-CCA must be embedded in local development and other plans;
- the Comprehensive Land Use Plan (CLUP) and other development plans offer opportunities for engagement;
- maximize local structures such as the LDRRMO in strengthening people's participation;
- during disasters, the LGUs will need CSO participation;



- LGUs should be encouraged to incorporate DRR-CCA in recovery;
- identify CSO expertise that can be presented to LGUs in terms of inclusion in DRR-CCA initiatives;
- government plans for TY Yolanda-affected areas offer prioritizing DRR-CCA concerns;
- communication is a challenge in making people understand climate change;
- while CSOs are effective in influencing the agenda of CCA-related councils, they are not good in implementation; and
- awareness and appreciation of DRR-CCA concepts at the local level should be raised for easier integration.


Statement from the DRR-CCA Civil Society Summit

1. Government should be the anchor, its leadership solid, in providing strategic direction to multiple stakeholders, whether local or foreign, in times of disasters. This will uphold Filipino sovereignty in all humanitarian actions and in directing international aid to fit our country's contexts and plans - not the other way around. Yolanda reconstruction must be private-sector supported but not corporate driven.
2. Local participation and leadership will lead to sustained efforts in resilience building. Return empowerment to local leaders through community organizing, which government and international agencies can support. Government must support and invest in community participation. Actual planning and designing of rehabilitation and recovery plans must be with the active and increased participation of vulnerable sectors, especially the poor, children and the youth, women, the elderly, persons with disabilities, and indigenous communities, through inclusive community consultations and joint implementations that foster ownership.



3. Yolanda rehabilitation should not rebuild risk but must push for the major economic development of disaster zones and high-risk areas that addresses vulnerabilities. This can be done by rebuilding in safe zones, building safer settlements, diversifying and strengthening livelihoods, pursuing a form of development that nurtures the ecosystems' capacity to deliver services, and enhancing people's resilience against future shocks and climate related risks, especially among poor farmers and fishers.
4. More clarity is needed on how much and where the Yolanda-allocated or donated money is. There should be more transparency on the processes for its collection and how it can be accessed by LGUs. Use of this money should be at local levels where it is most needed. Being transparent about where aid goes will help government empower civil society to provide assistance and monitor performance of local authorities, and likewise empower companies to ensure that aid and economic investments are cost-effective and fully maximized.
5. High levels of funding and political prioritization for DRR and CCA in the Philippines save lives but need to be substantially increased and enhanced in long-term plans, particularly during the phases of rehabilitation and recovery, in the face of increasing risks.
6. The abuse of volunteerism must not be fostered. Local people's organizations, especially those of women, take multiple leadership roles, but their contributions are often undervalued, considered "volunteer" work, and are not

properly compensated. We should encourage volunteerism but alongside this, develop proper mechanism that enhances people's agency with requisite support to their welfare and well-being.

7. Disasters expose the vulnerabilities of a country that are exacerbated by external factors and create an opportunity for rights claiming and rearranging of power relations. As post-2015 HFA and Millennium Development Goals (MDG) discussions near, the Philippine government should lead in negotiating for climate justice funding.
8. Government must assess and improve disaster response and management policy as well as humanitarian logistics to see whether standby arrangements and emergency trigger mechanisms are enough to respond to large scale emergencies. Government should prioritize and fast-track the establishment of truly functional DRRM offices in LGUs and build their capacities.
9. TY Yolanda has presented an opportunity to review in depth the gains and gaps of the PDRRMA of 2010. This review should look at new resilience standards brought about by the typhoon and previous disaster experiences in the country and in the region. TY Yolanda has also provided an opportunity to assess the Climate Change Act and to occasion the statute's full operationalization at ground level, alongside DRR efforts for a truly integrated resilience building anchored on sound adaptation.
10. And of great importance, the governance mechanisms of the NDRRMC, including those of key agencies involved in recovery work such as the Office of the Presidential Assistant for Rehabilitation and Recovery (OPARR) and the National Economic Development Authority (NEDA), must be clarified. 



its practitioners, at its worst, of all manner of pretensions. But at best, the typhoon showed the media as caring, responsive and first on the scene, with at least four community journalists paying for their lives reporting the unfolding event.

A rapid assessment eight days after TY Yolanda hit Eastern and Central Visayas was on the ground to determine the impact of the typhoon on the community news media especially in the light of its high casualty rate and to provide emergency assistance. Organized by the CCJD as lead convener of the DRRNetPhils,

The Media Dilemma in the Time of Yolanda

“The media has an important role to play in protecting people from disasters, by educating the public about risks and hazards, transmitting forecasts and warnings, and challenging policy makers and disaster managers to improve their performance. There has been a great deal of criticism of the media’s treatment of disasters – notably its focus on the consequences of disasters rather than their causes, and its stereotyped and erroneous portrayal of disaster-struck communities as passive victims.” – Disaster Communication: A Resource Kit for Media

If ever there was a test of the true purpose of journalism as lived and practiced, TY Yolanda in November 2013 became a powerful bellwether of media disaster reporting, stripping the institution and

the Peace and Conflict Journalism Network-Philippines (PECOJON), and the International News Safety Institute (INSI), the assessment provided a snapshot not only of the news media situation in Tacloban and Eastern Samar, but likewise incidentally

The CCJD is a media non-profit that serves as facility for journalists working with citizens and communities for social change. It is the lead convener of the DRRNetPhils, a coalition of formations, organizations, and individuals advocating a community-based disaster risk reduction. The PECOJON is into conflict sensitive reporting. The International News Safety Institute (INSI) is a global coalition of media organizations working for the safety of journalists everywhere through training and advocacy.

revealed gaps and weaknesses in the risk communication process at various levels.

Shortly before TY Yolanda, on 4 November, the Philippine news media reported warnings from PAGASA that a tropical storm was about to enter the PAR.

PAGASA would later describe Yolanda as the strongest typhoon the modern world has seen so far.

Four days before the typhoon struck, the media tracked its location, speed, strength and reported preparations made by local governments and communities in the typhoon's path, basing their reports on bulletins and information from PAGASA and the NDRRMC.

The media was also tracking this timeline as a guide for reporting:

- November 5 – NDRRMC Operations Center maintains Red Alert status
- November 6 – Haiyan enters the PAR east of Mindanao and is named Yolanda; local and international TV news networks pre-position teams in areas where the typhoon is expected to make landfall
- November 7 – the typhoon intensifies further; the Defense Secretary and the Secretary of Interior and Local Government fly to Tacloban City
- November 8 – extensive power and communication outages in Regions VII and VIII; generators of TV OB (outside

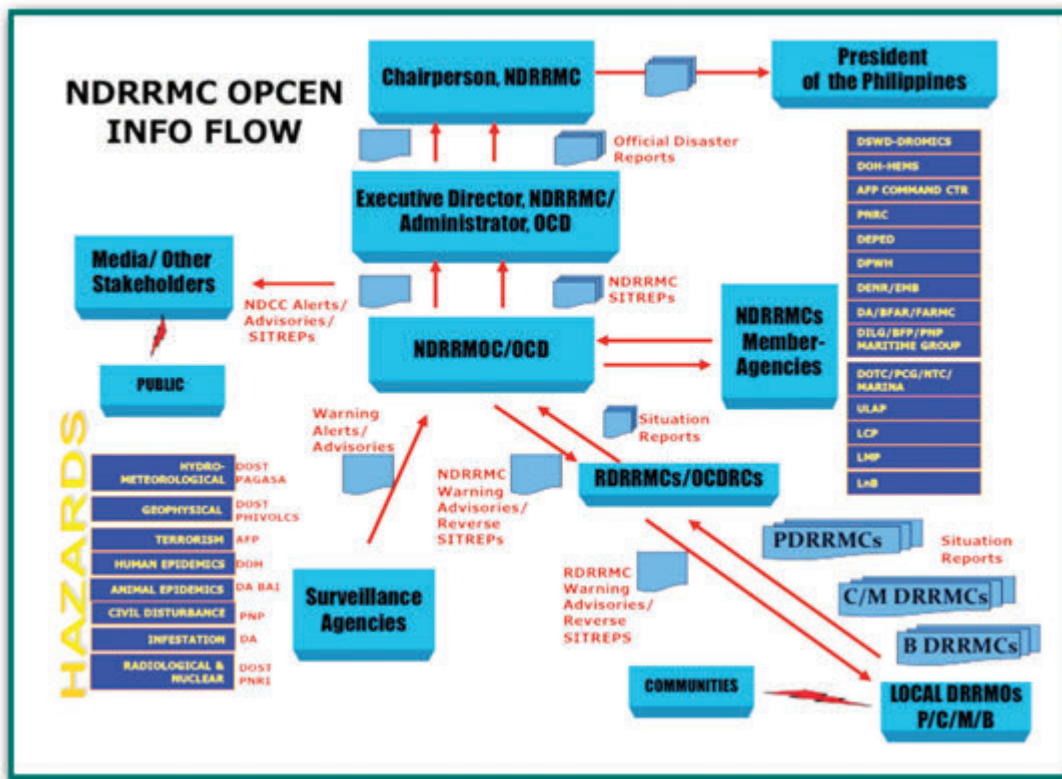
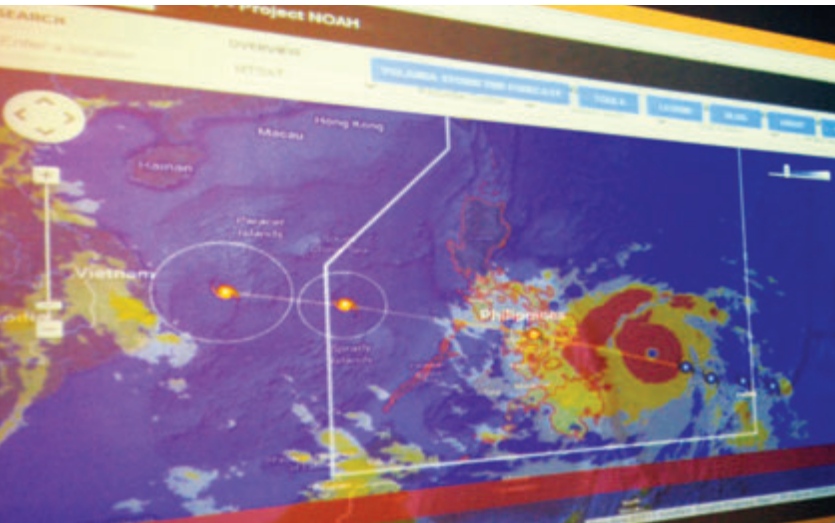


Figure 3.1 –
NDRRMC OpCen
Info Flow

Above: the communication and information flow followed by the news media in preparing their reports and bulletins



broadcast) vans become the only source of emergency power

So, what went wrong despite all the preparations and communication protocols?

Assessments made by government agencies and media organizations like the CCJD, PECOJON, INSI, and the Center for Media Freedom and Responsibility (CMFR) showed that:

- Risk knowledge and understanding to ensure people will act based on warnings were not emphasized or described clearly and compellingly
- Areas at risk to storm surges were identified but characteristics, behavior, and impact of the natural event were not adequately explained; media failed to emphasize the danger through graphic explanations of a storm surge and what it can do
- The President took to the airwaves and other news media to announce areas to be affected and

to expect storm surges with waves up to six meters in height; no one from the media or government warning agencies translated this information into something that can readily be understood

- Media simply picked up the pronouncements made by government agencies, e.g. PAGASA, NDRRMC- OCD
- Given the above, people were unable to imagine and visualize the impact of a disaster such as that wrought by TY Yolanda
- Media did not, or forgot to, mine data and information in the website of Project NOAH which among others, include a simple and very understandable definition of storm surges, in Filipino.

Even journalists themselves admit they could have done more reporting on the other aspects of disaster risk reduction such as mitigation and prevention, citing





that given the “nature of the beast” which demanded a 24-hour news cycle, reporting often becomes event-based. A number of things emerged based on a post-Yolanda assessment conducted by an international NGO:

- Children said they heard about the approaching typhoon through the radio but thought that storm surge had something to do with lightning and thunderstorms
- Many people in the communities felt they had a lot of experience with strong typhoons and that their preparations were already enough
- Many believed that staying in concrete buildings and houses offered enough protection
- Some town officials in Eastern Samar said they issued warnings and told residents to evacuate but many chose to remain as they had been through similar typhoons before



In the wake of typhoon Yolanda, journalists in the Philippines have also become the story

/NSI's Red Batario reports from Tacloban, Leyte

Broadcaster Ronald Vinas and technician Allan Medino, both of DYVL AksyonRadyo, and reporters Archie Glovio and Malou Realino of DYBR-Tacloban were killed while reporting the advance of typhoon Yolanda. Both radio stations were swept away by the storm surge along with many other buildings in the city. Estimates by Tacloban City-based journalists and those from Samar Island put the number of displaced media staff at more than 50.

Imelda Q. Magbutay, station manager and program host of Community Mass Media (CMM) TV Channel 28, who survived the deluge but lost her TV station and apartment, said many reporters and radio broadcasters chose to remain at their posts “because people were relying on the media for typhoon updates.”

Traumatized by the experience, she described how she scraped together personal funds and loans from friends and her sister to put up the CMM TV channel last February 2013 only to see her dream disappear in less than an hour.

- Two municipalities in Eastern Samar and one in Leyte strictly followed emergency protocols including forced evacuation and had zero casualty

It was, however, at the height of TY Yolanda's rampage that the media demonstrated its capacity to rise to heroic heights while at the same time debasing itself with actions that can only be described as nothing short of pandering to bad taste.

With all communication lines down, it was the media that stepped into the breach most notably the big TV networks with their portable power generators that in the initial stages of the disaster provided vital links to humanitarian agencies and the outside world. Local and international news media were the first to report about the actual situation on the ground.

As the emergency entered into the early recovery stage, the news media continued reporting on extent of massive destruction, the urgency of emergency response and early recovery, arrival of international aid, and government action or inaction in a number of cases. It also provided the emergency response teams critical information on the status of devastated areas and linked those affected by the typhoon with relatives and friends in other provinces and Manila.

Four Tacloban City journalists also became casualties after they were swept away by the storm surge as they were reporting on the situation. (see sidebar)

On the minus side, some TV journalists were criticized for "grandstanding" at the height of the typhoon, they who reported right in the middle of the catastrophe that could have given viewers a false sense of TY Yolanda's actual strength. Media critics and observers also noted that the TY Yolanda coverage has given rise to the "I-and-me-as-the-story" kind of reporting instead of providing more information as to how citizens can access aid more quickly, for instance.

Another broadcaster from radio station DIWA, Jazmin Bonifacio, volunteered to stay on beyond her 6 a.m. sign-off because a colleague who was supposed to come in for the day shift could no longer leave her house due to fierce winds.

"When I peeked outside, our station vehicle was being spun by the wind so I decided to just stay put and hunkered down. But then the water came in, smashing down the door. It was so fast, I really thought I was going to die," she said.

Ricky Bautista, who works for the *Samar Weekly* newspaper, was filing a report from his house in Basey, Samar when its roof was torn off. As the walls of the concrete structure began crumbling, Bautista hustled his family members to the second floor of a nearby building where they weathered the typhoon, soaked but alive.

Marlon Tano, correspondent for *The Freeman* newspaper and IBC TV 6, had fled with his wife and two young daughters the night before the storm broke to a two-storey building near the provincial capital thinking the concrete structure would be safe. The storm surge smashed down doors and windows and in a matter of minutes Tano and his family found themselves clinging to the rafters after he punched a hole through the ceiling.

Sarwell Meniano, correspondent for *Business World* and the *Leyte-Samar Daily Express (LSDE)*, and his family, including his four-year-old daughter, had sought refuge in their village church in Tanauan, Leyte a few hours before Yolanda hit. As the storm ravaged his coastal town, he and other people in the church tried to cling to the church pillars to fight off the storm surge. Meniano was among several journalists here who were reported either dead or missing a few days after Yolanda. It took media groups, including CCJD and PECOJON, more than a week to locate him and his family: They were all safe and accounted for, but they lost all their possessions to the storm in an instant.

In March 2014, Meniano finished his MA Journalism with distinction at the Ateneo de Manila University, drawing inspiration from the people, including a child who lost all members of his family to Yolanda. "Walking for hours to and from the municipal hall just to charge my phone and file my stories and school requirements are still not enough to match the resilience of the people I met while reporting the aftermath of Yolanda," he said.


Beyond Yolanda

Clearly, TY Yolanda underscored even more the critical role that media plays in disaster risk reduction and management not only in the emergency and early recovery phase, but more importantly in laying the groundwork for addressing vulnerability through prevention and mitigation.

The catastrophe also pointed out the primary importance of improved, and perhaps seamless interaction between media and disaster management authorities especially the NDRRMC, international and local humanitarian NGOs, and among media organizations themselves.

One of the lessons that came out from the ruins is the urgent need to localize and popularize the PDRRMA of 2010 or RA 10121 including enhancing the awareness of media about its provisions especially those that relate to communications and coordination among agencies. Many journalists say they have not written about the law and its ramifications, “Because the news desk and the editors do not find it sexy enough.”

It should also be noted that despite some inroads in advocating for disaster risk reduction and management as a new paradigm, media coverage of disasters is largely dictated by long-held perceptions that disasters should be treated as disjointed events rather than a long-term process. As one journalist ruefully wrote in the book *Disaster Communication: A Resource Kit for Media*, “Even more serious than the sensationalizing of disasters is the media’s almost total neglect of the causes and consequences of disasters.”

And that is where most of the work in engaging the media in disaster risk reduction and management should begin. 

Theirs are not the only stories. Journalists continued to report across the Philippines, literally in the eye of the storm and seemingly oblivious of their own safety. Those who survived said they all thought their workplaces in concrete buildings were strong enough to protect them, but sometimes these could not. In one instance, several family members sheltered inside a radio station. It was destroyed by the storm surge and those who took refuge in the station are still missing.

During an emergency response and assessment mission in Leyte and Samar undertaken from November 17 to 24 by the PECOJON Philippines in partnership with the CCJD, DRRNet-Phils, and the INSI, representatives met with surviving journalists, identified their priority needs, and provided emergency cash assistance and temporary work assignments for some as stringers, fixers, or guides for international news agencies.

The journalists interviewed by the mission also said that they followed emergency and safety protocols based on warnings and advisories from the government but they didn’t expect the whole city would be devastated.

The mission noted that most of the journalists were exhibiting unmistakable signs of trauma and would often retell their experience over and over. Magbutay of CMMTV would break into tears in the middle of a conversation. She said she worries about her staff who have lost their homes and livelihoods.

It might take some time to rebuild news media outlets, many of which are privately owned. The building and printing equipment, for example, of the LSDE was completely destroyed. It is owned by local publisher Dalmacio Grafil who was rushed to Manila because of severe injuries.

Although the mission has provided some journalists with temporary employment as fixers or guides for international news agencies, or as field researchers on disaster preparedness, many more need some form of livelihood to keep them and their families alive – but all hope it is something related to journalism and media.

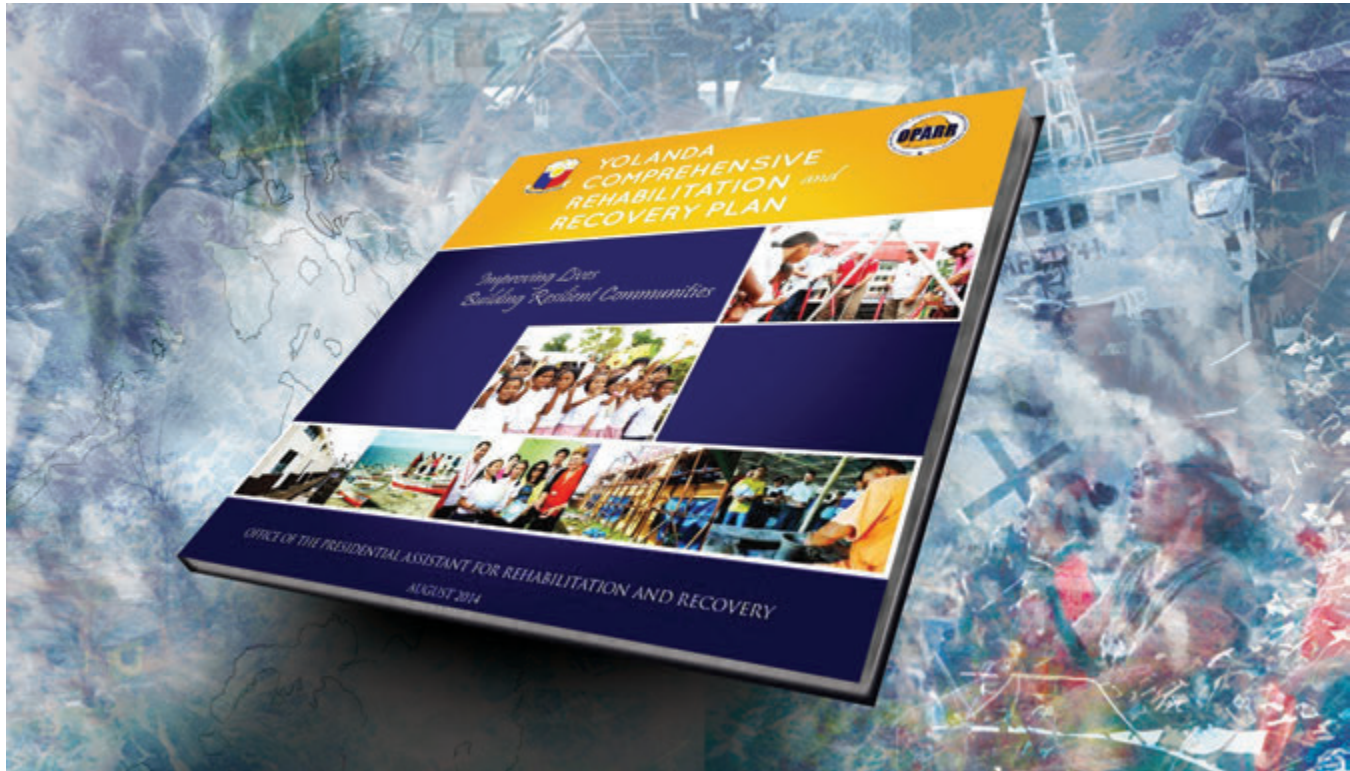
(This story was first published in the website of the INSI which looks into the safety of journalists. Red Batario is the INSI regional coordinator for Southeast Asia.)



PART



Building Back Stronger



Journey of the Comprehensive Rehabilitation and Recovery Plan

Days after TY Yolanda made its first landfall, the vice chairperson on recovery and rehabilitation, the National Economic Development Authority (NEDA), immediately started a series of damage and needs assessments. These will help government and its partners see the whole picture on how the disaster impacted on the lives, livelihoods, properties, investments, and other related sectors. Although the final recovery plan only came out after more than six months since the disaster happened, it really took into account the results from the different assessment reports done at different points during the response operations.



This section gives a background and chronology on the processes with the design and development of the TY Yolanda Comprehensive Rehabilitation and Recovery Plan (CRRP). It will provide an outline of the broad organizational context within which the CRRP was formulated in conjunction with various government offices along with the planning processes undertaken at the provincial level in the formulation of the LGU rehabilitation and recovery plans (LRRPs).



Reconstruction Assistance on Yolanda

One of the first activities undertaken by government was to prepare the Reconstruction Assistance on Yolanda (RAY) via NEDA. The RAY provided the decision-making basis for government interventions in the affected areas and used to guide the government to facilitate international donor assistance.

The RAY served as the government's strategic plan to guide the recovery and reconstruction of the economy, lives, and livelihoods in the affected areas. It was also drafted to set the direction and the design paradigm, which would provide a basis for the development and implementation of a full set of recovery and reconstruction interventions.

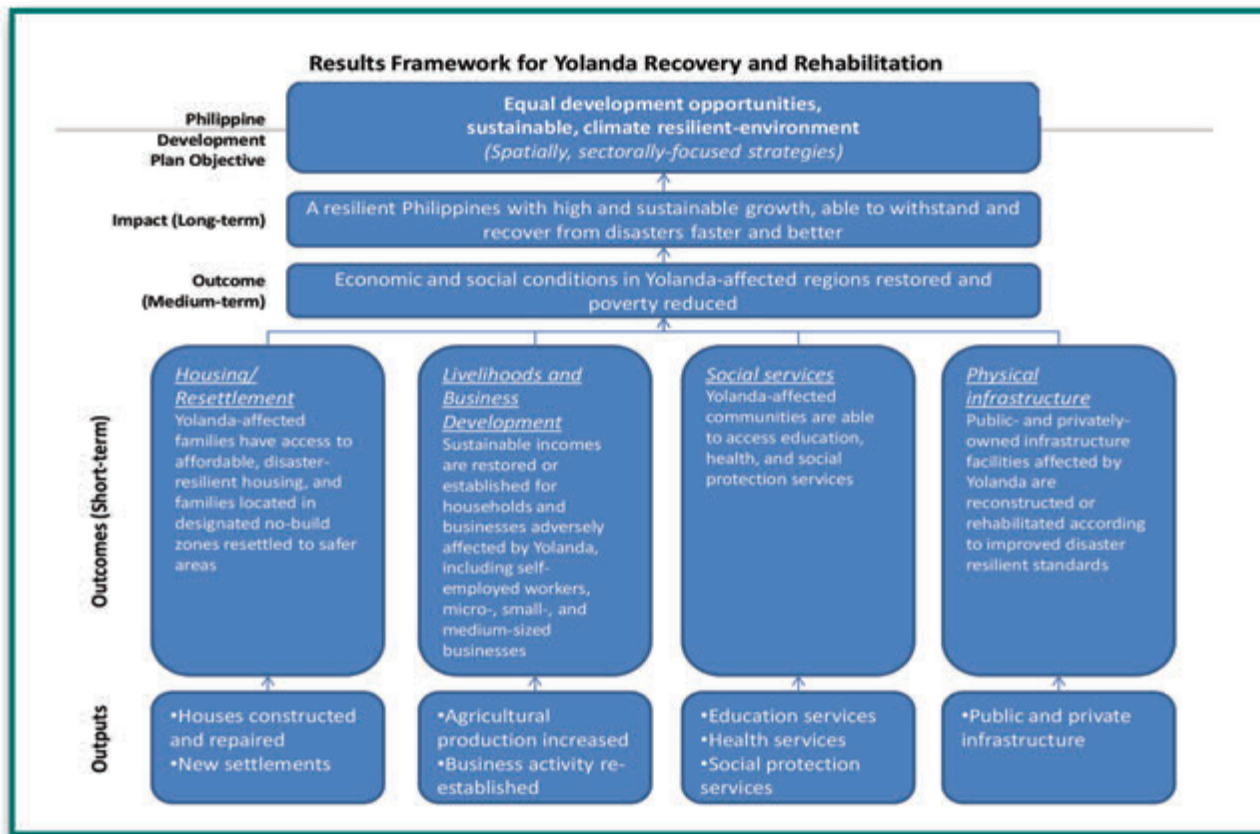
RAY- Implementation for Results (RAY- I4R)

A second document was prepared to accelerate and intensify the recovery and rehabilitation process. This report is known as RAY- Implementation for Results (RAY- I4R) aimed to establish the framework for recovery and present detailed planning, implementation, and policy actions in four priority result areas highlighted in Building Back Better: livelihoods and business development; housing and resettlement; social services; and, infrastructure.

The I4R is a framework that ensures the alignment of strategies of the Yolanda CRRP with the overall goals of the updated Philippine Development Plan (PDP).

Taking off from the RAY and the results of the PDNA, the I4R identifies short- and medium-term strategies, policies, and programs and projects for rehabilitation and reconstruction of areas affected by TY Yolanda. It focuses on strategic actions in priority recovery concerns which include sustainable land use, housing repair and reconstruction, business resumption and economic redevelopment, social sector response, infrastructure restoration, and mitigation.

The I4R shows the linkage of outputs to outcomes, and outcomes to the overall goal of the PDP all meant to reduce poverty and create more quality jobs. As such, it serves as the basis for the outcome monitoring of the CRRP particularly with respect to the contribution of rehabilitation activities towards the achievement of PDP outcomes.



The results framework

To achieve inclusive growth, the PDP aims for equal development opportunities and with sustainable and climate-resilient environment. Thus, it is necessary to have a disaster-resilient Philippines where communities are capable to withstand and recover fast and better from the negative impacts of disaster as well as adapt to changing climate.

The Yolanda Rehabilitation and Recovery Program aims to restore the social and economic conditions of affected areas not only to its original state but to a higher level of resilience. It focuses on putting back on track stalled services and damaged infrastructures specifically those that disrupted economic activities and consequently derailed

growth. Particular attention will be given to affected poor communities that can further slide to poverty.

Consistent with the specific PDP strategies on DRRM, the Program is anchored on four main outcomes in the short term:

- **Livelihood and business development.** Private investment and business play an important role in sustaining high and rapid growth. It is also necessary to restore incomes of households and businesses to ensure that damages and loss will not delay

growth. This is important considering that about 90 percent of total damage and loss from TY Yolanda were private assets and income, mostly from businesses. Policies and programs that enable increase in agricultural production and encourage the private sector to recover, reinvest, and restart their business activities should be put in place.

- **Housing and resettlement.** Inadequate quality type of houses and housing located



in hazard-prone areas were among the factors for the high number of damaged housing units and casualties from TY Yolanda. Houses will be disaster resilient and to be located in safer areas. Land use planning will resettle people in safe locations as well as identify the areas suitable for production or industrial use.

- **Social services.** Poverty can be aggravated when social services are denied. Likewise, those marginally non-poor areas can slide into poverty quickly if needed services are not immediately restored. Access to health and nutrition, education, and social protection services must continue to be extended to the affected population to ensure the recovery of communities even after the response/relief phase is through.
- **Infrastructure.** Along with the reconstruction of damaged public and private infrastructures to higher standards of resilience and along safe areas, strict implementation of policies and regulatory measures on construction and establishment of facilities, among others, should be undertaken. This will strengthen disaster risk mitigation which can reduce losses and prevent negative impact of future disasters from happening.

The results framework also incorporates cross-cutting issues which will be mainstreamed into the rehabilitation and recovery program. These include issues and concerns relating to gender sensitivity, protection of vulnerable groups, environmental sustainability, poverty reduction, and DRRM.



Post Disaster Needs Assessment

In accordance with RA 10121, OCD led the conduct of a PDNA using a multi-sectoral and multi-disciplinary approach to assess the disaster impacts and identify priority recovery and reconstruction needs.

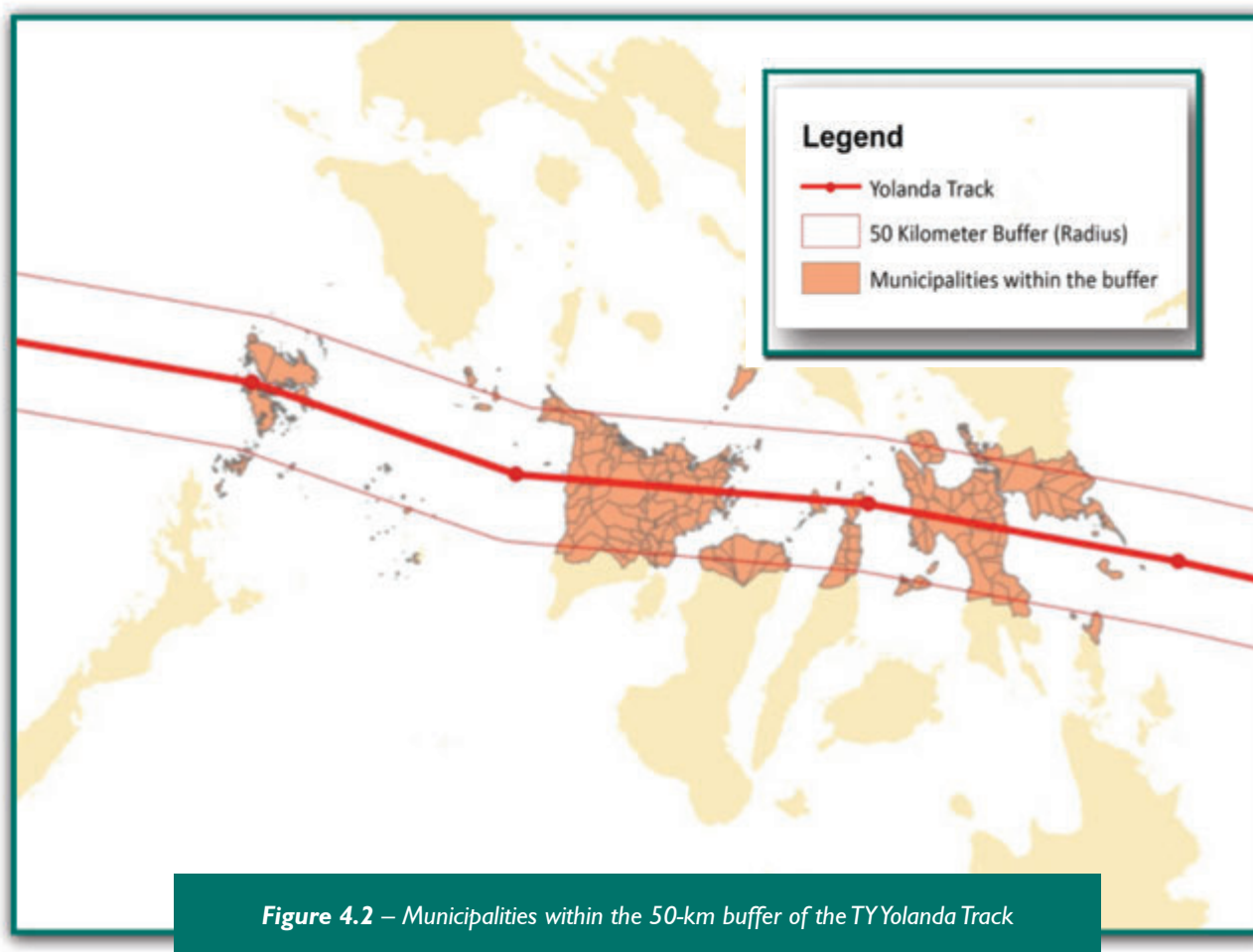
The post disaster needs assessment started on December 2013 and based on ground-verified information, the result was presented to the President on 16 May 2014. It covered the damage and loss assessment (DaLA) and human recovery needs assessment (HRNA) and included a recovery and reconstruction framework. In the PDNA process, OCD engaged the national government agencies, local government units, civil society organizations, NGOs, and barangay officials and residents. The data collected was field validated and assessed by experts and professionals and with cost valuation based on standard costing, local assessment, and agreed assumptions.



Using the locally adopted version of PDNA, the assessment team went to the field to gather information amidst many manpower, logistical, and related challenges.

Sectoral Approach

The broad sectors included infrastructure, productive, social, and cross sectoral areas. In addition, the assessment included subsectors in terms of their physical assets, flow of production, supply of goods and services, and Yolanda's possible impact in the overall macro economy.



Areas covered by the PDNA

The selection of areas covered by the PDNA was based on a three-point selection criteria, to include: a) areas within the 50-km radius of the typhoon track; b) hard-hit areas based on the NDRRMC situational reports; and c) areas validated by the OCD regional directors and the RDRRMC.

Seven OCD-led teams from the N/RDRRMC member-agencies were organized to cover the severely affected areas namely: Tacloban City, Leyte; Eastern Samar; Samar; Southern Leyte;

Biliran; northern Palawan; northern Cebu; Aklan; Antique; Iloilo; and Capiz.

All in all, the report covered a total of

- 155 municipalities
- 7 cities in
- 11 provinces of
- 4 regions

A total of 536 personnel from national, regional, local, private and other non-government agencies, CSOs, and international partners participated in the PDNA.

PDNA Results

The PDNA reported that the typhoon caused damages worth a total of P89.598 billion, P42.759 billion for losses, and P104.644 billion needed for recovery and reconstruction needs.

The PDNA also recommended a recovery and reconstruction framework to aid decision makers and players on short-, medium-, and long-term priorities, and possible options for rebuilding a safer, adaptive and building-back-better disaster-stricken communities.

The PDNA report gave the following development recommendations:

- strengthen and preserve the baseline data in the subsector levels;
- standardize measures of quantity as well as the quality of specific measures for damage, loss, and needs;
- standardize criteria for prioritization of needs;
- facilitate access to the NDRRM Fund especially those regarding the restoration of lifelines and utilities owned and managed by GOCCs and private corporations;
- ease assistance for the business community, e.g. industries, trade, and services subsector;
- have risk transfer mechanism and insurance coverage especially for critical public infrastructure; and
- revisit the NDRRM Fund and make sure that this is used for DRR and not just used after a disaster had struck.

Region/Province	Damage (in pesos)	Losses (in pesos)	Needs (in pesos)
Region IV-B			
1. Northern Palawan	703,885,673.39	351,870,736.28	1,118,920,742.75
Sub-total	703,885,673.39	351,870,736.28	1,118,920,742.75
Region VI			
1. Aklan	2,034,729,909.50	846,679,279.25	5,370,882,457.33
2. Antique	1,580,873,094.88	256,854,659.01	2,354,077,626.99
3. Capiz	5,608,181,880.85	1,584,681,826.28	13,175,015,801.04
4. Iloilo	5,394,980,264.96	1,664,802,862.83	11,913,684,852.88
Sub-total	14,618,765,150.19	4,353,018,627.37	32,813,660,738.24
Region VII			
1. Northern Cebu	5,677,349,596.71	2,575,046,742.70	8,801,932,720.34
Sub-total	5,677,349,596.71	2,575,046,742.70	8,801,932,720.34
Region VIII			
1. Biliran	331,603,497.64	238,316,182.00	1,408,395,457.82
2. Leyte	50,911,426,069.12	24,061,941,842.54	30,161,719,112.80
2.1. Tacloban City	6,948,485,783.18	5,308,802,499.25	12,987,188,785.83
3. Southern Leyte	242,486,132.31	118,495,920.60	1,084,226,373.19
4. Eastern Samar	5,387,757,077.93	5,333,178,535.87	11,146,563,507.39
5. Samar	4,776,309,654.41	418,958,939.29	5,122,257,756.05
Sub-total	68,598,068,214.59	35,479,693,919.55	61,910,350,993.08
TOTAL	89,598,068,634.88	42,759,630,025.90	104,644,865,194.41

Table 4.1 - PDNA Results

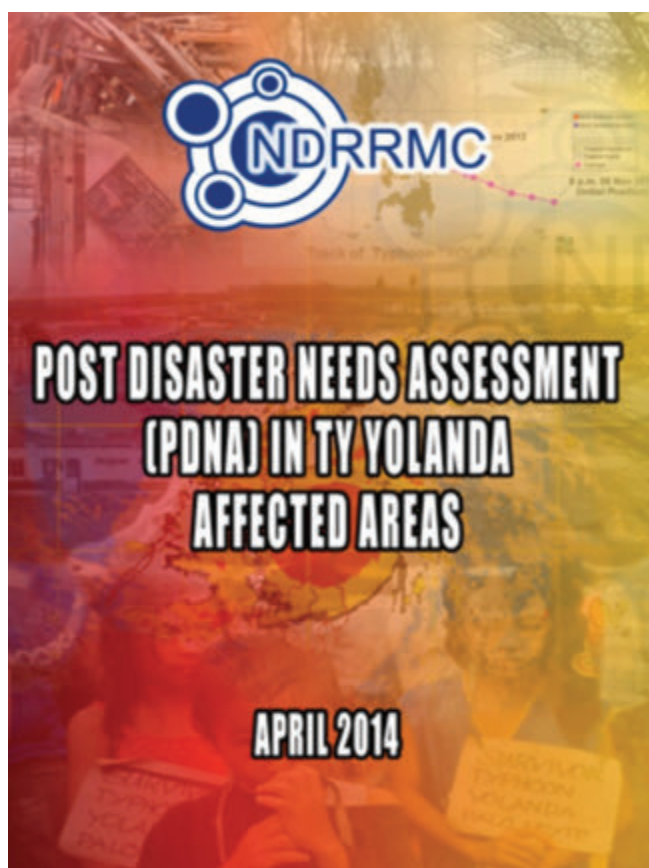
It recommended a recovery and reconstruction framework to aid decision makers and key stakeholders on short-, medium-, and long-term priorities, and possible options to rebuild, adapt, and build back better.

Development recommendations from the PDNA:

- review the National Building Code;
- strict monitoring and regular inspection to ensure compliance with building standards and designs;
- provide microfinance loans to marginalized farmers and fisher folk;
- improve and widen the scope of crop and animal insurance system, and require the micro and small enterprises to insure their businesses;
- review specific DRRM, governance, and gender matters;
- review of RA 10121 and its IRR;
- update/formulate DRRM policies to ensure its adequacy to respond to large and complex disasters;
- evaluate the proposed national policy on “40-meter no-build zone” versus “unsafe zones” or “no dwelling zones”;
- review of other related laws: Local Government Code, GSIS Charter, Water Code, Tariff and Customs Code, etc.;
- establish risk transfer mechanism to cover marginalized sectors, i.e. poor and vulnerable, MSMEs; and households; and,
- earmark at least five percent gender budget for all projects and programs designed for implementation.

In addition, the assessment also identified the following activities to improve the conduct of PDNA:

- revise the guidance notes and strengthen the capacity of government agencies to conduct PDNA from the national to the local level;
- form a technical team at the national level to a software application to estimate values for damage-loss-needs, a “DLN calculator” which can cut short and fast track the PDNA process;
- strengthen and preserve the baseline data in the subsector levels;
- standardize measures of quantity as well as the quality of specific measures for damage, loss, and needs; and,
- standardize criteria for prioritization of needs.



Comprehensive Rehabilitation and Recovery Plan

The CRRP provides the overarching policy framework and outlines the government's commitment to implement over 25,000 disaster rehabilitation and recovery specific programs, projects, and activities (PPAs) in areas affected by TY Yolanda. The P170.9 billion CRRP was finalized and delivered to President Aquino by the Presidential Assistant for Rehabilitation and Recovery (PARR), Panfilo M. Lacson, on 1 August 2014.

A key feature of the CRRP is the institutional processes that the PARR has established for the engagement and coordination of various nongovernment, private sector, international donors, and international aid agencies.

As outlined in the CRRP, the PDNA presents a Strategic Framework for Recovery which finds its groundings in RA 10121 or the Philippine Disaster Risk Reduction and Management Act of 2010. The Philippine Development Plan 2011-2016 that adopted a framework of inclusive growth aimed at achieving high sustained growth, generating mass employment, and reducing poverty; and promoting the President's Social Contract to the Filipino people. The PDNA identified a number of critical policy issues requiring attention. Some of these have subsequently been addressed in RAY-I4R or are matters under consideration by the rehabilitation and recovery support cluster of the OPARR.

The CRRP stems from both the RAY I and RAY-I4R and provides projects, programs, and activities to meet the needs as identified in the PDNA. The CRRP is complemented and supplemented by the rehabilitation and recovery plans prepared at the

province and city levels. This is a detailed plan that provides details of the modalities, and establishes guidance for national departments and agencies. A significant part of the rehabilitation and recovery efforts is from the nongovernment sector which will support the implementation projects focused on four areas; education, health, housing and livelihood. These entities have contributed significantly to the recovery efforts via methods established by OPARR such as donors, sectoral sponsors, or development sponsors.

Timeline of development of CRRP

March 2014

- team is assigned on part-time basis to assist OPARR in developing a comprehensive rehab master plan
- UNDP funds the appointment of personnel to formulate and identify rehabilitation and recovery initiatives

April

- first draft is assessed by the PARR
- the President agrees to partial and phased implementation

May

- the PARR works closely with provincial planners to fast track the inclusion of provincial plans in the CRRP
- UNDP and USAID provide technical assistance to support government's livelihood cluster and help capacitate LGUs in preparing their LRRPs

June

- the LRRPs for Cebu, Iloilo, Eastern Samar, Leyte, Samar, and Tacloban City are approved by the President

Underlying logic in the formulation of the CRRP

The underlying logic in the development of the CRRP can be traced back to the development baselines as articulated in the PDP. According to the CRRP, pre-disaster data indicated that the affected regions experienced high rates of malnutrition. Eastern Visayas, for example, had the second highest rate of child mortality in the Philippines. Many households in the Visayas lacked access to safe water and sanitary toilet facilities. Elementary enrolment was generally high, with most near or above the national enrolment rate of 91.2 percent. Moreover, the regions, particularly Eastern Visayas, lagged behind in cohort survival and completion rates.

These matters were to be addressed as part of the

PDP with the adopted framework of inclusive growth that incorporates high sustained growth, generation of mass employment, and reduction of poverty. Through the PDP, government intends to pursue rapid and sustainable economic growth and development, improve the quality of life of the Filipino people, empower the poor and marginalized, and enhance our social cohesion as a nation.

As a result of typhoon Yolanda, the people of the affected regions had been relegated to an even worse poverty status and need considerable interventions to bring the affected regions up to the targets originally envisaged under the PDP and to build back better wherever possible. The framework outlined in the diagram on the following page provides an outline of the logical framework that underpins the development of the CRRP.



Figure 4.3 - Draft TY Yolanda Comprehensive Rehabilitation and Recovery Plan Logical Planning Framework

The CRRP also acknowledges that a wide range of multi-faceted economic and social elements contribute to recovery including the effects of private sector economic activity and return of overseas remittances etc. However, the CRRP focuses largely on two types of fundamental government inputs that are required to underpin the full rehabilitation recovery of the affected areas: those key government programs and service delivery commitments identified in line with meeting ongoing development objectives, and continuation of service delivery along with those additional inputs required for recovery.

Another facet of the logic underpinning CRRP is a commitment to harness and capitalize on the extant procedures, practices and existing governance, policy, and legislative structures of the national government. This logic also assumes that the PPA mechanisms are used as the bases of inputs to the process and that these inputs are adjusted following regular sector outcome evaluations in conjunction with NEDA the NDRRMC and other governing institutional arrangements.

The CRRP has at its core the following objectives:

- to restore, rehabilitate, or reconstruct damaged infrastructure necessary to sustain economic and social activities;
- to repair houses or rebuild settlements and basic community facilities and services that are more resilient to natural calamities;
- to restore the peoples' means of livelihood and continuity of economic activities and businesses; and,
- to increase resilience and capacities of communities in coping with future hazard events.

Appointment of the Presidential Assistant for Rehabilitation and Recovery

By MO 62, the President appointed the PARR on 6 December 2013 to unify the efforts of government and other agencies involved in the rehabilitation and recovery effort. President Aquino signed the official appointment of former Senator Panfilo Lacson who was dubbed by the media as “rehabilitation czar.” Lacson would oversee reconstruction in the regions that typhoon Yolanda devastated; the PARR holds a cabinet rank under the Office of the President.






The PARR’s mandate is primarily directed towards the unification of efforts of government and other agencies. The PARR’s authority over nongovernment organizations and private sector is only (through moral suasion), regulatory in nature pursuant to existing laws, rules, and regulations because the President, or the government, has little directive authority over them.

PARR as overall manager and coordinator



Although the PARR is to “act as overall manager and coordinator of rehabilitation, recovery, and reconstruction efforts of government departments, agencies, and instrumentalities in the affected areas, to the extent allowed by law,” it cannot interfere in the different mandates of the departments, agencies and instrumentalities. The PARR must, instead, harmonize their involvement in the rehabilitation and recovery pursuant to their mandate as defined by law. PARR’s control is over the unification and consolidation of the efforts.

The following graphics provide an outline and high-level summary of the institutional governance and leadership structures of each of the five government-led rehabilitation and recovery clusters departments and agencies along with the core membership of each. It is important to note that the cluster structures are designed to be flexible and are able to accommodate new member departments or agencies along with invited nongovernment sector key stakeholders in order to fully inform, effectively coordinate and implement as efficiently as possible the approved government led PPAs.

	Objective	Member agencies		
Infrastructure 	<ul style="list-style-type: none"> All infrastructure-related rehabilitation Construction, repair, and restoration of damaged roads, bridges, and other public infrastructure 	<ul style="list-style-type: none"> DPWH DepEd DOE DENR DTI LWUA 	<ul style="list-style-type: none"> DA DOH DOST DOTC DILG OCD 	<ul style="list-style-type: none"> DAR CHED NIA NEA
Resettlement 	<ul style="list-style-type: none"> Relocation of affected residents from unsafe zones Construction of new houses in resettlement sites Development of sustainable communities 	<ul style="list-style-type: none"> HUDCC NHA HLURB DILG DA DAR DPWH 	<ul style="list-style-type: none"> DepEd DENR DOH DOST DSWD NCIP OPAPP 	<ul style="list-style-type: none"> OCD NAPC
Social services 	<ul style="list-style-type: none"> Transition from relief operations to early recovery and community services Food, health, education, and emergency shelter assistance and core shelter assistance 	<ul style="list-style-type: none"> DSWD DND DA DAR DepEd 	<ul style="list-style-type: none"> NHA OCD DENR DOH HLURB 	<ul style="list-style-type: none"> HUDCC NCIP CHED
Livelihood 	<ul style="list-style-type: none"> Provision of livelihood assistance to affected families Crop production and industry and trade services, forestry, fishery, and livestock & poultry industries 	<ul style="list-style-type: none"> DTI DOLE DOT DA DENR OCD NAPC DAR 	<ul style="list-style-type: none"> DOST DSWD HUDCC NCIP NHA OPAPP TESDA GFIs may be invited 	<ul style="list-style-type: none"> LBP DBP
Support 	<ul style="list-style-type: none"> Address cross-cutting policy concerns and issues Assist OPARR in vetting the cluster action plans Identification and provision of funding support for major programs & projects 	<ul style="list-style-type: none"> DBM DFA DOF DOJ DSWD PMS OCD PCDSPO PCOO 	<ul style="list-style-type: none"> NEDA OES OCS OPA COA DPWH HLURB DENR DILG 	<ul style="list-style-type: none"> DOST CCC

Note: Cluster memberships may be updated as needed

Figure 4.4 – OPARR National Government Cluster Membership

PARR's responsibility to formulate plans and programs

MO 62 mandates the PARR to formulate the necessary “plans and programs for the rehabilitation, recovery, and development of the affected areas.” In the performance of this task, he has to coordinate with the NDRRMC and its member-agencies and consult with the concerned LGUs.

The plans and programs to be formulated are required to include “an overall strategic vision and integrated short-, medium-, and long-term programs” and should specify the details of the participation of the NGOs, private sector, multilaterals, and other stakeholders.

After the CRRP was finalized, it was presented to the President in August 2014. The plans and programs became the official document and policy of government in the rehabilitation and recovery efforts of the areas affected by Yolanda and thus legally binding to all departments and agencies of the government.

The PARR determines and indicates multi-year programs and the possible required funding for each year even after the lapse of its mandate.

Oversight function in the implementation of the plans and programs

Although the PARR has no technical authority to implement the plans and programs as formulated, he still has to make sure that the plans and programs, as approved by the President, are duly implemented. This oversight function therefore gives the PARR

the responsibility of: 1) monitoring the execution of the plans and programs; 2) determining whether the implementing agencies are effecting the blueprint as approved and in accordance with the laws; 3) untangling of bottlenecks; and, 4) making sure of the timely release of funding in accordance with the plan.

In recognition of the enormity of the task before the PARR, MO 62 therefore provides him the institutional mechanisms to summon or request any department, bureau, office, agency, or instrumentality of the government, including government-owned or controlled corporations (GOCCs), government financial institutions (GFIs), including LGUs, to assist him in carrying out his mandate. This complements his primary task as overall manager and coordinator in the rehabilitation, recovery, and reconstruction efforts of government.

Key institutional activities

One of the early objectives of the PARR was the coordination and harmonization of humanitarian activities. To facilitate the PARR's role as overall

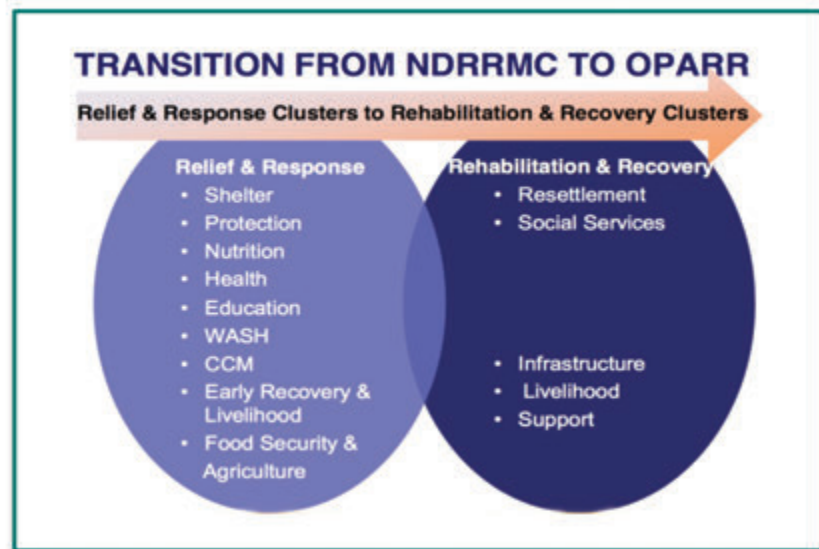


Figure 4.5 – Transition to OPARR Cluster Structures

manager and coordinator, OPARR established five government clusters. The following diagram provides an outline of the transitional process from the humanitarian to the PARR government cluster structures.

The national government cluster structure enables the PARR to exercise oversight over government agencies regarding the formulation and implementation of the plans and programs as well as submit status reports as required by the President.

This institutional oversight and coordination function is expressed in the following schematic diagram.

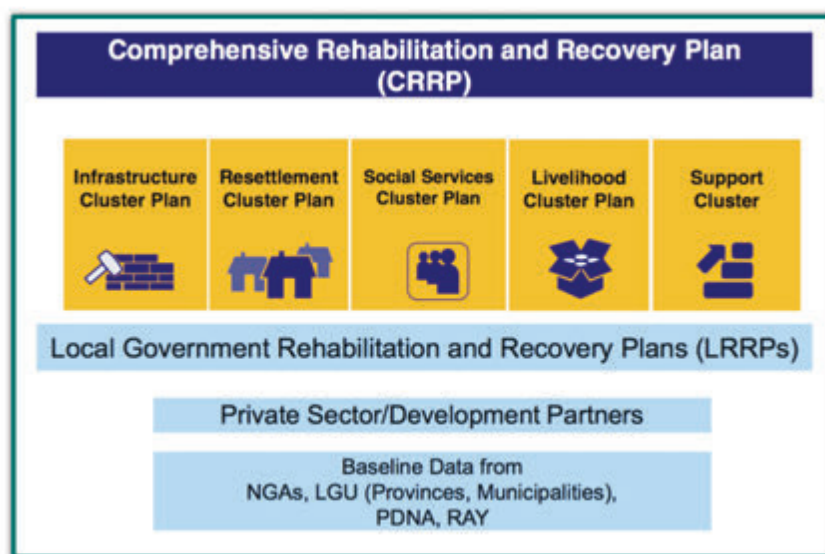
Consultation with LGUs was undertaken in the formulation of plans and programs for the rehabilitation, recovery, and development of affected areas. PARR had proposed funding support for the implementation of the plans and programs and developed the policy framework to exercise oversight over the implementation of the

plans and programs. Ultimately, PARR developed the CRRP to provide an overall strategic vision and integrated short-, medium-, and long-term plans and programs.

OPARR will establish coordination protocols between government-implemented programs and projects, and those implemented by private sector entities or international development partners to mitigate potential problems of interdependency. This may involve matters such as sharing of implementation plans, detailing technical oversight, and coordination of implementation programs.

A delay or problem in the delivery of one program can have a significant effect on the resources required to achieve outcomes in another. Program managers will map these interdependencies during the cluster planning and then put in place mitigation, contingency, reporting and information-sharing strategies so that these potential problems can be identified and addressed early. The following figure provides an overview of the structure and inputs to the content of the CRRP.

Figure 4.6 –
CRRP
Planning
Inputs



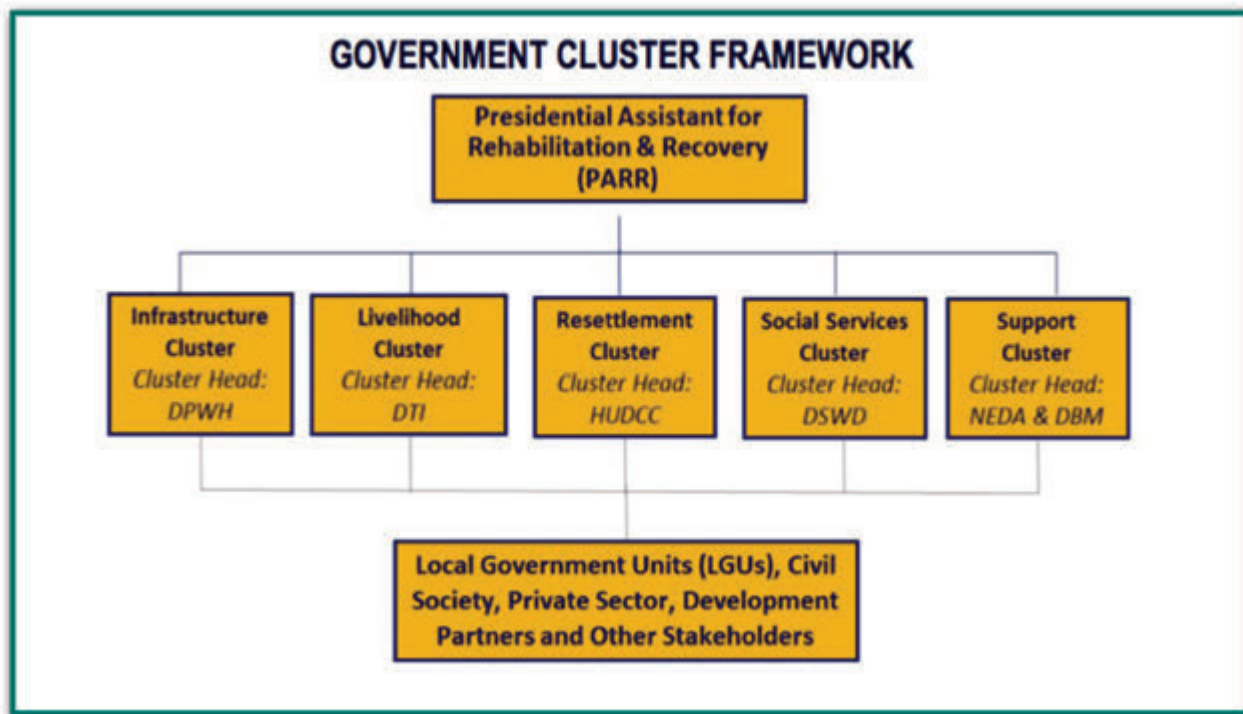


Figure 4.7
-- Five Government Clusters

Five Government Clusters

Infrastructure Cluster

The goal of the Infrastructure Cluster is to build back better by rehabilitating and improving infrastructure to support recovery and rehabilitation as well as the enhancement of disaster resiliency of affected communities.

The Infrastructure Cluster has adopted the following recovery PAPs:

- upgrading of minimum performance standards and specifications for the design and structural components as well as

materials for public infrastructure such as schools, public markets, municipal/city and community halls, bridges, etc.; and,

- repair and rehabilitation of infrastructures. Social infrastructures (e.g. schools, classrooms, technical vocational institutions, health facilities), essential infrastructures (e.g. roads, bridges, airports, seaports), and livelihood infrastructures (farm-to-market roads, post harvest facilities and warehouses, agricultural demo farms and laboratories, fish warehouses, and tourism roads and facilities).



Infrastructure Cluster expected deliverables:

Repair/rehabilitate/reconstruct the following:

116.32 km of national roads; 22 national bridges; six airports; 35 seaports; 13,406.17 km of conductors/power lines; 19,648 classrooms; 28 school buildings; 153 provincial/city/municipal halls; 137 civic centers; 859 barangay halls; 1,867.48 hectares covered by communal irrigation systems; 132 public markets; 304.51 km of farm-to-market roads; 58 water facilities; and 38 halls of justice.

Resettlement Cluster

The goal of the Resettlement Cluster is to relocate families living in hazard-prone areas to safe areas and to develop sustainable and disaster resilient settlements.

The Resettlement Cluster has adopted the following PAPs:

- construction of disaster-resilient houses that can withstand a wind load of 250 kph;
- development of new settlement sites with basic community facilities; and,
- carry out capacity-building programs for affected families such as community management and self-help training programs.

Resettlement Cluster expected deliverables:

- construction of 205,128 housing units;
- identify and acquire safe and suitable resettlement sites;
- construction of community facilities such as 537 schoolbuildings, 202 multi-purpose covered courts in new settlement sites; and,
- provision for sustainable livelihood opportunities in new settlement sites.



Social Services Cluster

The goal of the Social Services Cluster is to facilitate delivery of basic services such as education, health, and social protection services to affected communities as well as provide healthy environment and strengthen capacity to cope future hazards and disasters.

The Social Services Cluster has adopted the following key PAPs:

- basic and higher education support/health and nutrition/food security will involve food distribution to vulnerable groups, insurance subsidy to farmers;
- environmental protection will have mangrove rehabilitation, re-forestry, and agro-forestry development; and,
- on-site shelter assistance will involve emergency shelter assistance, cash-for-work, shelter assistance for indigenous people communities; land-use planning.

Social Services Cluster expected deliverables:

- provide 135,135 students with college scholarship grants;
- assist 19 SUCs with damaged equipment and instructional materials;
- provide 6,377,842 students textbooks;
- give supplemental feeding to 434,835 students;
- distribute 517 computer packages;
- provide water disinfectant to 176,522 households;
- deploy 232 midwives;
- provide health services and medicines to 582 patients;
- give delivery kits to 115,435 pregnant women;
- distribute 197 weighing scales and 197 height boards;
- give away 500,000 learning kits;
- rehabilitate 16,807 hectares of mangrove and 29,366 hectares of forest land;
- develop 362 hectares for agroforestry;
- provide shelter assistance to 966,341 families including 1,075 families from IP communities;
- have insurance subsidy for 35,164 farmers;
- distribute 77,739 food packs; and,
- assist 171 LGUs in the formulation of their CLUPs.

Livelihood Cluster

The goal of the Livelihood Cluster is to achieve inclusive, sustainable business and livelihoods in affected areas.

The Livelihood Cluster has adopted the following PAPs:

- support agriculture particularly livestock and poultry production; provision of farm tools and equipment; coconut planting/replanting, timber disposal and utilization, intercropping;



- provision of various seeds for high value crops, rice, corn, vegetable, and fruit production;
- support the fisheries and aquaculture by providing fishing boats, motor engines, fishing gears and other paraphernalia, seaweed dryers and seaweed farm implements; aquaculture rehabilitation and development;
- support the industry and services particularly the small and medium enterprise roving academy (SMERA) program by providing access to finance project; business investment enabling environment project; marketing assistance; product packaging, design, and labelling assistance;

- emergency employment and livelihood assistance;
- science and technology support to agriculture, fishery and micro, small, and medium enterprises; and,
- vocational education, technical skills training, and capacity development.


Livelihoods Cluster expected deliverables:

- expansion of food and income base to 6,068,300 individuals including 705,495 farmers; improvement of coconut-based farming systems; rehabilitation of abaca industry, and development of Regions IV-B, VI, VII, and VIII as “fruit bowl”;

- provide 98,684 fisherfolk with boats and fishing gears; promotion of fisheries registration system; and rehabilitation of mariculture parks and seaweeds farming;
- assist 32,359 MSMEs by establishing and strengthening industry clusters using the value-chain approach; identification of market linkages; provision of affordable and accessible financial services; and creation of business-enabling environment; and,
- help 50,000 individuals through vocational technical skills training and at least 85 LGUs through capacity development in local employment promotion and local economic development.

Private sector participation

OPARR has spearheaded the coordination of the private sector and support of nongovernment organizations to the rehabilitation and recovery projects, programs, and activities and continues to sustain these collaborative efforts through regular consultations and information exchanges with them.

These stakeholders include private corporations and their foundations, local and international NGOs, people and community organizations and foundations, all of which have been actively involved starting from the initial relief and response stages of this great humanitarian effort. 







EPILOGUE

Hopefully Nevermore

Yolanda had, without reservations, made it emphatic that coastal areas are, in DRR terms, not ideal for human habitation. Tacloban City found this the hard way and has now identified resettlement sites for those who used to occupy spaces near or along the shore. But relocating has its downside; transferees become far removed from their source of livelihood and have to fork out more for transport fare.

It is impossible to relocate everyone living in high-risk areas such as coastal communities, that would be tantamount to aggravating poverty, the very factor that increases vulnerability in the first place.

To recover goes beyond changing locations. It entails changing visions.

Building back better means imagining development differently, it should be based on strategic perspectives, not on knee-jerk or traditional solutions. Communities are perennially exposed to natural hazards and many will be exposed to new, more vicious ones. But exposure does not automatically translate to vulnerability. Vulnerability is as much a result of exposure to extreme environmental stress as it is a function of poverty, inequality, inadequate protection, and insufficient participation.

The exposure of some will be much higher than others; the dangers faced by some will be far more serious than others. Helpage, for example, estimates that “almost two fifths of people killed by Yolanda were over the age of 60 – despite the fact that the group made up only 8 percent of the general

population in the worst affected areas. As with previous natural disasters, the data suggest older people have been disproportionately affected.”

In short, risk assessment will be an important element because vulnerabilities vary at such a large scale. Women and children in poor coastal communities will be particularly exposed. PWDs will need to be especially cared for. But on the other side of this question of vulnerability is the question of capacity: women, children and PWDs cannot just be passive recipients of assistance and goodwill. They are the most important stakeholders in the whole equation, and their participation is crucial to the success or failure of this DRRM project. They need to be involved throughout. Spontaneous actions of groups of people during and after Yolanda resulted in clear triumphs amidst insurmountable odds. What more if they were organized, well-equipped, and sufficiently resourced.

In terms of preparedness, short-term actions will not do. The disasters have become too huge and too complex that these need to be matched with deliberate plans, systems, structures, and processes that ensure the people are well covered. This involves community organization and stewardship, making sure that each has a stake. Structures include education, the best weapon in facing future challenges for each one’s survival.


The “dream law”

The country has made a potentially game-changing step when it passed the new DRRM law in 2010. Dubbed the “dream law,” it reflects the paradigm shift in disaster management and DRR. It affirms the

framework of DRRM as a continuum that requires constant attention involving multiple layers. It is no longer a stand-alone concern that can be handled by a specific sector or office, but a major component in overall governance that requires not only an “all government approach” but an “all of society approach.”

But that game-changing potential has yet to be fully realized. At the national level, the DRRM Council has already been constituted, and the model it adopted stands head and shoulders above the models of other countries because of the strategic space it affords to other stakeholders, chiefly civil society as well as the religious sector, the private sector,

and the academe. The challenge is to make sure that this model works and to make sure that multi-stakeholder cooperation happens at the local level.

In the municipalities visited for the lessons-learned project, there was not much seen by way of constituting DRRM Councils with full stakeholders participation. There were hesitation in a number of local governments in fully involving organized groups into DRRM governance. Yolanda has shown that this state of affairs cannot continue. The success of DRRM depends primarily in government leadership in mustering the collective strength of stakeholders and in creating harmony and synergy towards progress and resilience. 



ACRONYMS

AADMER	ASEAN Agreement on Disaster Management and Emergency Response
ABP	Adopt-a-Barangay Project
ACFPI	American Chamber Foundation Philippines, Inc.
AFP	Armed Forces of the Philippines
AKP	Aksyon Klima Pilipinas
AOR	Area of Responsibility
ASoG	Ateneo School of Government
AusAID	Australia Agency for International Development
BDRRC	Barangay Disaster Risk Reduction and Management Committee
BFAR	Bureau of Fisheries and Aquatic Resources
BFP	Bureau of Fire Protection
BUPB	Bottom-up Planning and Budgeting
CAAP	Civil Aviation Authority of the Philippines
CANA	Citizen Action Network for LGU
CBDRRM	Community-Based Disaster Risk Reduction and Management
CCA	Climate Change Adaptation
CCAP	Climate Change Adaptation Plan
CCJD	Center for Community Journalism and Development, Inc.
CDP	Center for Disaster Preparedness
CDRC	Citizens Disaster Response Center
CJTF	Combined Joint Task Force
CLUP	Comprehensive Land Use Plan
CMM	Community Mass Media
CNDR	Corporate Network for Disaster Response
COA	Commission on Audit
CRRP	Comprehensive Rehabilitation and Recovery Plan
CRS	Catholic Relief Services
CSC	Civil Service Commission
CSO	Civil Society Organization
DA	Department of Agriculture
DaLA	Damage and Loss Assessment
DAMPA	Damayan ng Maralitang Pilipinong Api, Inc.
DLNcalculator	Damage-Loss-Needs Calculator
DBM	Department of Budget and Management
DepEd	Department of Education
DENR	Department of Environment and Natural Resources
DOE	Department of Energy
DOF	Department of Finance
DOH	Department of Health
DILG	Department of the Interior and Local Government
DOLE	Department of Labor and Employment

DPWH	Department of Public Works and Highway
DTI	Department of Trade and Industry
DOTC	Department of Transportation and Communication
DOST	Department of Science and Technology
DSWD	Department of Social Welfare and Development
DRR	Disaster Risk Reduction
DRR-CCA	Disaster Risk Reduction-Climate Change Adaptation
DRRM	Disaster Risk Reduction and Management
DRRMA	Disaster Risk Reduction and Management Act
DRRNetPhils	Disaster Risk Reduction Network Philippines
EWS	Early Warning System
EOC	Emergency Operating Center
GFI	Government Financial Institution
GOCC	Government-Owned and –Controlled Corporation
HFA	Hyogo Framework for Action
HRNA	Human Recovery Needs Assessment
ICS	Incident Command System
ICTMS	Information Communication Technology Management System
ILO	International Labor Organization
I4R	Implementation for Results
I.M.Prepared	Information Management in Preparation for Disasters
INGO	International Nongovernment Organization
INSI	International New Safety Institute
IOM	International Organization for Migration
IP	Indigenous People
IRA	Internal Revenue Allocation
IRR	Implementing Rules and Regulations
IWPR	Institute for War and Peace Reporting
JICA	Japan International Cooperation Agency
JMC	Joint Memorandum Circular
KALASAG	KAlamidad at SAKuna LABanan, Sariling Galing ang Kaligtasan
Km	Kilometer
Kph	Kilometer Per Hour
LDRRMC	Local Disaster Risk Reduction and Management Council
LDRRMF	Local Disaster Risk Reduction and Management Fund
LDRRMO	Local Disaster Risk Reduction and Management Office
LGU	Local Government Unit
LPA	Low Pressure Area
LRRP	LGU Rehabilitation and Recovery Plan
LSDE	Leyte-Samar Daily Express

MC	Memorandum Circular
MDG	Millennium Development Goals
MDRRMO	Municipal Disaster Risk Reduction and Management Office
MGB	Mines and Geosciences Bureau
MNCC	Multinational Coordination Center
MNLF	Moro National Liberation Front
MO	Memorandum Order
MOA	Memorandum of Agreement
MPSS	Minimum Performance Standards and Specifications
MSME	Micro Small and Medium Enterprises
MSWDO	Municipal Social Welfare and Development Office
NAMRIA	National Mapping and Resource Information Authority
NAPOCOR	National Power Corporation
NCDA	National Civil Defense Administration
NDCC	National Disaster Coordinating Council
NDRP	National Disaster Response Plan
NDRRM	National Disaster Risk Reduction and Management
NDRRMC	National Disaster Risk Reduction and Management Council
NDRRMF	National Disaster Risk Reduction and Management Fund
NDRRMOC	National Disaster Risk Reduction and Management Operations Center
NDRRMP	National Disaster Risk Reduction and Management Plan
NEDA	National Economic Development Authority
NGA	National Government Agencies
NGO	Nongovernment Organization
NGP	National Greening Program
NOAH	Nationwide Operational Assessment of Hazards
NPCDP	National Program on Community Disaster Preparedness
NUJP	National Union of Journalists of the Philippines
OB	Outside Broadcast
OCD	Office of Civil Defense
OPARR	Office of the Presidential Assistant for Rehabilitation and Recovery
OSS	One-Stop Shop
OWWA	Overseas Workers Welfare Administration
PAGASA	Philippine Atmospheric, Geophysical and Astronomical Services
PAR	Philippine Area of Responsibility
PARR	Presidential Assistant for Rehabilitation and Recovery
PCIC	Philippine Crop Insurance Corporation
PCG	Philippine Coast Guard
PCNA	Post Conflict Needs Assessment
PD	Presidential Decree
PDNA	Post Disaster Needs Assessment

PDRA	Pre-Disaster Risk Assessment
PDRRMS	Philippine Disaster Risk Reduction and Management System
PDP	Philippine Development Plan
PECOJON	Peace and Conflict Journalism Network Philippines
PFA	Psychological First Aid
PHIVOLCS	Philippine Institute of Volcanology and Seismology
PNP	Philippine National Police
PPA	Programs, Projects and Activities
PRC	Philippine Red Cross
PRRM	Philippine Rural Reconstruction Movement
PSWS	Public Storm Warning Signal
PWD	Person With Disability
QRF	Quick Response Fund
RA	Republic Act
RAY	Reconstruction Assistance on Yolanda
RAY-I4R	RAY-Implementation for Result
RDNA	Rapid Damage and Needs Analysis
RDRRMC	Regional Disaster Risk Reduction and Management Committee
REOC	Regional Emergency Operations Center
3Rs	Review, Revise and Really Implement
SAR	Search and Rescue
SMERA	Small and Medium Enterprise Roving Academy
SMS	Short Message Service
SNAP DRR	Strategic National Action Plan for DRR
SOG	Special Operations Group
SWB	Severe Weather Bulletin
TD	Tropical Depression
TESDA	Technical Education and Skills Development Authority
TS	Tropical Storm
TY	Typhoon
UN	United Nations
UNDP	UN Development Programme
UNFCCC	UN Framework Convention on Climate Change
UP	University of the Philippines
WVDFI	World Vision Development Foundation, Inc.

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