Public Disclosure Authorized

Technical Report

Public Expenditure Review:

Disaster Response and Rehabilitation in the Philippines

14 December 2020

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Acronyms and Abbreviations

AFP	Armed Forces of the Philippines
AFPRESCOM	Armed Forces of the Philippines Reserve Command
AO	Administrative Order
ARMM	Autonomous Region in Muslim Mindanao
ASEP	Association of Structural Engineers of the Philippines, Inc.
ATO	Air Transportation Office
BBS	Bureau of Broadcast Services
BDC	Barangay Development Council
BFAR	Bureau of Fisheries and Aquatic Resources
BFP	Bureau of Fire Protection
BJMP	Bureau of Jail Management and Penology
BLGF	Bureau of Local Government Finance
BMCRRP	Bangon Marawi Comprehensive Rehabilitation and Recovery Program
BRP	Barko ng Republika ng Pilipinas / Republic of the Philippines Ship
BSGC	Budgetary Support to Government Corporations
BTr	Bureau of the Treasury
C3	Command, Control and Communication
CDA	Cooperative Development Authority
CHED	Commission on Higher Education
COA	Commission on Audit
CRRP	Comprehensive Rehabilitation and Recovery Plan
CSC	Civil Service Commission
CSO	Civil society organization
DA	Department of Agriculture
DAR	Department of Agrarian Reform
DBM	Department of Budget and Management
DENR	Department of Environment and Natural Resources
DepEd	Department of Education
DILG	Department of the Interior and Local Government
DND	Department of National Defense
DOF	Department of Finance
DOH	Department of Health
DOJ	Department of Justice
DOST	Department of Science and Technology
DOT	Department of Tourism
DPWH	Department of Public Works and Highways
DReAMB	Disaster Response Assistance and Management Bureau
DRFI	Disaster Risk Financing and Insurance
DRMB	Disaster Response Management Bureau
DRRM	Disaster risk reduction and management
DSWD	Department of Social Welfare and Development
DTI	Department of Trade and Industry
ETC	Emergency Telecommunication Cluster
FY	Fiscal Year

GAA	General Appropriations Act
GAM	Government Accounting Manual
GDP	Gross domestic product
GFDRR	Global Facility for Disaster Reduction and Recovery
GOCCs	Government-owned and controlled corporations
HERTS	Health Emergency Response Teams
HLURB	Housing and Land Use Regulatory Board
HUDCC	Housing and Urban Development Coordinating Council
IRA	Internal revenue allotment
JICA	Japan International Cooperation Agency
JMC	Joint Memorandum Circular
LCE	Local Chief Executive
LDRRMF	Local Disaster Risk Reduction and Management Fund
LGU	Local government unit
LSG	Livelihood Settlement Grants
LWUA	Local Water Utilities Administration
MDS	Modified Disbursement System
MINDA	Mindanao Development Authority
MMDA	Metropolitan Manila Development Authority
MOA	Memorandum of agreement
MOOE	Maintenance and Other Operating Expenses
MRRRP	Marawi Recovery, Rehabilitation and Reconstruction Program
NASA	Neighborhood Association for Shelter Assistance
NBI	National Bureau of Investigation
NCA	Notice of Cash Allocation
NCIP	National Commission on Indigenous Peoples
NDRRMC	National Disaster Risk Reduction and Management Council
NDRRM Fund	National Disaster Risk Reduction and Management Fund
NDRRMP	National Disaster Risk Reduction and Management Program
NEA	National Electrification Administration
NEDA	National Economic and Development Authority
NFA	National Food Authority
NGA	National Government Agency
NHA	National Housing Authority
NIA	National Irrigation Administration
NOA	Notice of Award
NTC	National Telecommunications Commission
NYC	National Youth Commission
OCD	Office of Civil Defense
OP	Office of the President
OPAPP	Office of the Presidential Adviser on the Peace Process
OSEC	Office of the Secretary
PAGASA	Philippine Atmospheric, Geophysical and Astronomical Services Administration
PAGIBIG	Home Development Mutual Fund
PAPs	Programs, activities, and projects

PCG	Philippine Coast Guard
PCMs	Provinces, cities, and municipalities
PCNA	Post-conflict needs assessment
PCOO	Presidential Communications Operations Office
PCUP	Presidential Commission for the Urban Poor
PDNA	Post-Disaster Needs Assessment
PER	Public Expenditure Review
PhilHealth	Philippine Health Insurance Corporation
PHILVOLCS	Philippine Institute of Volcanology and Seismology
PIA	Philippine Information Agency
PICE	Philippine Institute of Civil Engineers
PNP	Philippine National Police
PRC	Professional Regulation Commission
PSF	People’s Survival Fund
PTNI	People's Television Network, Inc.
QRF	Quick Response Fund
RA	Republic Act
RANCAI	Registry of Allotment and NCA Issued
RAPAL	Registry of Appropriations and Allotment
RDANA	Rapid Damage Assessment and Needs Analysis
RDRRMC	Regional Disaster Risk Reduction and Management Council
RFU	Regional Field Unit
RO	Regional Office
RRP	Rehabilitation and Reconstruction Program
SARO	Special Allotment Release Order
SEA-K	SELF-Employment Assistance-Kaunlaran
SHFC	Social Housing Finance Corporation
SRR	Search, Rescue and Retrieval
SUCs	State Universities and Colleges
TESDA	Technical Education and Skills Development Authority
TFBM	Task Force Bangon Marawi

Executive Summary

The Philippines is exposed to a wide range of natural disasters, with losses to public and private assets from typhoons and earthquakes expected to exceed 1 percent of GDP every year on average.[1] This is likely exacerbated by climate change. The Philippines has been identified as the third most vulnerable country in the world to weather-related extreme events and sea level rise.[2] Disasters not only directly lead to human and capital losses they also reduce economic activity and growth potential. The effects on the population and damage to key assets and infrastructure impacts the fiscal balance as the government shoulders significant costs for response and recovery. Yet no comprehensive review has been carried out to identify and quantify total post-disaster public spending across agencies and among national and governments. Quantifying budget allocations, identifying source of fund post-disaster as well as challenges in the disbursement of funds could improve fiscal and financial management of disasters.

This Public Expenditure Review (PER) finds that post-disaster spending could be made more timely, transparent, and more efficient. This PER, the first comprehensive assessment of post-disaster spending in the country, found that one third of post-disaster spending was financed through pre-arranged funding sources for disasters. Yet frequently access to this funding was delayed and execution experienced bottlenecks. The other two thirds was mainly financed through regular budget allocation and reallocation of other budget lines. When a disaster strikes the country, other sectors have to finance the response through reduced budget allocations, compromising allocative efficiency. Moreover, the majority of costs was covered by the national government even though local governments have a dedicated budget for disasters.

The Government has undertaken important institutional and legal reforms to strengthen financial, physical and social resilience to disasters. The Philippine Disaster Risk Reduction and Management (DRRM) Act of 2010 provided a strong legal and institutional basis for holistic disaster risk management by mandating a shift from response to risk reduction and preparedness involving multi-sectoral coordination and active participation at the local level. In 2015, the DOF adopted the National Disaster Risk Financing and Insurance Strategy setting out key priorities for the government to strengthen financial resilience. The DSWD has recently developed social protection programs to also support disaster resilience and response. Finally given the President's priority to strengthen resilience to natural hazards, a proposal for the creation of a "Department of Disaster Resilience" is under discussion in Congress.

While public expenditure has been increasing steadily between 2015 to 2018, expenditure related to natural disasters has remained flat. National government spending increased from 16.0 percent of GDP in 2015 to 18.7 percent in 2018, with the highest increase in education (from 2.7 percent of GDP in 2015 to 3.2 percent in 2018),[3] health (from 0.7 percent of GDP in 2015 to 0.9 percent of GDP in 2018), and physical infrastructure (from 3.1 percent of GDP in 2015 to 5.3 percent in 2018) consistent with the government's focus on ramping up public investment in physical and human capital. While disaster exposure is increasing over the years, national government post-disaster spending has been relatively stable around 0.6 percent of GDP or 4.3 percent of total national budget. While this is higher

[1] Philippines National Probabilistic Catastrophe Risk Model developed by AIR Worldwide for the Government of the Philippines with support by the World Bank. On a long-term average basis, the Philippines is expected to incur 177 billion PHP per year in losses to public and private assets due to typhoons and earthquakes.

[2] Getting a grip on climate change in the Philippines: executive report (English). Public Expenditure Review (PER) Washington, D.C.: World Bank Group.

[3] Health, education, and infrastructure spending represent 4.5 percent, 15.4 percent, and 25.5 percent of total budget in 2018, respectively.

than Armenia (0.4 percent of GDP in 2010-15) and Indonesia (0.03 percent of GDP in 2014-18)[4], the Philippines is estimated to incur higher average annual losses (2.8 percent of GDP) than Armenia (0.6 percent of GDP) and Indonesia (0.4 percent of GDP).[5]

Between 2015-18 national government spending for rehabilitation and reconstruction averaged 0.63 percent of GDP - but fragmented and incomplete data on damages and losses makes it difficult to assess adequacy of funding. Table ES. 1 provides an overview of post-disaster spending on disasters from 2015 to 2018. This is financed through several sources of funds. Pre-arranged funding includes (i) Quick Response Funds (QRFs) averaging 0.03 percent of GDP between 2015-18 and (ii) the National Disaster Risk Reduction and Management Fund (NDRRM Fund) averaging 0.17 percent of GDP between 2015-18 (this can also replenish the QRFs). When disasters happen, agencies can use pre-arranged funds and/or their existing budgets, or, in case these are exhausted, tap into unprogrammed and general contingency funds. They can also request additional budget allocations or subsidies. Incomplete data makes it difficult to compare level of public spending against socioeconomic impact of disasters to assess efficiency and adequacy of spending. Estimates of disaster damage and losses are incomplete. Data on the use of different funding sources is fragmented. For example, annual consolidated reports on the use of disaster-related funds only cover the current year but funds are often used across multiple years. This is made more complex through multi-year budget appropriations.

Table ES. 1. Post-Disaster Allotment by National Funding Source
(in percent of GDP)

	2015	2016	2017	2018	Average
NDRRMF + augmentation	0.11	0.32	0.12	0.12	0.17
QRF	0.05	0.04	0.00	0.04	0.03
Agencies specific budgets	0.20	0.26	0.29	0.35	0.28
Subsidies to government corporations	0.04	0.21	0.04	0.04	0.08
Unprogrammed funds	0.15	0.00	0.03	0.08	0.07
Total authorized (as % of GDP)	0.55	0.84	0.48	0.64	0.63
Total authorized (as % of GAA)	4.10	5.93	3.19	4.08	4.32

Complex approval processes often delay the release of funding even from pre-arranged mechanisms, leading to delays in disaster response. Most funding sources require specific requests and approvals by different levels of government. This is especially a concern for pre-arranged funds where a streamlined approval process is important to achieve their objectives. For instance, requests for funding from the NDRRM Fund need to be evaluated by the Office of Civil Defense (OCD) and the National Disaster Risk Reduction and Management Council (NDRRMC), approved by the Office of the President (OP) for every request, and finally the Department of Budget and Management (DBM) releases the budget authorization. This process can be lengthy, with delays of up to one year or more reported against the prescribed timeline for national government agencies (NGAs) of 15 to 30 days.

These delays reduce the effectiveness of the NDRRM Fund in achieving its purpose. Delays in the approval process force agencies to find alternative sources to cover post-disaster costs and then potentially repurpose the NDRRM Fund funding when it materializes. The review also found significant authorized, but not released amounts of the NDRRM Fund, which could point to further weaknesses in the approval process. By contrast, QRFs can be readily used at the discretion of the agency. Although initial allocations are based on fixed amounts rather than past expenditure needs and they require regular replenishments. QRFs can be used only for prescribed disaster response activities (within the

[4] Estimates of disaster related spending in Armenia and Indonesia used different methodologies, therefore they are not perfectly comparable to the Philippines level.
[5] According to Global Assessment Report on Disaster Risks Reduction 2015. While the government is not expected to cover all damages caused by a disaster, as only a fraction will be related to public assets, this is a useful cross-country comparison.

current year or last quarter of the preceding year) or immediate mitigation measures for slow-onset disasters (such as droughts). Allocations to both the NDRRM Fund and QRF are not determined by evidence or data, but rather based on fixed amounts or previous year's needs.

The national government covered most of the post-disaster costs with the majority spent on: (i) public infrastructure, (ii) social assistance, and (iii) disaster rehabilitation for agriculture and housing. In the reviewed case studies, the national government contributed between 66 percent to 100 percent of total post-disaster expenditures with the rest financed by local government units (LGUs). This may however not account for all spending by LGUs, as this is often underreported. Among the expenditures over 2015-18, 37 percent of NDRRM Fund releases went to the Department of Public Works and Highways (DPWH) for public infrastructure repairs and reconstruction, while 25 percent went to the Department of Social Welfare and Development (DSWD) to augment its QRF and provide relief assistance. This was followed by spending on agriculture and irrigation activities (11 percent) and housing and shelter projects (9 percent). During the reviewed period no NDRMMF spending was approved for LGUs and only negligible amounts for preparedness and risk reduction, even though both are permissible.

Oversight agencies do not have complete data on the actual utilization of the country's disaster-related funds, making such expenditure analysis difficult. Data on utilization is limited since recipient agencies maintain individual reports and agency-specific audit reports have fragmented data and few disclosures on disaster-related expenditures. The Commission on Audit (COA) consolidated audit reports also have several weaknesses. For example, annual consolidated reports on the use of disaster-related funds only cover the current year (i.e., releases are matched with current-year utilization) but funds are often used across multiple years. In fact, the COA reports only covered 25 percent of the actual utilization of the NDRRM Fund in FY2015-18. In all the years studied, COA also highlighted a lack of proper reporting on the use of the Local Disaster Risk Reduction and Management Fund (LDRRMF) by many LGUs.

Policy Recommendations

The findings of this PER highlight several areas for improvement in public spending on disaster response, recovery, and reconstruction. The government of the Philippines has made significant progress in improving financial protection to disasters through the development and implementation of a National Disaster Risk Financing and Insurance Strategy since 2015. The focus so far has been on putting in place the financial instruments to ensure access to sufficient funding when disasters strike. A key next step will be to further strengthen the efficient and transparent execution of funds. These policy recommendations build on long experience of the World Bank in supporting countries around the world to strengthen public financial management of disasters.[6, 7]

To strengthen the public financial management of disasters, authorities should consider reforms along three main pillars: (i) ensure sufficient budget; (ii) streamline expenditure from the budget; and (iii) enhance oversight and control mechanism for transparency and accountability.

1. Ensure that adequate funding is available for immediate post-disaster needs

Develop an annual risk financing strategy, integrated to national fiscal planning and fiscal risk management. To ensure efficient planning for the total funding required for disaster response the

[6] World Bank Group. 2019. Boosting Financial Resilience to Disaster Shocks: Good Practices and New Frontiers. World Bank Technical Contribution to the 2019 G20 Finance Ministers' and Central Bank Governors' Meeting;. World Bank, Washington, DC. © World Bank. https://openknowledge.worldbank.org/handle/10986/31887 License: CC BY 3.0 IGO.
[7] OECD; World Bank. 2019. Fiscal Resilience to Natural Disasters: Lessons from Country Experiences. OECD: Paris. © OECD and World Bank. https://openknowledge.worldbank.org/handle/10986/32341 License: CC BY-NC-ND 3.0 IGO.

government should prepare an annual disaster risk financing strategy or plan, as a next step from the current Disaster Risk Financing and Insurance (DRFI) strategy which sets out priorities to strengthen financial resilience. Such an annual risk financing plan should set out how the government plans to finance its contingent liability from disasters, bringing together all financial instruments including budgetary mechanisms, risk transfer, and development partner funding. This could be comparable to a public debt management strategy. This should closely build on the annual fiscal risk statement prepared under the Development Budget Coordination Committee (DBCC), which should quantify the government's contingent liabilities from disasters, climate risks and other exogenous shocks such as pandemics. Such a quantitative approach to disaster related contingent liabilities would then inform the efficient implementation of the government's risk layering strategy. The government may want to nominate or establish a dedicated unit with a fiscal risk management function and mandate to include disasters, climate risks and other exogenous shocks such as pandemics.

Revise QRF allocations to ensure adequate funding and minimize the need for replenishments. While the QRF is a useful and effective source of contingency funding for disaster response efforts it can be strengthened further. Oversight agencies should consider allocating funds to QRFs by using estimates based on past expenditure data coupled with a forward-looking analysis of potential disaster costs, instead of simply allocating fixed amounts based on the previous year's allocation. This should aim to reduce replenishments with often benefitted just a couple of agencies and reduce transaction costs. Government should also regularly review which agencies currently have – or if additional agencies should receive – a QRF. Equally, the guidance for QRFs could be reviewed, to ensure it is used for response and recovery, while reconstruction costs are covered through the NDRRM Fund or regular budget allocations. In addition, agencies could receive more leeway to utilize respective QRFs on prepositioning of specified or essential disaster response goods and equipment for rapid onset disasters (i.e., typhoons) or early action for slow onset disasters (i.e., drought and animal diseases) to speed up government response and fund utilization. Agencies could also consider channeling donations to complement their respective QRFs, increasing transparency and timeliness in the use of donations. Actions to encourage agencies to use regular budget allocations for planned and institutionalized expenditures should further protect the QRF.

Strengthen the NDRRM Fund by streamlining procedures and revising the design and operations. While the NDRRM Fund is a key government fund (budget line) to respond to disaster, it does not achieve its potential due to delays in releasing funds and a lack of flexibility in the use of the fund. Beyond delays in approvals, there are other signs that it is not working as intended. For example, the NDRRM Fund is expected to also finance pre-disaster activities and provide support to LGUs, but has barely done so. The planned establishment of a new Department for Disaster Resilience under a new law provides an entry point to rethink the design and use of the NDRRM Fund. The government could consider to:

- Revisit allocations to the NDRMM Fund, by considering historical and technically estimated future needs, developed in consultation between DBM, DOST, OCD, and BTr. This should build on an annual risk financing strategy (above) to determine the optimal level of risk retention in the NDRMM Fund, taking into account all other risk financing instruments available to the government.
- Update the damage approval and funding request process. Adopting new technology solutions should help speed up on the ground damage assessments, coordination and communications. Pre-approved lists of assessors in regions could support damage assessment processes.
- Streamline the approval process in line with the prescribed timelines and ensure the NDRRM Fund can provide rapid support by reducing the number of steps, documentary requirements, and signatories to improve the speed of approval for projects; possibly allowing advances that

require less documentation; and finding a balance between the documents / level of approval required and the amount and time sensitivity of funding requests. Fund approvals should be based on purely technical parameters, approved by technical staff, without political considerations.

- Focus limited funds in the NDRRM Fund on post-disaster activities, disaster preparedness, and small or unforeseen risk reduction investments. Regular risk reduction and management should be funded through planned regular budgets under the public investment process. This could include requiring agencies to allocate a percentage of their budget for DRRM projects and activities.
- Directly link funding to existing programs for providing disaster assistance, such as the Emergency Cash Transfer Program building on the Pantawid Pamilya Pilipino Program or the National Community Driven-Development Program - Disaster Response Operations Modality (both under DSWD) or emergency infrastructure maintenance and rehabilitation programs under DPWH. This requires agreeing in advance on standard operating procedures, the eligible expenditures/beneficiaries, amounts to be disbursed, triggers and approval processes for such additional funding, and clear pre-established fund flow arrangements. The government can then model the resulting liability to the NDRRM Fund and more efficiently determine the appropriate size for future years.
- Redesign the NDRRM Fund as a financial vehicle to more efficiently leverage the national budget allocation. This could include setting up a special purpose fund that can enable the fund to be the mechanism for the government to efficiently and transparently channel additional financial instruments that backstop the fund in case of severe disaster years, including contingent financing from development partners, sovereign risk transfer (Insurance, Cat Bonds), or to receive post-disaster donations. This could also include allowing the fund to accrue across fiscal years as a self-insurance mechanism to help balance good with bad disaster years if the government wants to smooth out unexpected expenditures. Such a redesign would require specific attention to the institutional and legal structure as well as governance and operational arrangements to ensure appropriate oversight, transparency, and implementation capacity.

The bill under consideration for the proposed establishment of the Department of Disaster Resilience (DDR) includes key changes to the appropriations of national government disaster funds. This may already address a number of challenges and recommendations raised here. The details, however, will depend on the final bill to be passed and the implementing rules and regulation. Proposed changes include bringing disaster funds together under a new National Disaster Resilience Fund to be managed by DDR. This could help streamlining fund approvals and releases and facilitating transfer of funds to implementing agencies. The above proposals could be considered in light of any such larger reform. The GoP may want to consider keeping initial allocations of QRFs or funds for immediate response, relief and quick recovery measures incorporated in the agency budgets to ensure an immediate disposition of the fund for disaster response, while providing for additional requests for QRFs or contingency funds from DDR and reporting on the use of the QRF to the DDR.

Reforms to the Local Disaster Risk Reduction and Management Funds to improve fund allocation, management, utilization, and transparency. There are currently more than 43,000 separate LDRRMFs in all LGUs with total allocation equivalent to over 1 percent of the annual national budget (or over 0.15 percent of GDP). Yet there is limited transparency how much was actually allocated or utilized. COA reports shows low utilization rates, utilization of funds for non-designated purposes, and a lack of transparency in funds carried over in the special trust fund if not utilized. Reforms to LDRRMFs could explore ways to decrease the inefficiency of having 43,000 standalone contingency funds, and increase transparency and effectiveness through the following options:

- Enhance oversight and transparency of the LDRRMFs by building the capacity of LGUs in managing and reporting on the use of post-disaster funds and provide incentives for or enforce reporting requirements (for example, provide additional national government support for good governance achievements or make additional national support contingent on submission of adequate reporting).
- Explore ways to establish a joint structure for LGUs to work together and pool all or part of their LDRRMFs. Such a joint facility should be owned by LGUs and aim to provide predictable and fast access for each LGU. A centralized fund could manage the total liability of local governments more efficiently through financial structuring and reducing total funds held as not all LGUs will be disaster affected every year, thereby lowering the opportunity costs of the LDRRMFs. The national government could provide incentives for a well-functioning mechanism by using the same structure for any additional post-disaster support. Such a structure could also explore similar reforms as suggested for the NDRRM Fund above. Importantly, this would also enhance transparency and simplify oversight and reporting.

2. Streamline the process for using funds after disaster and climate-related shocks

Increase the use of the regular budget for planned recovery and rehabilitation activities and simplify NDRRM Fund approvals for unforeseen expenditures only. For rehabilitation and reconstruction programs in future fiscal years, government agencies should institutionalize these programs by integrating these funding requests under agency-specific medium-term budgets with pre-approved, multi-year allocations. The NDRRM Fund processes and procedures should then be streamlined to minimize delays in approval by putting in place standard operating procedures, guidelines on pre-approved expenditures and contracting, and reducing layers of reviewers and signatories to make allocation decisions non-political but based on technical considerations. This should link closely to recommendations on broader NDRRM Fund reforms as set out above.

Assist implementing agencies in implementing emergency procurement frameworks. Emergency procurement procedures such as negotiated procurement[8] can be used after disasters in the Philippines but are not always used. While the COA provides advisory services to help resolve operational or procedural issues, it could further provide guidance on common emergency procurement and procedural scenarios and on how to comply with its requirements. The COA and Government Procurement Policy Board (GPPB) could develop clear guidance and a sustainable capacity building program for government entities in conducting emergency procurement with harmonized pronouncements.

Utilize financial mechanisms including market-based instruments to help clarify liability for disaster reconstruction costs and introduce additional discipline into spending. Financial mechanisms, such as contingent financing arrangements or insurance programs can be valuable not only to pre-arrange additional funding, but also to clearly set out who is responsible for shouldering (paying for) the risk and how any payout will reach the intended beneficiaries. For example, the National Indemnity Insurance Program (NIIP) under preparation[9] by BTR, DBM, DOF, and GSIS will enhance the use of insurance for strategically important public assets and infrastructure. This means when an asset is damaged or destroyed, a private sector loss adjuster will verify the damage, estimate the

[8] Section 53 of RA No. 9184 or the Government Procurement Reform Act, and its 2016 Revised IRR that allows negotiated procurement under emergency cases when imminent danger to life or property during a state of calamity, or when time is of the essence arising from natural or man-made calamities.

9 Joint Memorandum Circular (JMC) No. 004-2020, "Guidelines on the Implementation, Monitoring, and Reporting on the Indemnity Insurance of Government Properties" by The Department of Finance (DOF), Department of Budget and Management (DBM), and Government Service Insurance System (GSIS) was issued on November 13, 2020.

rehabilitation costs and submit a detailed report back to the government and the insurance companies. The program will then pay out directly for the repair or reconstruction of the damaged asset. Not only will this help ensure adequate funding to restore damaged assets, it also prescribes a clear and transparent process for assessing damages and disbursement of funds. This builds on the experience of the Philippines National Parametric Insurance Program pilot from 2017-2019.

3. Enhance the control over the expenditure and tracking of post-disaster funding

Improve transparency of post-disaster spending through strengthening periodic audit reports and introduce budget tracking for disaster-related spending. Currently no comprehensive system exists to track and monitor all disaster-related expenditures or their effectiveness. The post-disaster financing process is complex, with various interrelated sources of funds, many recipients of fund transfers, implementation over multiple years, and some funds are embedded within agency-specific budgets. This makes it difficult to ensure efficient budget allocations for disaster risk management and response and to assess quality of disaster related spending. Reforms to consider include:

- Strengthening existing audit reports to address fragmented reporting by: (i) auditing key or lead agencies to cover the source, use, and status of all post-disaster funds, including disaster-related PAPs funded by agency-specific budgets and fund transfers; (ii) improving the COA Consolidated Report on the Audit of DRRM Funds in close coordination with oversight agencies and fund administrators, such as the DBM and OCD for the NDRRM Fund and other GAA sources, and DILG and LGUs for the LDRRMF to provide a more complete representation of all DRRM funds; (iii) ensuring completeness and accuracy of agency disclosures by prescribing minimum information disclosures in Notes to Financial Statements of respective agency audit reports; (iv) given intensified responsibility on the reporting agencies, providing incentives for the complete and accurate reporting by the agencies, e.g. through the integration of complete and timely reporting in the NDRRMC's annual DRRM awards; and (v) establishing a framework for multi-agency thematic performance audits to assess expenditures by event (e.g. flood, typhoon) or type of activity (e.g. emergency response, reconstruction and rehabilitation).
- Establishing and implementing a methodology for budget tracking to increase efficiency and transparency of disaster related expenditures. This should ideally provide information for spending on the department or agency, programs and activities, and object of expenditure such as salary, goods and services, capital expenditure, and subsidies. This should also allow assessment by information such as type of disaster (by event), disaster phase (i.e., response, recovery, or reconstruction), and funding source. The government could leverage the tagging for climate change expenditures under implementation and its lessons learned. Introducing a more comprehensive and activity-specific methodology for budget tracking such as monitoring specific budget items and expenditures rather than tagging at program level, entails efforts and costs and should be carefully considered to find appropriate solutions to complement the regular audit, monitoring and evaluation practices.

Introduce uniform reporting on budget reallocation and including budget reallocation in COA reports. The government should more efficiently track and monitor budget reallocations that are not reflected in the COA's audit reports, as these may be a large source of post-disaster funding. Without adequately accounting for such unattributed expenditures the government will likely continue to underestimate total disaster-related spending. In addition, agencies will face funding shortfalls for regular spending needs such as operations and maintenance of infrastructure, which further increases the risk of assets to disaster damage if insufficiently maintained because funds are used for disaster response instead. This could be done leveraging budget tracking mechanism as discussed above and could be introduced for a specific agency or take a whole-of-government approach.

Strengthen the financial management and reporting capacity of LGUs. The national government should strengthen technical assistance to LGUs to improve their financial planning to act as first responders. The rollout of the Philippines Rehabilitation and Recovery Planning Guide by the NDRRMC provides a framework for both NGAs LGUs to prepare rehabilitation and recovery plans before a disaster, including for identifying sources of funding and activities to be carried out. Government should ensure the full rollout of this report, including the adequate involvement of LGU finance officials. Support to LGUs should further include help to improve financial reporting and utilization of LDRRMFs. This could be carried out in collaboration with the Bureau of Local Government Finance through integration in ongoing training activities or the competency framework for local treasurers. Moreover, the government could implement specific policies and procedures for determining LGUs' estimated revenues as basis of respective LDRRMF allocations, including creating separate bank accounts for the LDRRMFs to more effectively monitor the allocation and utilization of funds. The scope of the audit by COA should be improved to cover all LDRRMFs, and the timeliness of audit submissions of fund utilization reports should be enforced.

Improve disaster damage and loss assessment and recording. The absence of accurate, reliable, complete, and consolidated disaster damage and loss data makes it challenging to assess adequacy or efficiency of disaster spending. Even if all disaster related spending is accurately tracked, unless there is clarity on the actual damages incurred, agencies cannot evaluate if spending and outcomes are sufficient to protect the population, the economy, and government property. This should be explored further jointly between finance oversight agencies (e.g. DOF, DBM, COA) and agencies involved in disaster risk management, response and reconstruction planning (e.g. DOST, NEDA, NDRMMC, and OCD). Such damage reporting should aim to capture accurately damage to public assets to inform financial decisions and reconstruction planning. The disaster damage and loss recording should store the detailed loss reports not just aggregate data to allow granular understanding of needs and inform planning. It should further be developed in an open and collaborative platform that allows all relevant agencies to contribute to and access the data. This should be explored in collaboration with the National Asset Registry (NARS) under development by BTr to tie loss reporting directly to assets, as well as the GeoRiskPh platform rolled out by DOST. The recent issuance of the Philippine Government Asset Management Policy[10] might assist in implementing these reforms.

10 Joint Memorandum Circular (JMC) No. 2020-1, "Implementation of a Philippine Government Asset Management Policy (PGAMP)" by Department of Finance (DOF), Department of Budget and Management (DBM), and National Economic and Development Authority (NEDA) was issued on September 24, 2020

1 Introduction

This Public Expenditure Review (PER) is the first comprehensive assessment of public spending on disaster response, recovery, and reconstruction activities in the Philippines. Despite the high exposure of the country to natural disaster shocks and climate risks, no comprehensive review has been carried out for disaster-related public expenditures. This limited information on disaster expenditure makes it difficult to quantify the total fiscal cost of disasters and evaluate the efficiency of related public spending. This PER was prepared in coordination with the DBM as a diagnostic to provide a comprehensive account of post-disaster public spending and to help further improve the flow of funds following disasters and climate-related shocks.

Quantifying allocations and identifying challenges in the disbursement of funds following disasters can improve financial preparedness and risk management. A better understanding of post-disaster expenditures helps inform government decisions related to reducing risk and optimizing the allocation of funds. It further helps to: (i) streamline the flow of funds for effective disaster response; (ii) track funds and embedded reallocations; (iii) identify disbursement bottlenecks; (iv) improve oversight of fund utilization; and (v) monitor the achievement of policy targets.

1.1 Exposure to Natural Disasters

The Philippines is exposed to a wide range of natural disasters, which is expected to be exacerbated by climate change. The country has been identified as the third most vulnerable country in the world to weather-related extreme events and sea level rise.[11] The main hazards include typhoons, floods, earthquakes, and volcanic eruptions. Climate change is expected to make it more likely that severe weather events occur in the future. For instance, while the frequency of tropical cyclones has decreased slightly in the past sixty-five years, more frequent "very strong typhoons" (>170kph) have been observed. Climate models show that these trends in the increased frequency and intensity of strong typhoons are expected to continue in the foreseeable future.

The country is expected to incur, on average, about US$3.5 billion (over 1.0 percent of GDP) per year in losses to public and private assets from typhoons and earthquakes.[12] This is based on a probabilistic risk model which accounts for potentially very severe events not seen in recent years. Data within government of actual disaster damages are incomplete. For example, COA estimated, on average, damages per year amounting to Php56 billion over FY2015-18, which is approximately 0.1 percent of GDP (See Table 1, compared to data from an international disaster loss database tracking public information). This is likely severely underestimated as not all disaster events are recorded and quantified and records are incomplete.

Rare catastrophic events, such as the 2013 typhoon Yolanda (Haiyan), the strongest typhoon that has ever made landfall anywhere in the world, can cause much larger damage. As a result of Typhoon Yolanda over 6,000 people lost their lives and more than 16 million were affected, with 2.3 million people falling below the poverty line. Over 1.1 million houses were partially damaged or fully destroyed. The typhoon also had a devastating impact on public infrastructure, including roads, bridges, utilities like water and power, hospitals and school buildings, government buildings, and agriculture and irrigation facilities.[13] The estimated damage reached about Php571.1 billion (US$12.9 billion), or 4.6 percent of GDP.

[11] World Bank (2013). *Getting a grip...on climate change in the Philippines: overview.*
[12] This is based on probabilistic catastrophe risk models. In the next fifty years, it is estimated that the Philippines has a 40 percent chance of experiencing losses from natural disasters that will exceed US$33 billion, and there is a 20 percent chance of losses that will exceed US$53 billion.
[13] World Bank (2018): Philippines: Lessons Learned from Yolanda; and NDRRMC, Final Report on Typhoon Yolanda.

This exposure to natural disasters translates into a significant source of fiscal and socioeconomic risk. When disasters affect the population and damage key public assets and infrastructure, they have an impact on a country's fiscal balance, as the government shoulders significant costs for response and recovery. Disasters also directly lead to human and capital losses and reduce economic activity. This disproportionality affects the poor who are less resilient, preventing people from moving out of poverty, or even pushing people back into poverty. Therefore, a deliberate approach to the public financial management of disasters is becoming increasingly important to mitigate their adverse fiscal, social, and economic impact.[14]

Table 1. Reported Disaster Damages and Affected People in the Philippines

Year	Number of natural disasters	People affected by natural disasters (millions)	Damages to public and private properties (incl. agriculture) (Php Million)	Share of GDP (percent)	Damages from disasters as reported by International Disaster Database EM-DAT (US$ Million)	Share of GDP (percent)
2015	84	> 12.5	41,597 (~US$ 860 million)	0.28	1,966	0.67
2016	68	> 1.5	14,236 (~US$ 290 million)	0.09	180	0.06
2017	95	~ 0.43	104* (~US$ 2 million)	0.0006	161	0.05
2018	45	> 0.25	15 (~US$ 310,000)	0.0001	659	0.20

Source: COA Consolidated Audit Reports
Note: This estimate of disaster damages is likely incomplete and severely underestimates the actual experience
*Damages from the Marawi siege are not reported

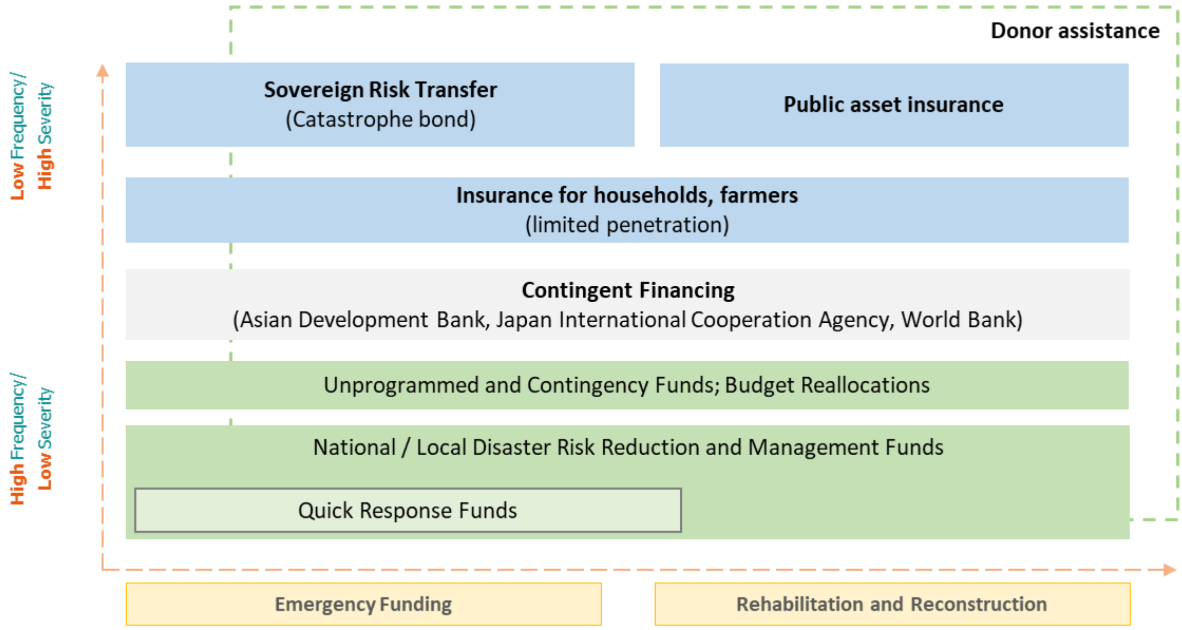
1.2 Government Strategy on Disaster Preparedness, Response, and Rehabilitation

The Government has undertaken important institutional and legal reforms to strengthen financial, physical and social resilience to disasters by mandating a shift from response to risk reduction and preparedness involving multi-sectoral coordination and active participation at the local level. The Philippine Disaster Risk Reduction and Management (DRRM) Act of 2010 provided a strong legal and institutional basis for holistic disaster risk management taking into account the following: (i) disaster risk reduction and management; (ii) good governance; (iii) risk assessment and early warning systems; (iv) knowledge and awareness raising; (v) risk transfer instruments; and (iv) preparedness for effective response and recovery. Building on the gains from this strong reform agenda, the government has integrated lessons learned from previous disasters in their implementation of various disaster risk management programs at the national and local levels including COVID-19 response efforts.

In 2015, the Government adopted a national DRFI strategy, a key milestone in improving financial planning for disasters. The national DRFI strategy was developed in 2015 by the Department of Finance (DOF), with support from the World Bank under the 2015 second Development Policy Loan with a Catastrophe Deferred Drawdown Option (DPL CAT DDO) (Annex 11). The strategy aims to maintain the sound fiscal health of the national government; develop sustainable financing mechanisms for LGUs; and reduce the impact on the poorest and most vulnerable and prevent them from falling into a cycle of poverty while also shielding the near-poor from slipping back into poverty.

[14] World Bank (2019): Boosting Financial Resilience to Disaster Shocks, Good Practices and New Frontiers

Figure 1. Philippines risk layering strategy



Guided by this strategy, the DOF and the Bureau of the Treasury (BTr) have led the implementation of a transformative program to increase the country's financial resilience. Over the past five years, the government has expanded its portfolio of disaster risk financing instruments (see risk layering in the Philippines in Figure 1). For example, from 2017 to 2019 the government placed the national parametric insurance program pilot with over Php3 billion in premium from the budget, protecting national government agencies and LGUs against typhoon and earthquake risk.[15] Additional solutions to strengthen financial resilience at the national and sub-national level are under preparation. For instance, the government allocates resources to the NDRRM Fund every year to address the higher frequency of disasters. It has also leveraged contingent lending from international partners such as the World Bank, the Japan International Cooperation Agency (JICA), and the Asian Development Bank (ADB). In December 2019, the Philippines issued the first sovereign catastrophe bond in Asia. It is now preparing the National Indemnity Insurance Program (NIIP), expected to be launched early 2021. This program will cover strategic high-risk national government assets with the BTr as the single policyholder. Implementation of this program is also supported by the recently issued Philippine Government Asset Management Policy. Yet, the adequacy of disaster financing instruments' coverage is unknown as there is lack of assessment of total public spending for response, reconstruction, and rehabilitation effort.

1.3 Public Expenditure Review on Post-Disaster Expenditure

This PER estimates public expenditures following disasters over 2015-18. The analysis looks at both pre-arranged (reserve funds) and ex-post (regular budget) sources of government spending. It considers spending for Programs, activities, and projects (PAPs) of thirteen key government entities on disaster response, recovery, and reconstruction (Annex 1). The analysis does not include spending on risk reduction or preparedness. Several case studies, including the Marawi siege (man-made disaster), Typhoon Ompong, and the Mindanao earthquakes, are examined in this PER. Few further

[15] Supported through DOF-DBM JMC No. 2017-1 dated June 30, 2017 and DOF-DBM JMC No. 001-2018 dated December 10, 2018; World Bank (2020) Philippines Parametric Insurance Program - Lessons Learned Evaluation (forthcoming); http://documents1.worldbank.org/curated/en/799241548872273775/Insuring-the-Philippines-against-Natural-Disasters-Case-Study.pdf

case studies, already reviewed previously, are included as comparison: (i) Zamboanga City Siege (man-made disaster); (ii) typhoon Yolanda; and, (iii) Bohol earthquake.

Although it does not explicitly assess effectiveness and efficiency of post-disaster spending, this PER sheds light on bottlenecks and inefficiencies through cases studies. Currently, there are no international standards on post-disaster financing effectiveness and efficiency (including for government financing or for specific risk financing instruments). This PER did not capture unit costs systematically and did not review implementation of specific projects and their long-term impacts. Further as this is among the first PERs on post-disaster spending, there is no available systematic data for comparison with other countries (e.g. on timing of post-disaster financing, unit costs, achievement of certain policy objectives). The analysis in this PER should serve as the baseline for a more in-depth future assessment looking specifically on efficiency and effectiveness.

The study looks at post-disaster expenditures from various sources of funding. The public spending identified disbursements from the annual budget, the General Appropriations Act (GAA), and LGUs. Funding from the GAA was disbursed through the NDRRM Fund, the QRFs, or agency-specific budget allocations. The analysis also considers unprogrammed and contingent funds under the GAA, made available for and released as top-up funding for the above budget lines when depleted. The PER also looks at subnational government spending through the LDRRMF at each LGU.

The PER reviewed mainly budget allocations, as data on budget releases and utilization are limited. While data on budget allocation are available through the GAA and the Special Allotment Release Order (SARO), decisions on some allocations (e.g., unreleased allocations) had to be verified through interviews, as these are normally not documented. Utilization data are particularly limited. COA's consolidated audit reports only include utilization in the current year and many LGUs have not been reporting on utilization. Although public agencies record their utilization, their reports are only available at each individual agency.

This review of post-disaster spending aims to support the government in strengthening its public financial management of disasters, including ongoing efforts in risk financing and broader disaster risk management. A better understanding of post-disaster expenditures could help the government in its decision-making related to risk reduction and optimize the allocation of funds. It could also help to better understand the flow of funds to support an effective disaster response; help track funds to identify disbursement bottlenecks and embedded reallocations; improve the oversight of the utilization of funds; and monitor the achievement of policy targets.

The remainder of this report consists of the following parts: chapter 2 gives an overview of the relevant legal and institutional framework (with more details provided as part of Annex 3 and 4); chapter 3 describes and aggregates the spending of reviewed sources of funding; chapter 4 reviews the selected case studies; chapter 5 concludes and provides key policy recommendations.

2 Legal and Institutional Framework

This section provides a brief overview of the institutional and legal framework that guides public financial management of disasters. This includes resource mobilization—including setting up clear pre-arranged funding sources and creating standard operating procedures for when and how to access resources—as well as effective disbursement and utilization of funds. This framework includes rules and processes for the appropriate reporting of funds to ensure transparency and effective oversight.

2.1 Legal Framework

The legal framework that guides disaster risk management and financing includes the following key documents (see Annex 4 for more details):

- *The Republic Act (RA) No. 10121: Philippine Disaster Risk Reduction and Management Act of 2010*, which establishes the framework for disaster risk reduction and management (DRRM), including the institutional structure of the NDRRMC. The Act identifies the sources of funds for post-disaster financing as the NDRRM Fund, QRFs and LDRRMFs at each LGU;
- *The National Disaster Risk Reduction and Management Plan 2011-2028*, which sets out key activities and outputs, identifies lead and involved agencies, and creates timelines for disaster prevention and mitigation, preparedness, response, and rehabilitation and recovery. It also identifies funding sources that can be mobilized for various DRRM programs and projects, such as existing budgets of NGAs under the GAA and donor funds, in addition to the NDRRM Fund and LDRRMFs provided under RA No. 10121;
- *The Rehabilitation and Recovery Planning Guide*, which provides a framework for NGAs and LGUs to prepare rehabilitation and recovery plans before a disaster. It includes processes and structures; institutional arrangements for coordinating plan activities; implementation mechanisms, including for identifying sources of funding; and proposed monitoring and evaluation arrangements. The Guide was adopted by the NDRMMC in March 2019;
- *The National Disaster Risk Financing and Insurance Strategy of the Philippines*, which includes measures to strengthen the country's financial resilience to natural disasters by: (i) maintaining fiscal health to support long-term reconstruction; (ii) developing sustainable financing mechanisms for LGUs to meet immediate disaster-related costs; and (iii) reducing the impact of disasters on the poorest and most vulnerable groups. The strategy defines priorities to implement these measures at the national, local, and individual level. (Annex 11).

Equally important are the legal and regulatory frameworks that define and guide broader budget management in the Philippines. The key legal frameworks and regulatory documents are detailed in Annex 4.

2.2 Institutional Arrangements

While LGUs have the primary responsibility as first responders during a disaster, NGAs support local authorities when local capacity is limited or overwhelmed. In general, LGUs are responsible for providing basic services and perform devolved government functions, and NGAs provide financial or technical assistance to LGUs, as needed. The NDRRMC is an inter-governmental body that performs various policymaking, coordination, integration, supervision, and monitoring and evaluation functions related to disasters, and it is responsible for the overall coordination of DRRM activities during major disasters. Its counterparts at the local level include regional DRRM councils; provincial, city, or municipal DRRM councils; and the Barangay Development Council (BDC). The OCD acts as the operating arm of the NDRRMC.

Disaster response and reconstruction includes multiple departments and agencies. The NDRRM plan specifies the roles and activities of each government agency in the period after a disaster (Annex 4). NGAs and government-owned and controlled corporations (GOCCs) implement DRRM activities in relation to their respective mandates and functions. Different agencies are responsible for specific rehabilitation and recovery clusters. Civil society organizations (CSOs) may be engaged in the government's DRRM programs to complement public resources and ensure effective service delivery.

Oversight agencies guide the financial management of public spending related to disasters:

- *The DBM,* which is mandated to promote the sound, efficient, and effective management and utilization of government resources. Among its regular functions, the DBM formulates the annual national budget; establishes the rules and procedures for the management of government resources; and monitors and assesses the physical and financial operations of NGAs, LGUs, and GOCCs. It also acts as administrator of the NDRRM Fund;
- *The BTr,* which manages the government's funds. The BTr has the mandate to efficiently and effectively manage the financial resources of the government by maximizing revenues from available funds and minimizing costs of financing, whenever possible;
- *The COA,* which functions as Philippines' supreme auditing institution that has exclusive authority to promulgate accounting and auditing rules and regulations. The COA's constitutional mandate gives it the power, authority, and duty to examine, audit, and settle all accounts pertaining to the revenue and receipts of, or expenditures or uses of, funds and property pertaining to the government, or any of its subdivisions, agencies, or instrumentalities, including GOCCs;
- *The NDRRMC,* which manages and mobilizes resources for DRRM, including the NDRRM Fund that it ensured to be consistent with the NDRRM Plan. It also monitors and provide necessary guidelines and procedures on the LDRRMF releases as well as utilization.
- *The OCD,* which serves as the implementing arm of the NDRRMC. It advises the National Council on matters relating to DRRM. It formulates and implements the NDRRM Plan and also reviews and evaluates the LDRRM Plans. The OCD also evaluates fund requests from the NDRRM Fund and make recommendations to the NDRRMC.
- *The Department of Interior and Local Government (DILG)*, which assists the President of the Philippines in supervising local governments. The DILG is tasked with formulating plans, policies, and programs to prepare for and manage local emergencies arising from natural or man-made disasters. It is also responsible for establishing systems that allow for the coordination and cooperation among the citizenry, local executives, and its own administration in order to ensure the effective and efficient delivery of basic public services.
- *The President of the Philippines,* who can declare (and lift) a State of Calamity during a major disaster, which affects the process of post-disaster financing. The President specifies a cluster of barangays, municipalities, cities, provinces, and/or regions under a State of Calamity based on recommendations from the NDRRMC. For the financial management of disasters, the declaration of a State of Calamity makes it mandatory for concerned public authorities to immediately undertake the following remedial measures: (i) program/reprogram funds for the repair and/or safety upgrading of public infrastructure and/or facilities; and (ii) grant no-interest loans, either thorough public or private institutions, to the most affected population through cooperatives or people's organizations.

Disaster funding is implemented by the concerned government authorities and GOCCs according to their mandates. This PER includes the main recipients of disaster-related funding in the Philippines, and a list of these recipients is included in Annex 1.

3 A Review of Funding Sources for Post-Disaster Spending

This chapter reviews in detail the funding sources of post-disaster spending at both the national and local government level in FY2015-18. This includes spending on disaster response, rehabilitation, and recovery.

The analysis reviewed the following budget lines in the annual budget (the GAA):

- **NDRRM Fund,** a dedicated source of stand-by funding for disaster response and reconstruction;
- **QRFs**, a series of stand-by funds under the budgets of key NGAs;
- **Agency-specific budget allocations for post-disaster PAPs,** including for disaster reconstruction;[16]
- **National government subsidies to GOCCs** for disaster recovery and reconstruction; and
- **Unprogrammed or contingent funds of the GAA** to supplement other budget lines when needed for existing or new PAPs (comprising only the funds released for post-disaster needs).

A combination of budget lines is used to address post-disaster needs that can materialize over several years. Broadly, QRFs and the NDRRM Fund are the key sources of pre-arranged funding for government agencies, although some have specific budget lines that can fund post-disaster needs (e.g., the Department of Agriculture's (DA's) seeds buffer). QRFs, being more easily accessible, constitute the key instrument for rapid disaster response. For recovery and reconstruction, the government mostly utilizes regular budget lines (i.e., agency-specific budget allocations or subsides) included in the budget for the following fiscal year, but it can also allocate funds from the NDRRM Fund. Different instruments can also replenish each other. For example, the NDRRM Fund is used to replenish QRFs, and savings or unprogrammed and contingency funds can be used to augment the NDRRM Fund.

The Declaration of State of Calamity introduces some flexibility in the post-disaster funding process. The declaration makes it mandatory for government agencies to use post-disaster financing instruments, including the programming or reprogramming of funds or the use of savings for post-disaster activities. These measures are implemented by concerned NGAs and GOCCs, which can utilize QRFs (if available), request funds from the NDRRM Fund, or reprioritize regular budget funding. LGUs can also submit funding requests to the NDRMMF. (Annex 2 includes a detailed mapping of budget flows).

Between 2015-18, the government authorized Php384 billion (equivalent to 0.6 percent of GDP, or 3.34 percent of total government spending) in disaster-related funding (Table 2 and Figure 2). This fluctuated between years, with an average of Php91.9 billion per year. The largest share of post-disaster spending came from regular agency allocations (i.e., ex-post budget allocations for disasters in previous years), followed by pre-arranged allocations through the NDRRM Fund.

Table 2. Post-Disaster Allotment by National Funding Source, FY2015-18
(in Php Billion)

Sources of Funds	FY2015	FY2016	FY2017	FY2018	Total
NDRRM Fund	15.0*	38.9	15.8	19.6	**89.3**
QRF initial allocations	6.7	6.2	-	7.6	**20.5**
Agency-specific budgets	28.5	39.9	48.4	64.8	**181.5**

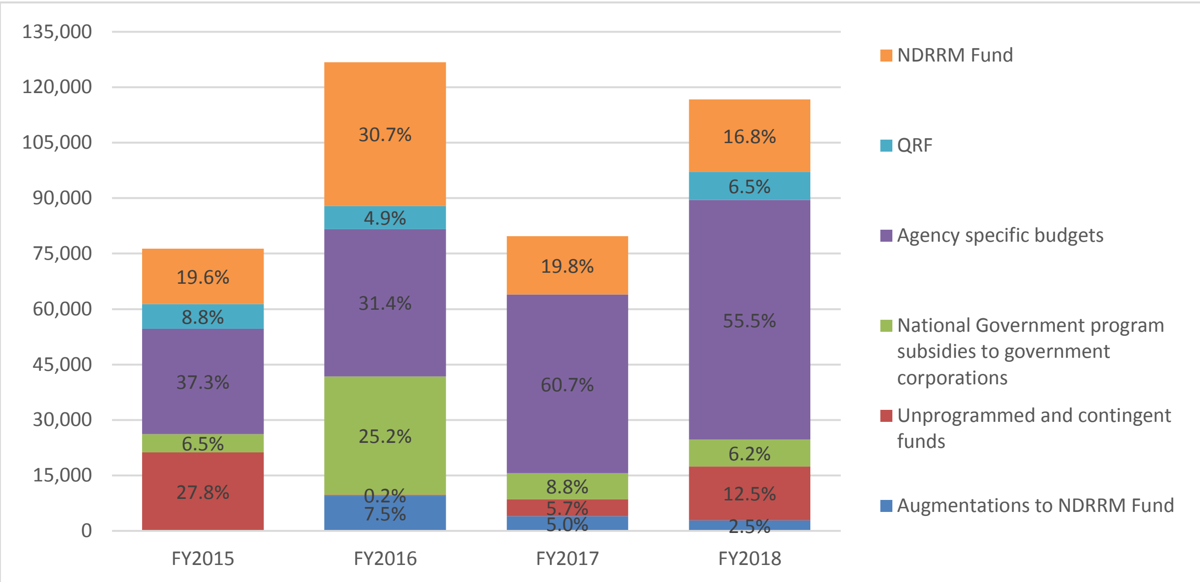
[16] While this PER identified some budget lines that are subject to reprioritization and reallocation, these were not quantified, as data can only be obtained from individual agencies.

National government subsidies to GOCCs	5.0	32.0	7.0	7.2	**51.2**
Unprogrammed and contingent funds released for post-disaster needs	20.0	-	-	5.0	**25.0**
Total appropriations	**75.2**	**117.0**	**71.2**	**104.3**	**367.6**
Share of GAA (percent)	**4.0**	**5.5**	**2.8**	**3.6**	**3.9**
Share of GDP (percent)	**0.5**	**0.8**	**0.4**	**0.6**	**0.6**
Augmentations to the NDRRM Fund	-	9.5	4.0	2.9	**16.4**
Total authorized	**75.2**	**126.5**	**75.2**	**107.1**	**384.0**

Source: Authors' calculations based on the GAA FY2015-18.

Notes: The NDRRM Fund includes QRF replenishments. *In FY2015, the total appropriation of Php 15 billion included Php 1.0 billion in Rehabilitation and Reconstruction Program that was appropriated separately in the GAA from the NDRRM Fund unlike in FYs 2016-18 (See also Table 4). In FY2017, QRF allocations were included in the NDRRM Fund. Unprogrammed and contingent funds include specific earmarks for disaster funds as well as actual SARO releases for disaster-related expenditures.

Figure 2. Appropriations by Funding Source, FY2015-18 (Php Million)



Source: Authors' calculations based on the GAA FY2015-FY2018.

Note: In FY2016, the NDRRM Fund received allocations for Yolanda Rehabilitation and Reconstruction Program (RRP) to cover remaining unfunded programs and incomplete activities.

Budget appropriations for disaster assistance are larger than reported disaster damages in each year, reflecting limitations on reported disaster data. Access to accurate disaster damage and loss data allows the authorities to assess whether allocated funds are adequate. While consolidated audit reports on the NDRRM Fund and LDRRMF provide information on observed disasters and their damages, information on damages remain incomplete. Total appropriations for disasters reported by the audit reports are higher than reported disaster damages, which include damages to infrastructure, private dwellings, the agriculture sector, etc. (Table 3). This is likely due to incomplete damage reporting and the fact that appropriated budgets can be used over several years or finance disasters from previous years. Moreover, some disasters are not recorded, including both small and major events (e.g., the Marawi Siege).

Table 3. Estimated Disaster Damages, FY2015-18
(in Php Million)

Damages to Properties	FY2015	FY2016	FY2017*	FY2018	Total
Infrastructure	**8,457**	**643**	**65**	**24**	**9,189**
Natural incidents	8,349	606	0	0	8,956
Human-induced incidents	107	38	65	24	233
Agriculture	**32,591**	**13,638**	**230**	**12**	**46,470**
Natural incidents	32,572	13,630	104	12	**46,317**
Human-induced incidents	19	8	125	-	**153**
Private/Commercial	**993**	**45**	**-**	**182**	**1,221**
Natural incidents	676	-	-	3	679
Human-induced incidents	317	45	-	179	542
Total	**42,041**	**14,326**	**295**	**218**	**56,880**
Natural disasters	**41,597**	**14,236**	**104**	**15**	**55,952**
Human-induced incidents	444	91	190	203	928
Share of GDP (percent)	**0.28**	**0.09**	**0.0006**	**0.0001**	**0.28**

Source: COA Consolidated Audit Report on DRRM Funds FY2015-18
Note: FY2017 data do not include damages from the Marawi Siege. Human-induced incidents include, for example, armed conflicts, bomb explosions, fire incidents, maritime incidents, and vehicle incidents.

3.1 The National Disaster Risk Reduction and Management Fund

Description and Purpose

The NDRRM Fund is a designated budget line for disaster-related programs and projects. It can finance activities related to: (i) the mitigation of disasters; (ii) reconstruction after a disaster; (iii) epidemics, as declared by the Department of Health (DOH); or (iv) crises resulting from armed conflicts, insurgencies, terrorism, or other catastrophes occurring in the current year or in the two preceding years, although special provisions have been introduced in the GAA to finance events beyond this timeframe (Table 4).[17] For pre-disaster activities, the fund can finance initiatives aimed at disaster mitigation, prevention, and preparedness, including: (a) the acquisition of land or lots for resettlement; (b) site development of resettlement areas; (c) the construction of local public infrastructure to reduce risk (e.g., multi-purpose evacuation centers, water catchment systems, or storage facilities); and (d) the construction of local disaster operations centers. For post-disasters, it can finance the following relief, rehabilitation, and recovery activities by both NGAs and LGUs: (i) repair, rehabilitation, or reconstruction of public infrastructure damaged or destroyed by natural or induced disasters; (ii) support and assistance for the resettlement of affected populations from transition to permanent sites; and (iii) local economic recovery initiatives for employment and income generation or reintegration and other capacity building projects for affected communities.

The NDRRM Fund is made up of different programs. The National Disaster Risk Reduction and Management Program (NDRRMP) is a key program that includes all authorized activities, from aid, rehabilitation, and relief services to rehabilitation and reconstruction. There are also disaster-specific

[17] For instance, in FY2017, the Rehabilitation and Reconstruction Program (RRP) was introduced under the NDRRM Fund to be used exclusively for rehabilitation and reconstruction projects related to events happening beyond the two preceding years. However, the President has introduced a condition that RRP funds cannot be requested before funds from the regular budget have been exhausted. In FY 2015, the RRP allocation was a separate GAA line item, which was intended to cover rehabilitation efforts in all areas affected by specified calamities, mainly from FY2013 and earlier years.

programs such as support to communities affected by typhoon Yolanda and the Marawi siege. The fund can also be used to augment or replenish depleted QRF allocations to relevant NGAs when the balance of allocations reach a critical level (50 percent of the allocation under SP No.1 of the NDRRM Fund under the FY 2020 GAA).[18] The amount replenished is based on the request and availability of funding, and it requires approval from the DBM; a copy of the approval is submitted to the NDRRMC.

Funding is released in response to individual requests by implementing agencies and following an extended approval process. NGAs and LGUs can submit requests for funding to the OCD. These requests are submitted to the NDRRMC for endorsement; following this, the requests are submitted to the OP for approval usually with initial evaluation from the DBM. In the case of proposals from LGUs, the respective regional DRRM councils conduct prior review, and then subject to further evaluation by the OCD and NDRRMC, followed by the approval of the OP. Government authorities, including LGUs, need to report on the use of funds received from the NDRRM Fund. They must submit quarterly reports on their utilization of funds to the DBM, NDRRMC, Speaker of the House of Representatives, Senate President, House Committee on Appropriations, Senate Committee on Finance, and the COA. Data on utilization of the NDRRM Fund is published on the DBM's website.

Use of the NDRMMF

From FY2015-18, appropriations to the NDRRM Fund totaled Php105.7 billion, averaging 0.17 percent of GDP. This included Php89.3 billion in initial GAA appropriations and an additional Php16.4 billion in augmentation (between FY2016-18). A large share of total appropriations over this period were allocated to cover general reconstruction, rehabilitation, repair, aid, relief, and other works or services, and only a small share went to pre-disaster activities (Table 4). For prevention, the NDRRM Fund provided funding to capitalize the People's Survival Fund (PSF) in FY2016. The separate law[19] establishing the PSF to support climate change adaptation activities of LGUs and communities had required Php1.0 billion in opening balance to be appropriated under the GAA. Although the balance of the PSF may be increased as the need arises subject to review and evaluation of the OP and the DBM, only Php1.0 billion so far had been sourced from national budget as allocated under the NDRRM Fund (based on DBM reports). The PSF is a special fund at the National Treasury set up to support LGUs for disaster/climate change prevention and mitigation. The PSF can accrue funds, which means its balance does not revert to the national government's general budget if not used. Aside from the earmarked PSF and funds for insurance coverage through the DOF, only one pre-disaster activity was financed by the NDRRM Fund.[20]

The NDRRM Fund can be augmented by tapping savings of agencies such as the DPWH. For instance, the NDRRM Fund was increased by Php16.4 billion in FY2016-18, entirely sourced from augmentation (i.e., savings) from the DPWH, and approved by the OP. This was done to accommodate additional requests for funds in excess of the original appropriations. The DPWH is one of the key agencies that can generate savings through infrastructure projects, usually in the form of excess allotment from actual contract costs.

The government has demonstrated flexibility in utilizing the NDRRM Fund to appropriate funds for unfunded disaster costs and incomplete projects that extend beyond the prescribed two-year timeframe. In FY2016, the GAA appropriated Php18.9 billion for unfunded PAPs under the Yolanda Comprehensive Rehabilitation and Recovery Plan (YCRRP) —three years after the typhoon occurred

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[18] The critical level is 50 percent of total allocations, according to government agencies.
[19] RA No. 10174: An Act Establishing the People's Survival Fund to provide Long-Term Finance Streams to enable the Government to effectively address the problem of Climate Change; Amending for the purpose RA No. 9729 otherwise known as the "Climate Change Act of 2009", which was approved by the Philippine President in August 16, 2012.
[20] The OCD received Php2 million in FY2018 for revising and enhancing the master plan of the Metro Manila Earthquake Impact Reduction Studies.

in 2013. Another Php1.5 billion was allocated in FY2017 for disasters that had occurred earlier than the two preceding years. The national government also set aside Php10 billion in the regular budget for the NDRRM Fund in FY2018, which was earmarked for Marawi City and other areas affected by armed conflict, particularly the Marawi siege that occurred in May of the preceding year.

Table 4. NDRRM Fund Appropriations in the GAA, FY2015-18
(in Php Billion)

Purpose	FY2015	FY2016	FY2017	FY2018	Total
1. Aid, relief, and rehabilitation services to communities/areas affected by calamities, Including training of personnel, and other pre-disaster activities	6.2	8.7	1.9	5.1	**21.9**
2. Repair and reconstruction of permanent structures, including capital expenditures for pre-disaster operations, rehabilitation, and other related activities	6.8	10.3	5.4	2.5	**25.0**
3. Adaptation projects and activities of LGUs and community organizations (for the PSF)	1.0	1.0	-	-	**2.0**
4. Rehabilitation and Reconstruction Program*	1.0	-	1.5	-	**1.5**
5. Yolanda Rehabilitation and Reconstruction Program		18.9	-	-	**18.9**
6. Marawi Recovery, Rehabilitation and Reconstruction Program		-	-	10.0	**10.0**
7. Earmarked for QRF initial allocations			6.0		**6.0**
8. Earmarked for insurance coverage of government facilities against natural calamities			1.0	2.0	**3.0**
New appropriations, sub-total	15.0	38.9	15.8	19.6	**88.3**
Augmentation	-	9.5	4.0	2.9	**16.4**
Total NDRRM Fund authorized	**15.0**	**48.4**	**19.8**	**22.5**	**105.7**
Share of total GDP (percent)	**0.11**	**0.32**	**0.12**	**0.12**	**0.17**
Share of total GAA (percent)	**0.81**	**2.26**	**0.79**	**0.79**	**1.13**

Source: NDRRM Fund GAA FY2015-18
Note: NDRRMP includes purpose 1 and 2 and earmarked allocations for QRFs in FY2017. *In FY2015, the total appropriation of Php 15 billion included Php 1.0 billion in Rehabilitation and Reconstruction Program that was appropriated separately in the GAA from the NDRRM Fund unlike in FYs 2016-18

NDRRM Fund releases increased steadily between FY2015-18. 91 percent (ranging from 87 percent to 97 percent) of authorized NDRRM Fund resources were released (Table 5 and Figure 3). 85 percent of these funds were released to NGAs, while 15 percent were released to GOCCs (Table 6). A total of Php9.08 billion, or 9 percent of authorized fund, had lapsed and were no longer valid for release.

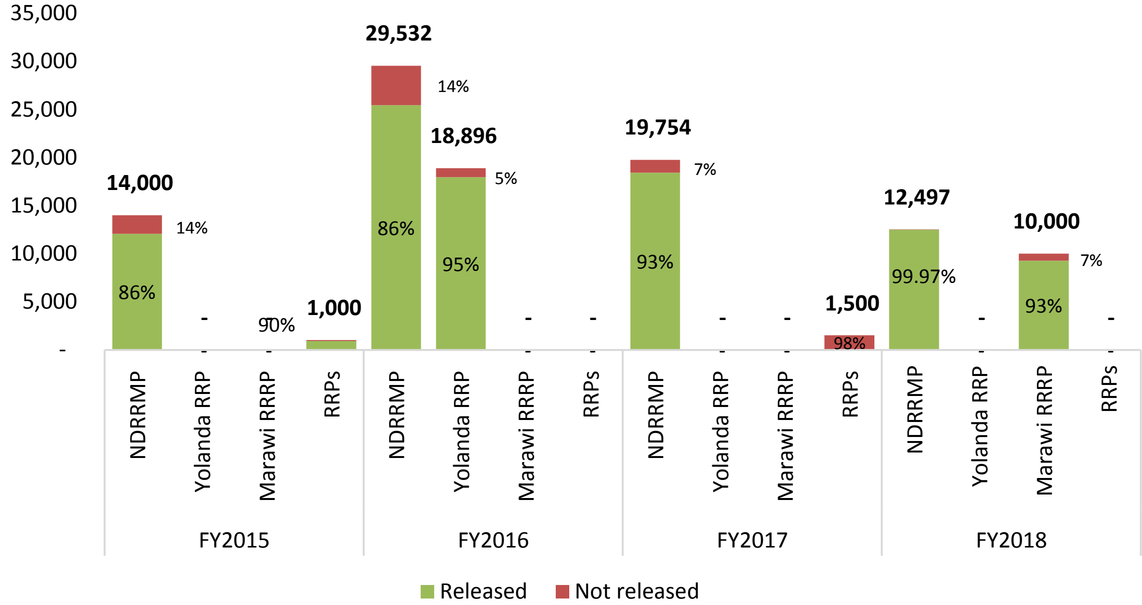
Table 5. NDRRM Fund SARO Releases, FY2015-18
(in Php Billion)

Programs	FY2015	FY2016	FY2017	FY2018
NDRRMP	12.1	25.4	18.4	12.5
Yolanda RRP	-	17.9	-	-

Marawi RRP	-	-	-	9.3
RRPs[21]	0.9	-	0.03	-
Total released	13.0	43.4	18.5	21.8
Share to Total authorized NDRRM Fund (percent)	87	90	93	97

Source: DBM NDRRM Fund Consolidated Report.

Figure 3. Authorized and Released NDRRM Fund Allocations, FY2015-18
(in Php Million)



Source: DBM NDRRM Fund Consolidated Report; COA Consolidated Audit Report on DRRM Funds.

Effectiveness of the NDRRM Fund is a concern as it has faced bottlenecks in the approval, release, and transfer of funds to implementing agencies. The prescribed indicative timeline for the OCD evaluation and NDRRMC endorsement of fund requests is 15 to 30 working days for NGAs[22] and 60 working days for LGUs. It is reported, however, that the provision of resources from the NDRRM Fund can take more than one year. For example, funds requested by the DA after the Marawi siege that occurred in May 2017 were released around June 2018. Delays are likely related to the capacity to manage the large number of requests that require processing and approval by different agencies. This affects utilization rates, as initially planned projects are sometimes completed and/or are no longer (or less) relevant by the time funding is received. Moreover, delays can reduce funding available to cover immediate needs, which is among the main objectives of the NDRRM Fund. More analysis should be done into lapsed funding (authorized but not released).

Table 6. SARO Charged against the NDRRM Fund (Funds Released to Agencies), FY2015-18
(In Php Billion)

	NDRRM Program and QRF *	Yolanda RRP	Marawi RRRP	Total

[21] FY2015 covered the following calamities: Zamboanga siege (2013), Bohol earthquake (2013), and typhoons Labuyo (2013), Odette (2013), Pablo (2012), Santi (2013), Sendong (2011), Vinta (2013), and Yolanda (2013), including Glenda (2014), and Mario (2014). For FY2017, the RRP was generally set aside for various calamities that cannot be covered by the regular NDRRM Fund, as provided in the corresponding GAA Special Provisions.

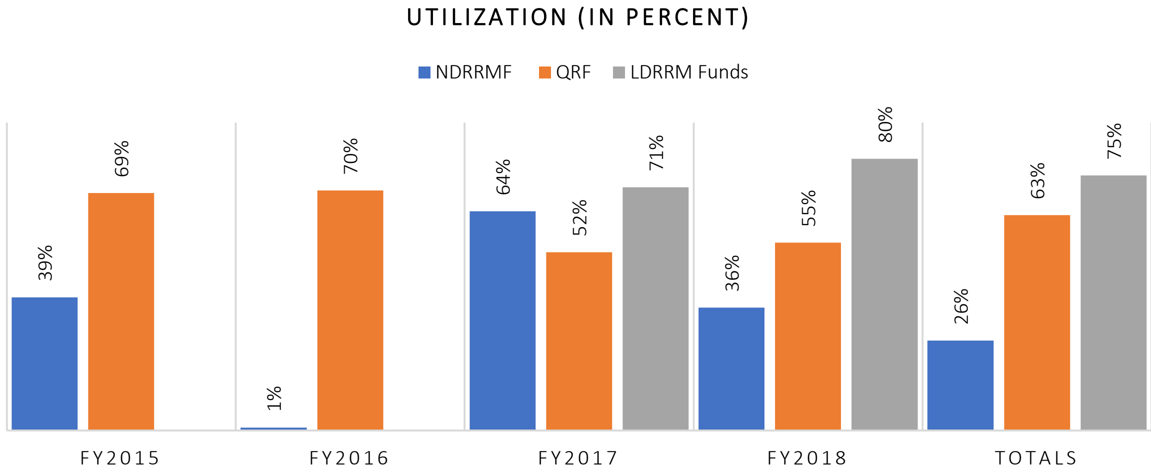
[22] Memorandum Circular No 45 s2017 indicates fifteen days for NGA requests with Post-Disaster Needs Assessment (PDNA) and thirty days for NGA requests without the PDNA.

National Government Agencies	**59.7**	**9.4**	**8.6**	**77.7**
Budgetary Support to Government Corporations	**4.7**	**8.5**	**0.7**	**14.0**
Sub-total	**64.4**	**17.9**	**9.3**	**91.7**
PSF and Insurance coverage – DOF				**4.0**
RRPs				**0.9**
Grand total				**96.6**

Source: DBM NDRRM Fund Consolidated Report; COA Consolidated Audit Report on DRRM Funds.
*Included 2017 initial QRF allocations earmarked from NDRRM Fund as well as all QRF replenishments.

As a result, NDRRM Fund utilization rates have been low. Figure 4 shows percentage utilization in the years studied indicating large range of utilization rates of NDRRM Fund ranging from 64 percent in 2017 to 1 percent in 2016. The COA also highlighted a lack of proper reporting on the use of the LDRRMF by many LGUs. This may reflect limited capacity of local governments to implement planned PAPs or could point to the ineffective use of funding.

Figure 4. Utilization of N/LDRRMF and QRF, FY2015-18



Note: COA consolidated audit reports do not provide insights into the completeness of coverage and included only financial highlights or data from the respective agencies' auditors.
Source: COA consolidated audit reports of DRRM Fund FY2015-18.

Key Recipients of the NDRRM Fund

Over 90 percent of SARO releases for the NDRRMP and major rehabilitation and reconstruction programs (RRPs) were made to nine out of a total of thirty agencies in FY2015-18 (Figure 5). Excluding QRF allocations and replenishments charged against the NDRRM Fund, the DPWH received the most funds to cover calamity-related projects, such as for the repair and rehabilitation of roads, bridges, and flood control systems damaged by typhoons (see Box 1). The DSWD was the second largest recipient of funds, mainly provided for the implementation of continuing relief assistance and cash-for-work for internally displaced persons (IDPs) of the Marawi siege and for households affected by typhoons (e.g., the Emergency Shelter Cash Assistance Program). The DA and the Department of Trade and Industry (DTI) received considerable funds under RRPs intended for farm infrastructure, machineries and equipment, and livelihood activities. The National Electrification Administration (NEA) and the National Housing Authority (NHA) received national government subsidies from the NDRRM Fund for electrification and housing activities in resettlement and transitional shelter sites. The SARO released to the DOF pertain to insurance premiums remitted to the BTr and PSF allocations earmarked in the GAA. The BTr allocations covered premiums for the parametric insurance program pilot in FY2017-2018 in accordance with relevant issuances.

Box 1. Key Recipient of the NDRRM Fund: The DPWH

The DWPH is mandated to design, construct, and maintain the country's national roads and bridges as well as major flood control systems. It functions as the engineering and construction arm of the national government, undertaking major infrastructure projects. The GAA Special Provisions of the NDRRM Fund explicitly specify the DPWH as the implementing agency of infrastructure and reconstruction and rehabilitation projects.

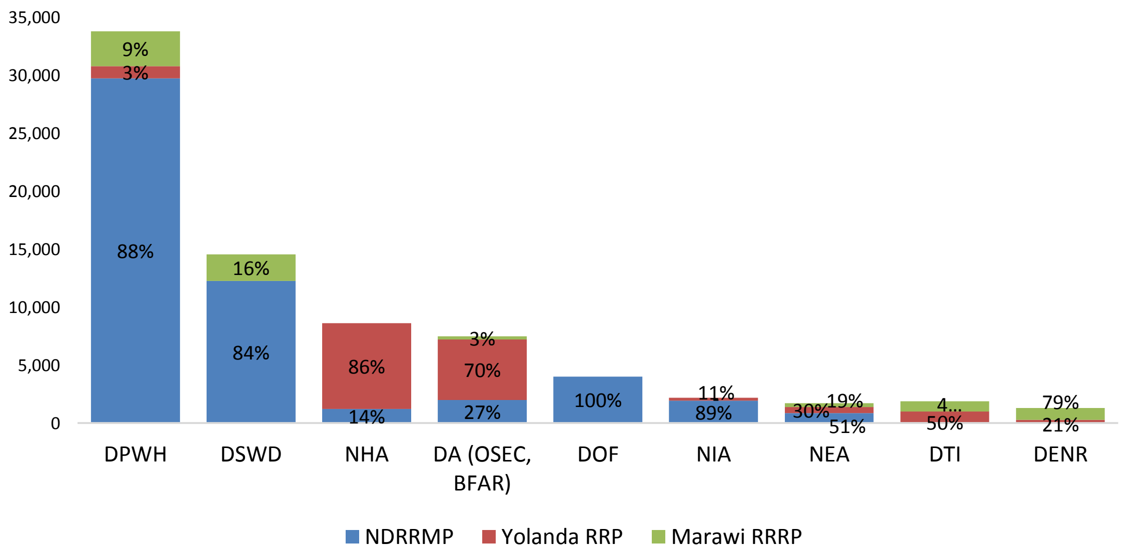
However, there are concerns over the absorptive capacity of the DPWH, especially considering its budget increased by an average of 30 percent in three years, from Php303.16 billion in FY2015 to Php650.87 billion in FY2018, on top of what it received from the NDRRM Fund. The COA has raised audit issues concerning low actual utilization and disbursement due to delays in project implementation. Audit reports show an overall average disbursement rate of 36 percent of general allotments in FY2016-18 for the DPWH, higher than 29 percent for the NDRRM Fund in FY2018. In this period, the average obligation rate for the DPWH was 86 percent, and its average disbursement rate on the year of obligation was 34 percent. A review of published financial accountability reports for the DPWH also reveal Php4.8 billion in total unobligated or expired resources from the NDRRM Fund in FY2015-18 and FY2017 QRF allotment.

Nonetheless, the DPWH is allowed to enter into a memorandum of agreement (MOA) with LGUs that have the capability to implement (by themselves or through third-parties) infrastructure projects. As prescribed by GAA Special Provisions, reconstruction and rehabilitation projects should be implemented by the DPWH or LGUs that have the required implementation capability to execute a MOA. The same provision applied to infrastructure projects under both the Yolanda and Marawi programs.

Also, funds can be transferred to operating units, other NGAs, or GOCCs, in accordance with existing budget, accounting, and audit rules and regulations. However, audit reports show that some funds transferred have remained unliquidated (i.e., actual use was not reported). For instance, Php80.81 million was transferred to the NHA for the reconstruction of water lines and facilities related to the Zamboanga City Roadmap to Recovery and Reconstruction Plan, but the status of these funds cannot be determined without a utilization report. However, agency-specific audit reports include no relevant summary data of fund transfers to operating units, other NGAs, GOCCs, and LGUs.

Source: DPWH, agency audit reports.

Figure 5. Top Recipients of the NDRRM Fund, 2015-18
(in Php Million)



Note: Some agencies implementing RRPs also received funds from other sources (e.g., the NHA received funding from the unprogrammed funds for the Marawi RRRP).
Source: DBM Status Reports of NDRRM Fund FY2015-18

However, there are no consolidated data on the actual utilization of NDRRM Fund releases to various implementing agencies. The COA's consolidated audit reports on DRRM funds provide incomplete data and are limited in scope. The reports covered only Php24.0 billion in actual utilization in FY2015-18, or 25 percent out of Php96.6 billion released, according to the DBM status reports. While recipient agencies incorporate the utilization of allocations received from the NDRRM Fund in their respective reports, they are incomplete.

3.2 Quick Response Fund

Description and Purpose

The QRF serves as stand-by fund to key NGAs. It can be used for response, reconstruction and rehabilitation PAPs, including, in a few cases, the pre-positioning of goods and equipment (pre-disaster activities, such as purchase of goods and equipment for an imminent disasters are excluded[23]) to quickly normalize the living conditions of people living in areas affected by disasters, epidemics, crises, or catastrophes. The QRF is limited to specific functions, with activities defined each year for each recipient agency in the GAA Special Provisions of respective agencies. For example, the activities defined for the DA includes production inputs (e.g., seeds and fertilizers), minor repairs of production facilities, and supplies for fisheries, and the DSWD is limited to using its QRF to provide assistance to affected families. Agencies request QRF allocations during the regular budget process, and they often receive approval for less than the requested amount. The DBM recommends standard QRF allocations in the GAA and approves subsequent replenishments through the NDRMMF based on agency requests within the fiscal year.

The use and approval of the QRF is streamlined across agencies. The QRF is included in the agencies' budgets and can be readily used without any need for further endorsement or approval by the NDRRMC or OP beyond the head of the respective agency. While it is used in the same way as a regular agency budget, it is subject to special provisions or conditions in the GAA. For example, the QRF can only be used in relation to disasters or calamities that occurred in the current year or in the last quarter of the preceding year, which means that the fund cannot be used for pre-disaster activities.

Agencies can submit a request for replenishment directly to the DBM when its QRF reaches a critical level (equal to 50 percent of its allocation).[24] All requests for replenishment are subject to evaluation and approval by the DBM and a copy of the approval is submitted to the NDRRMC. All QRF replenishments come from the NDRRM Fund, except in FY2019 when the DSWD's QRF was replenished from unprogrammed funds. The DBM has approved replenishments within an average of twenty-seven days, with the fastest in ten days, according to available data.[25] A SARO for the approved replenishment for the QRF is then issued by the DBM to the requesting agency. The DBM and NDRRMC review the utilization of QRFs based on quarterly utilization reports that implementing agencies are required to submit.

[23] For example, the request to use QRF for slow-onset disasters in the 2020 GAA, like El Nino/La Nina was not allowed for the DA. OCD, DSWD, DPWH reported pre-position goods and equipment for disasters using QRFs.
[24] As defined by the GAA Special Provisions. Consulted agencies reported that the QRF can be topped up when over 50 percent of it has been disbursed.
[25] The DSWD and DA, for example, confirmed it takes two weeks to one month to have the replenishment approved and released.

Use of the QRF

In total, Php37.6 billion, or 0.4 percent of the GAA, was allocated to QRFs in FY2015-18, including Php24.6 billion in allocations and Php12.9 billion in replenishments and additional allocations (Table 7 and Figure 6). This averaged to Php6.2 billion per year in initial QRF allocations to implementing agencies and GOCCs. Initial allocations are determined based on the previous year's allocations, except in FY2017, when the initial QRF allocations were sourced from the NDRRM Fund. Replenishments and additional allocations are sourced from the NDRRM Fund.

Table 7. QRF Initial Allocations and Replenishments, FY2015-18

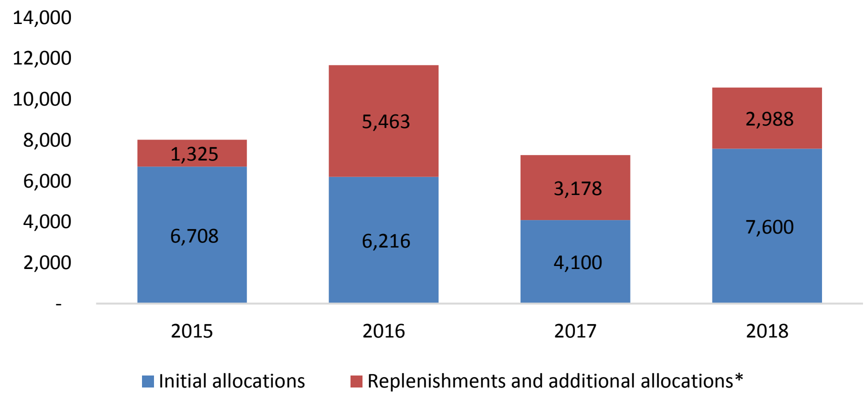
(in Php Billion)

Implementing Agencies	FY2015	FY2016	FY2017*	FY2018	Total
Agency Regular Budget					
DSWD	1.3	1.3	1.3	1.3	5.2
DPWH	1.0	1.3	1.0	1.0	4.3
DepEd	1.0	1.0	-	2.0	4.0
DND – OCD	0.5	0.5	0.5	0.5	2.1
DOH	0.5	0.5	0.5	0.5	2.0
DA	0.5	0.5	-	1.0	2.0
DND – AFP	-	-	0.8	0.8	1.5
DOTC	1.0	0.1	-	-	1.1
DND – Office of the Secretary (OSEC)	0.4	0.2	-	-	0.6
DOTC – PCG	-	0.08	-	-	0.08
DILG – BFP	-	0.08	-	-	0.08
DILG – PNP	-	0.08	-	-	0.08
Budgetary Support to Government Corporations					
NIA	0.5	0.5	-	0.5	1.5
NEA	-	-	0.1	0.1	0.2
Total initial allocations	**6.7**	**6.2**	**4.1**	**7.6**	**24.6**
DSWD	1.3	5.0	2.0	2.0	10.3
DPWH	-	-	0.2	1.0	1.2
DA	-	0.5	0.4	-	0.9
NIA	-	-	0.5	-	0.5
NEA	-	-	0.1	-	0.1
Total replenishments and additional allocations*	**1.3**	**5.5**	**3.2**	**3.0**	**13.0**
Total QRF authorized (allocation + replenishment) and released	**8.0**	**11.7**	**7.3**	**10.6**	**37.6**
Share of total GAA (percent)	**0.43**	**0.55**	**0.29**	**0.37**	**0.40**

Share of total GDP (percent)	**0.06**	**0.08**	**0.04**	**0.06**	**0.06**

Source: GAA's FY2015-18
*Earmarked against the NDRRM Fund.

Figure 6. QRF Allocations and Replenishments
(In Php Million)



Source: DBM Reports on Status of NDRRM Fund, and GAAs FY2015-18

The utilization of QRFs averaged Php5.0 billion (63 percent) per year in FY2015-18. While audit reports included Php32.0 billion in QRFs in the same period, 25 percent of that had already lapsed by the end of FY2018. Disbursement rates vary across agencies. DSWD had disbursed Php12.1 billion in QRF allocations and replenishments out of its total allotment of Php15.4 billion in FY2015-18, equivalent to a utilization rate of 79 percent, much lower than 99 percent at the National Irrigation Administration (NIA).[26] It In the same period, the DA had used Php2.0 billion, or 71 percent of its QRF. Despite the low overall utilization rate, a few implementing agencies requested replenishments in each of the years reviewed.

Key Recipients of the QRF

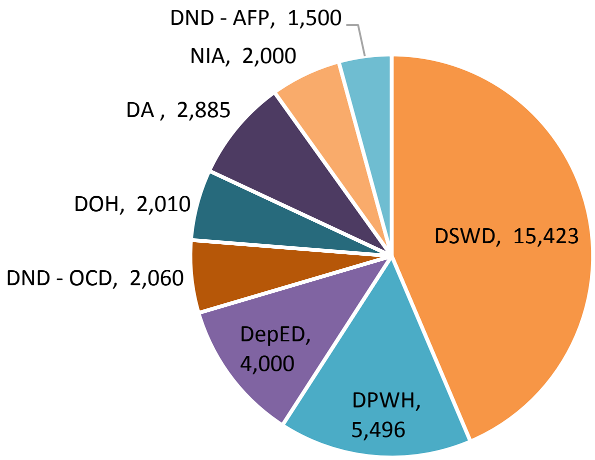
Including both initial allocations and replenishments, 94 percent of QRF releases were distributed among the top eight recipients (Figure 7). The DSWD was the top recipient of the QRF in FY2015-18 (41 percent), followed by the DPWH (15 percent) and the Department of Education (DepEd) (11 percent) (Box 2). Between them, the DPWH and DepEd have Php9.5 billion in standby funds, representing 25 percent of total QRF resources. The DPWH utilizes the QRF mainly for clearing and repairing road networks and flood control systems. The annual allotment for the DepEd has apparently become inadequate, as it uses the QRF for the immediate repair and reconstruction of disaster-affected public schools. The estimated deficit for repairing schools affected by disasters has increased by approximately Php8 billion since 2017.[27]

From QRF replenishment, the DSWD received 79 percent over FY2015-18. Its large share of replenishments is due to the DSWD pre-positioning of resources for humanitarian assistance, particularly standby funds at the central and field offices, and stockpiling relief supplies (i.e., family food packs and food and non-food items) in preparation for potential disaster events.[28] The DSWD

[26] The COA report does not include a breakdown by agencies.
[27] While the DepEd received Php1 billion for in QRF allocations in FY2015 and FY2016, it did not receive any allocations in FY2017. It did, however, receive twice its annual allocation of Php1 billion in FY2018.
[28] In FY2016, Php5 billion in QRF replenishments, or 91 percent of that year's total, were released to the DSWD, as the agency increased spending on its DRRM programs and projects, such as family food packs, and increased standby funds and stockpiles in every DSWD field office to prepare for the El Nino season and typhoon season (especially the major typhoons Ferdie, Lawin, Lando, and Nona, which occurred at the end of FY2016).

maintained Php3 million balance in every field office at any given time, plus augmentation to affected field offices based on fund requests.

Figure 7. Top QRF Recipients (initial Allocations and Replenishments), FY2015-18
(in Php Million)



Source: DBM Reports on Status of NDRRM Fund, and GAA's FY2015-18

Box 2. Key Recipient of the QRF: The DSWD

The DSWD is the primary government agency tasked with developing, implementing, and coordinating social protection and poverty-reduction solutions for poor, vulnerable, and disadvantaged groups. It also functions as the Vice-Chair of Disaster Response of the NDRRMC and is responsible for the effective and efficient provision of technical assistance and resources (relative to food and non-food items, camp coordination and camp management, and IDPs) to different DSWD field offices, LGUs, and NGOs involved in disaster response operations. The DSWD's implementing bureau is the Disaster Response Assistance and Management Bureau (DReAMB), and its mandate covers all phases of disaster risk reduction and management, with an emphasis on disaster response.

The DSWD received a total of Php15.42 billion in QRF resources and Php24.07 billion in NDRRM Fund releases in FY2015-18. Below is a list with the PAPs provided to affected families of typhoons Ineng, Ruby, Glenda, Chedeng, Luis, Egay, Lando, Nona, Nina, Urduja, Vinta, Basyang, and Ompong; the Surigao Earthquake; El Nino; the Marawi Armed Conflict; the armed conflict in Mindanao; the Batangas Earthquake; and the closure of Boracay.

Projects, Activities, and Programs	Number of Families Served (in millions)	Php Million
Relief Assistance	4.480	2,922.44
Cash for Work	1.360	3,775.87
Bunkhouses	0.001	9.90
Emergency Shelter Assistance	2.035	28,748.65
Total	**7.877**	**35,456.86**

The Disaster Response Management Bureau (DRMB) utilizes the QRF to provide disaster-related resources to DSWD field offices. The DSWD also maintains locally purchased inventories of food and non-food items used to produce family food packs and non-food supplies for distribution to individuals affected by disasters. As of December 31, 2018, the department recorded Php 1.9 billion worth of welfare goods ready for distribution.

Source: DSWD and agency-specific audit reports.

3.3 Agency-Specific Budgets

Description and Purpose

After disasters, government agencies can request budget allocations for recovery and reconstruction through the regular budget process, use some of their existing budget lines, or modify the issued allotment, or use savings. Agency-specific budgets include appropriations or allocations for disaster-related PAPs. For example, the DPWH has funds for the rehabilitation of damaged roads, and the DA has a seed buffer stocking. In addition, national government agencies are provided with funds in their respective budgets to cover insurance premiums (i.e. Taxes, Insurance Premiums and Other Fees under the Maintenance and Other Operating Expenses). In exceptional circumstances, NGAs are allowed[29] to either modify the issued allotment or use savings to augment deficient appropriations. This requires different levels of approval, with modifications between different budget lines and the use of savings requiring approval by the DBM and/or OP. Savings can be used to augment other sources of funds. For instance, Php16.4 billion in augmentation to the NDRRM Fund in FY2016-18 came from the DPWH's savings and were used by other agencies. The use of savings can be permitted in the period after a disaster with a special issuance by the President, allowing agencies to immediately tap into their savings. The head of an agency also has the discretion

[29]The GAA and the National Budget Circular on the Guidelines on the Release of Funds include rules on modifying allotments issued and the use of savings.

to reallocate budgets within an allotment class. Any other changes require DBM approval. While budget reallocations within agencies were not quantified in this PER, the DA, for example, reported re-prioritizing post-disaster spending within its existing budget lines (e.g., within the seed buffer stocking).

Key Recipients and Use of Agency-Specific Budgets

In FY2015-18, key implementing agencies received Php181.5 billion, or 0.26 percent of GDP, in appropriations for disaster recovery and reconstruction. These PAPs included assistance from the DSWD to victims of disasters; the provision of emergency drugs and supplies for the DOH; and the rehabilitation, renovation, and repair of kindergarten, elementary, and secondary school buildings, as well as the repair of water and sanitation facilities, including non-classroom facilities damaged by calamities (Table 8). Moreover, the DA purchased seeds for its buffer stocking to ensure the availability of high-quality rice and corn seeds during disasters and unforeseen events that could affect rice and corn production.

Table 8. Post-Disaster-Related Appropriations to Agency-Specific Budgets, FY2015-18
(in Php Million)

Programs, Activities, and Projects (only relevant budget lines)	FY2015	FY2016	FY2017	FY2018	Total
DPWH					
Rehabilitation / Reconstruction / Upgrading of Damaged Roads Rehabilitation / Reconstruction of Roads with Slips, Slope Collapse and Landslide Rehabilitation / Major Repair of Permanent Bridges	16.3	23.9	33.9	41.9	**116.1**
DSWD					
Disaster Response and Management Program Protective Social Welfare Program	8.2	9.4	4.3	9.4	**31.3**
DA					
Seed Buffer Stocking	-	0.9	1.0	1.2	**3.1**
DepEd					
Disaster Preparedness and Response Program Allocations for Basic Education Facilities	2.9	4.0	5.0	7.1	**19.1**
DOH					
Health Emergency Management, Preparedness, and Response Assistance to Indigent Patients/Social Health Protection Program	1.0	1.6	4.2	5.2	**12.0**
Total	**28.5**	**39.9**	**48.4**	**64.8**	**181.6**
Share of GAA (percent)	**1.53**	**1.86**	**1.94**	**2.27**	**1.94**
Share of GDP (percent)	**0.20**	**0.26**	**0.29**	**0.35**	**0.28**

Source: GAA FY2015-18
Note: Table shows total appropriations, which mainly cover either regular disaster recovery programs (e.g., the DA's seeds buffer) or post-disaster reconstruction, and programs are often split by regions and municipalities and disbursed through agency-specific regional offices.

3.4 National Government Program or Project Subsidies to Government Corporations

Description and Purpose

GOCCs can request subsidies from the national government. Request for subsidies are conducted through the regular budget cycle. If proposals are approved by the national government, GOCCs can use subsidies to undertake disaster-related PAPs that are aligned with their specific mandates. In addition to the NDRRM Fund and QRF, the GAA also provides GOCCs with separate appropriations for PAPs under the Budgetary Support to Government Corporations (BSGC).[30] Similar to the NDRRM Fund, but unlike the QRF, the BSGC is administered by the DBM and can be released directly to GOCCs, subject to the submission of a special budget request. The budget request is made when GOCCs have utilized their regular budgets and are ready to implement the proposed activity in the aftermath of a disaster.

Use of the Subsidies and Key Recipients

Subsidies to GOCCs for the implementation of disaster-related PAPs, range from Php5 billion to Php32 billion in FY2015-18 (Table 9). During this period, the highest allotment was made to the NHA for a project on permanent housing in the aftermath of typhoon Yolanda. The Food Security Program of the National Food Authority (NFA) received subsidies from the national government every year over the studied period to fund direct purchases from local farmers. In case of disaster or shortfall of production, subsidies can also fund the importation of rice and corn (upon recommendation of the NFA Council and approval by the OP).

Table 9. Post-Disaster-Related National Government Subsidies to GOCCs
(in Php Billion)

Programs, Activities, or Projects	FY2015	FY2016	FY2017	FY2018	Total
NHA					
Housing Assistance Program for Calamity Victims (2015) Permanent Housing for Typhoon Yolanda Victims (2016) Community Facilities in Typhoon Yolanda Projects and Presentation Village Resettlement Project (2017)	0.7	25.6	1.4	-	**27.7**
NFA					
Food Security Program or Buffer Stocking Program	4.3	4.3	5.1	7.0	**20.6**
NIA					
Upgrading/rehabilitation of National Irrigation Systems Damaged by Typhoon Yolanda	-	0.5	0.6	0.2	**1.2**
Local Water Utilities Administration (LWUA)					
Construction of Water Supply System at the NHA's Yolanda Permanent Housing Sites	-	1.0	-	-	**1.0**
NEA					
Electrification of the NHA Yolanda Permanent Housing Sites (2016) and Construction of Power Distribution Lines in Barangays Kasanyangan and Rio Rondo, Zamboanga City under the Zamboanga City Roadmap to Recovery and Reconstruction (2018)	-	0.7	-	0.05	**0.7**
Total	**5.0**	**32.0**	**7.0**	**7.2**	**51.2**

[30] The BSGC constitutes a specific section of the annual GAA.

Share of GAA (percent)	**0.27**	**1.50**	**0.28**	**0.25**	**0.55**
Share of GDP (percent)	**0.04**	**0.21**	**0.04**	**0.04**	**0.08**

Source: GAA FY2015-18.

There are no complete consolidated utilization reports on the use of funds by GOCCs, but individual financial reports show sizeable underutilization of allocated resources on activities such as housing rehabilitation. Recipient GOCCs maintain financial reports on the utilization of their respective BSGCs. For instance, the NHA's financial reports that show that out of the Php25.6 billion in appropriated funds in FY2016, intended for permanent housing of typhoon Yolanda victims, only Php 15.8 billion in SARO from the DBM was received. Another Php723 million was received from the FY2017 appropriation of Php1.3 billion for community facilities related to Yolanda projects. An average of 39 percent of allotments released to the NHA in FY2016-17 had expired.

Utilization has also been rather low, as reported disbursements by end-FY2019 totaled Php6.8 billion, or 43 percent of total disbursements. The NHA, in its 2018 Annual Report, had raised various issues affecting housing project beginnings and completions. In relation to "Yolanda" projects, the NHA had reported internal issues such as developer-related[31] issues, delayed project packaging and project repackaging, and issues related to site conditions. Unfavorable external factors were also identified pertaining to LGU-related and other government agency-related issues, failed bidding, and inclement weather. Additional consultations are needed with GOCCs to better understand the cause of the underutilization of post-disaster funding.

3.5 Unprogrammed and Contingent funds

Description and Purpose

Unprogrammed and contingent funds[32] under the GAA provide standby funds for new and/or urgent projects and activities. Any NGA or GOCC could use these funds to cover funding deficiencies or additional expenditures. The availability of unprogrammed funds depends on realized collections in excess of target revenues from identified non-tax sources, new tax or non-tax sources, and/or new foreign funding. The Contingent Fund is administered by the DBM (and does not require an evaluation by the NDRRMC, can be made available for urgent needs after disasters, and activities have to be implemented or paid during the fiscal year.

Use of Unprogrammed and Contingent Funds

In FY2015-18, 7.5 percent of unprogrammed funds, or Php25.0 billion, were earmarked for rehabilitation and reconstruction programs (Table 10). Actual releases from unprogrammed and contingent funds varied during the period, peaking in FY2015 for rehabilitation activities related to typhoon Yolanda. In addition to Php2.4 billion released for the Marawi recovery in FY2018, Php12.2 billion was released from other allocations within unprogrammed funds, including: (i) Php9.3 billion to the DPWH for various infrastructure projects; (ii) Php1.4 billion to the DOF for FY2018 insurance coverage of government facilities; (iii) Php1.1 billion for QRF replenishments to the DSWD and NEA; (iv) Php290 million to the DA and the Bureau of Fisheries and Aquatic Resources (BFAR); and (v)

[31] This includes non-compliance of developer with requirements in the Notice of Award (NOA), mostly affecting projects after Typhoon Yolanda, resulting in non-implementation of 13 projects (9,287 units) in Regions VI, VII and VIII. Completion issues include insufficient manpower, materials and equipment, slow implementation, non-compliance with NOA requirements, ongoing rectification of defects and additional works which include installation of plumbing and electrical fixture, doors and windows. These affected 107 projects, equivalent to 31,604 units, mostly under Housing Program for Calamity Victims of Typhoon Yolanda and Resettlement Assistance to LGUs.

[32] The Contingent Fund, administered by the DBM, covers final and executory legal obligations (contingent liabilities) of the national government, funding requirements for newly created offices, and deficiencies in appropriations for official travels by the President of the Philippines. Nonetheless, the use of the Contingent Fund can also cover funding of new and/or urgent projects and activities of NGAs and GOCCs without prior appropriations that are to be implemented or paid during the fiscal year.

Php123 million to the Metropolitan Manila Development Authority (MMDA) for the Metro Manila Flood Management Project.

Table 10. Authorized Unprogrammed and Contingent Funds, FY2015-18
(in Php Billion)

Purposes	FY2015	FY2016	FY2017	FY2018	Totals
Rehabilitation and Reconstruction Fund for Yolanda CRRP	20.0	-	-	-	**20.0**
Bangon Marawi Fund				2.4	**2.4**
Releases for other allocations (detailed above)	1.1			12.2	**13.3**
Total Unprogrammed Funds	**21.1**	**-**	**-**	**14.6**	**35.7**
Contingent Funds	0.1	0.3	4.5	-	**4.9**
Total	**21.2**	**0.3**	**4.5**	**14.6**	**40.6**
Share of GAA (percent)	**1.14**	**0.01**	**0.18**	**0.51**	**0.43**
Share of GDP (percent)	**0.15**	**0.00**	**0.03**	**0.08**	**0.06**

Source: DBM reports.

Key Recipients

The DSWD and NHA are among the key recipients of unprogrammed and contingent funds, receiving 31 percent and 29 percent, respectively, in FY2015-18. These funds were mainly used for emergency shelter assistance and the construction of permanent housing units and community facilities under the Yolanda Comprehensive Rehabilitation and Recovery Plan (CRRP). The DPWH received 24 percent of funds, mainly for various infrastructure projects. The DOF also received SAROs to pay for insurance coverage in FY2018.

3.6 Local Disaster Risk Reduction and Management Fund

Description and Purpose

The LDRRMF is the main source of disaster financing at the local government level. There were a total of 43,594 LGUs and LDRRMFs (from the provincial down to the barangay level) in 2018 (Table 11). LGUs are required to set aside no less than 5 percent of their estimated revenues from regular sources in the LDRRMF to support local disaster risk management activities, such as: (i) pre-disaster preparedness programs, including training; (ii) the purchase of life-saving rescue equipment; (iii) the procurement of supplies and medicines; (iv) the payment of premiums on calamity insurance; and (v) post-disaster activities. 30 percent of the LDRRMF is to be allocated as QRFs, or standby funds, for relief and recovery programs.[33] The 5 percent budgetary requirement is in accordance with the Local Government Code, which also requires 5 percent of annual lump-sum appropriations for relief, rehabilitation, reconstruction, and other works or services in connection with calamities that may occur during the budget year. Unused local appropriations for the current year should be transferred

[33] Joint Memorandum Circular (JMC) No. 2013-1 issued by the NDRRMC, DBM, and DILG, guides the allocation and utilization of the LDRRMF. According to the JMC, the release and use of 30 percent QRF allocations from the LDRRMF entailed a prior declaration of state of calamity by the Local Sanggunian or the President. LGU compliance with the JMC has significantly improved, as the COA only flagged Php0.8 million from four non-compliant LGUs in FY2018, a significant improvement from Php32 million from twelve LGUs in FY2015.

to a special trust fund of the LGU under the LDRRMF to be used in future years, and they are to be reverted to the LGU's general budget if unutilized after five years.

Table 11. Local Government Units by Level of Government, FY2015-18

LGU Level	FY2015	FY2016	FY2017	FY2018
Provinces	81	82	82	82
Cities	144	145	145	145
Municipalities	1,478	1,477	1,477	1,478
Sub-total for provinces, cities, and municipalities	1,703	1,704	1,704	1,705
Barangays	41,889	41,889	41,889	41,889
Total	43,592	43,593	43,593	43,594

Source: DBM Local Budget Memoranda.

The internal revenue allotment (IRA) constitutes the LGUs' main source of regular revenue. The DBM issues the annual Local Budget Memorandum before the ensuing fiscal year to inform LGUs of their respective IRA shares and provide guidelines on the preparation of LGU budgets. The LGU's regular revenue sources to meet the LDRRMF's 5 percent revenue requirement include taxes, fees, and receipts actually realized, including the IRA and other shares provided, but excluding non-recurring receipts, such as national aid, grants, financial assistance, loan proceeds, sale of assets, miscellaneous income/receipts, and other similar receipts.

Use of the LDRRMF

LDRRMF appropriations from IRA shares reached an estimated Php91.4 billion, or 0.14 percent of GDP, in FY2015-18. The DBM regards the LDRRMF budgetary requirement as among the priorities for LGUs to use the IRA. IRA shares totaled Php1.8 trillion during the covered period (Table 13). It is expected that IRA shares will increase as a result of the Supreme Court's Mandanas Ruling in 2018, as it provided for IRA shares to be calculated from all national taxes, which is expected to increase LDRRMF appropriations.

Data on LGUs' LDRRMF appropriations are incomplete. The COA reported Php42.9 billion in LDRRMF appropriations in FY2017-18 from 63 percent of provinces, cities, and municipalities covered by the COA report (Table 12). However, this likely significantly underestimates appropriations, considering non-compliant or non-reporting LGUs—over 600 out of a total 1,705 provinces, cities, and municipalities (PCMs) have not reported their annual LDRRMF allocations (Table 14). The COA also reported twenty LGUs in FY2015-16 that did not make allocations to the LDRRMF (estimated at Php134 million) and another twelve LGUs with no data provided. The audit report excluded barangays.

Table 12. Status of LGU's LDRRMFs, FY2017-18
(in Php Billion)

LDRRMF	FY2017	FY2018
Beginning cumulative balance	25.6	21.5
Local Appropriation Ordinance	25.1	17.9
Total Local DRRM Fund available	50.7	39.4
Total LDDRM funds utilized	17.9	14.2
Reverted unutilized balances (to the general budget)	-	0.1
Ending cumulative balance	32.8	25.1

Source: Consolidated Report on the Audit of DRRM Fund for 2017 and 2018.
Note: Consolidated Report on the Audit of DRRM Funds covered 1,063 out of 1,705 LGUs in FY18 and 1,090 in FY17. Some LGUs did not report on their LDRRMFs. Unutilized LDRRMF appropriations revert to the LGU's general fund after five years.

Table 13. LGUs' IRA Shares, FY2015-18
(in Php Billion)

LGU Level	FY2015	FY2016	FY2017	FY2018	Totals
Provinces	91.0	100.0	113.3	121.6	**425.9**
Cities	89.2	98.1	111.5	119.8	**418.6**
Municipalities	133.0	146.1	165.9	178.1	**623.1**
Sub-total PCMs	313.2	344.2	390.8	419.5	**1,467.7**
Barangays	76.7	84.4	96.1	103.2	**360.4**
Total	**389.9**	**428.6**	**486.9**	**522.7**	**1,828.1**
Share to GAA (percent)	**20.93**	**20.04**	**19.48**	**18.27**	**19.53**
Share to GDP (percent)	**2.80**	**2.83**	**2.94**	**2.86**	**2.86**

Source: DBM Local Budget Memoranda.

Table 14. Estimated LDRRMF Allocations from LGUs' IRA Shares, FY2015-18
(in Php Billion)

LGU Level	FY2015	FY2016	FY2017	FY2018	Totals
Provinces	4.6	5.0	5.7	6.1	21.3
Cities	4.5	4.9	5.6	6.0	20.9
Municipalities	6.6	7.3	8.3	8.9	31.2
Sub-total PCMs	15.7	17.2	19.5	21.0	73.4
Barangays	3.8	4.2	4.8	5.2	18.0
Total	**19.5**	**21.4**	**24.3**	**26.1**	**91.4**
Share to GAA (percent)	**1.05**	**1.00**	**0.97**	**0.91**	**0.98**
Share to GDP (percent)	**0.14**	**0.14**	**0.15**	**0.14**	**0.14**

Source: Computed at 5 percent of IRA shares.

In addition to allocations from IRA shares, there is another Php20.3 billion in potential appropriations to the LDRRMF from LGUs' other regular income sources. PCMs generate regular revenue from local sources such as taxes, fees, and receipts from economic enterprises. Certain LGUs are also entitled to special shares in the proceeds of national taxes on top of their respective IRA. Average additional LDRRMF appropriations in FY2015-18 are estimated at Php27.9 billion[34], which represents an increase of 30 percent compared to the reported actual average allocation in FY2017-18, as per COA reports (Table 15).

Table 15. Estimated LDRRMF Allocations from LGUs' Other Regular Income FY2015-18
(in Php Billion)

LGU Level	Total IRA Shares	IRA Dependency (percent)	Annual Regular Income	Other Regular Income	Additional estimated LDRRMF Allocations
Provinces	425.9	84	507.0	81.1	4.1
Cities	418.6	66	634.3	215.7	10.8
Municipalities	623.2	85	733.1	110.0	5.5
Total PCMs	1,467.7		1,874.4	406.7	20.3

Source: Internal Revenue Allotment Dependency FY2009-18 (Preliminary) by the Bureau of Local Government Finance (BLGF.)

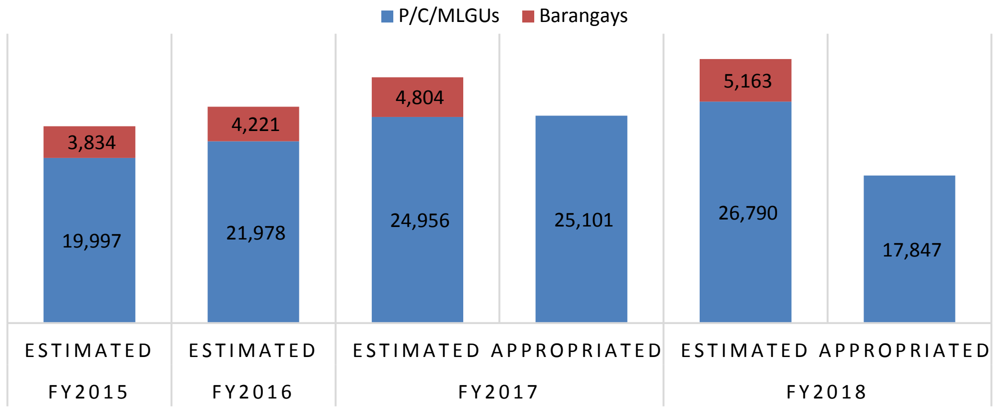
Figure 8 shows a comparison of estimated LDRRMF and actual appropriations, as audited by the COA. Approximately Php18.8 billion in LDRRMF appropriations (based on IRA and non-IRA estimated

[34] Approximate additional allocations were computed on the basis of IRA dependency, the percentage of IRA over the total annual regular income which averaged 84 percent for provinces, 66 percent for cities, and 85 percent for municipalities in FY2015-18.

allocations) were not accounted for or covered by the COA's consolidated audit reports on DRRM funds.

Figure 8. Estimated Total LDRRMF Allocations in FY2015-18 Compared to Appropriations Reported in COA Reports

(in Php Million)



Note: Barangays are reflected separately because these were not included in the COA report. Data on barangay allocations are taken from DBM Local Budget Memoranda regarding the IRA shares of all the LGUs. Only appropriated amounts of the LDRRMF for FY2017-2018 are available and presented in the COA consolidated audit reports. For provinces, cities and municipalities, appropriated amounts were about the same as the estimated amounts in FY2017 and much lower in FY2018.

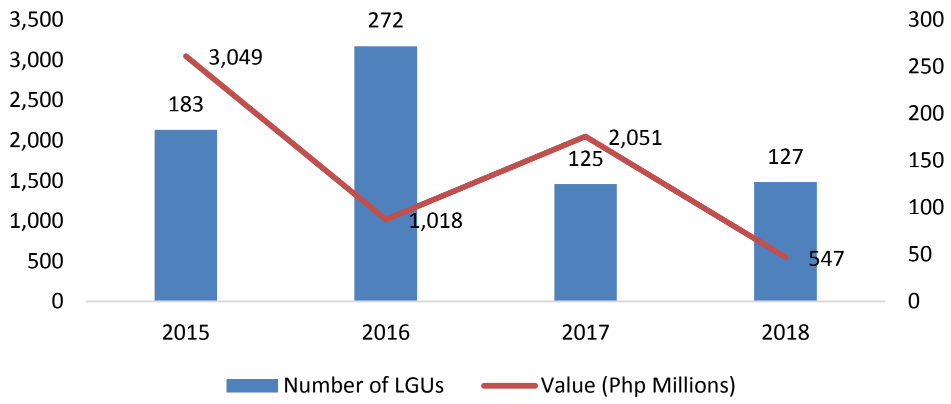
The average utilization rate for local appropriations in the current year was 75 percent in FY2017-18.[35] Yet, implementation effectiveness varied across LGUs. The COA cited a sample of seven LGUs that had implemented only 218 out of 482 planned DRRM activities in FY2017—an implementation rate of 45 percent. In FY2018, the COA also reported a sample of sixteen LGUs that had an average implementation rate of only 25 percent. Finally, the COA also found Php1.0 billion in appropriated LDRRMF releases in FY2016 that were not properly utilized.

Over half of available LDRRMF were not spent at end-FY2018. The reported cumulative balance of LDRRMFs totaled Php36.5 billion, 53 percent of available LDRRMF. Any unexpended balance of the current LDRRMF accrues to a special trust fund to be solely used for DRRM activities in the next five years. The COA, however, reported 672 LGUs with Php 6.7 billion in unexpended LDRRMF appropriations that had not been transferred to a special trust fund during the period analyzed, as well as another 35 LGUs in FY2018 with an undetermined amount of unexpended LDRRMFs (Figure 9).[36] There is a risk that these funds could be used for non-DRRM expenditures, according to the COA. Moreover, unutilized LDRRMF appropriations of Php194.8 million from 49 LGUs were reverted to their respective general fund in FY2017-18, excluding 11 LGUs where the reverted LDRRMFs could not be determined. This raises concerns regarding the accountability and transparency in use of the LDRRMF.

[35] The COA has previously flagged the low utilization of the LDRRMF: a sample of thirty-five LGUs utilized only Php553 million out of an allotment of Php3.3 billion In FY2017—an average utilization rate of 17 percent.

[36] This refers to an amount that the COA was not able to quantify and is indicated as such in the COA report.

Figure 9. LGUs with Unexpended LDRRMFs Not Transferred to Special Trust Funds, FY2015-18



Note: These funds could potentially be used for non-disaster-related purposes, as highlighted by the COA.
Source: COA Consolidated Audit Reports on DRRM Fund FY2015-18

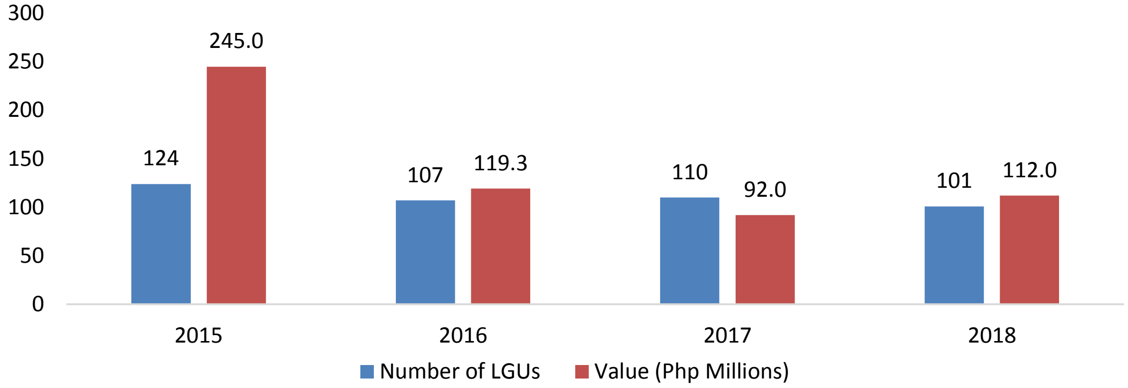
3.7 Accounting and Reporting on the Use of Post-Disaster Funds

Financial statements' disclosure of information pertaining to disaster-related activities remains limited. While the COA[37] requires fund recipients to ensure the quality of financial reports and availability of data related to the receipt and utilization of all disaster-related funding sources, challenges remain. Audit reports reveal few or fragmented details of actual expenditures for the implementation of post-disaster activities, and there is a lack of other relevant information, particularly modifications, reallocations, augmentation, and the status and utilization of post-disaster funds. Fund transfers between agencies is a specific challenge – liquidation reports are limited, while the funding is recorded by the transferring agency as an advance to the implementing agency.

According to the COA, an average 6 percent of LGUs have used LDRRMF allocations for non-related activities and 20 percent do not properly report the use of funds (Figure 10). The COA reported that more than 100 LGUs each year between FY2015-2018 had used their respective LDRRMFs on expenditures that were not related to DRRM activities, totaling Php564 million (excluding an undetermined amount from 26 LGUs). Also, the COA reported that an average 20 percent of LGUs have not submitted the required LDRRMF investment plan and monthly utilization reports, which contributes to difficulties in evaluating the utilization of the LDRRMF at the local government level (Figure 11). In FY2016-17, a total of Php678 million worth of chargeable DRRM activities were not recorded in the LGU's investment plans.

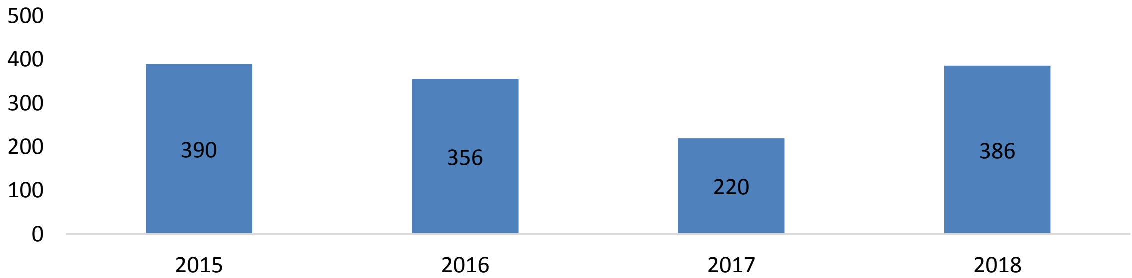
[37] The COA is responsible for reporting on the NDRRM Fund and ensuring transparency in the use of appropriations. The COA Circular 2014-002 includes accounting and reporting guidelines on receiving and utilizing the NDRRM Fund with the objective of improving the quality of financial reports and increasing the availability of information on the receipt and utilization of NDRRM Fund appropriations, in-cash or in-kind disaster relief aid/donations, and DRRM funds allocated from agencies' regular budgets.

Figure 10. LGUs That Reportedly Used the LDRRMF for Non-Disaster Expenditures, FY2015-18



Source: COA Consolidated Audit Reports on DRRM Fund FY2015-18

Figure 11. LGUs That Did Not Submit Utilization Reports, FY2015-18
(Number of LGUs)



Source: *COA Consolidated Audit Reports on DRRM Fund FY2015-18*

4 Case Studies

This section reviews a selection of case studies of disaster-related spending to further understand the current process and identify bottlenecks. These include case studies that were previously reviewed: (i) Zamboanga City Siege (September 2013); (ii) typhoon Yolanda (November 2013); (iii) Bohol earthquake (October 2013). These also include additional case studies analyzed for this PER: (i) the siege of Marawi City in 2017, a manmade disaster due to armed conflict; (ii) typhoons Ompong (September 2018) and Ursula (December 2019); and (iii) earthquakes in Mindanao in October 2019.

The case studies are compared in the below tables (Tables 16-18) based on type of events and a more detailed summary of the additional case studies is in Annex 6. The tables below include the following categories where available: (i) period of the event, (ii) declaration of state of calamity; (iii) affected areas; (iv) total affected, people displaced and/or provided with relief assistance; (v) size of total economic damages; (vi) number of damaged private and/or public property; (vii) total expenditures and their source; and, (viii) lessons learned. This is followed by a summary section with the overall lessons learned.

4.1 Armed Conflicts

Table 16. Review of Marawi and Zamboanga City Sieges

	Marawi City Siege	Zamboanga City Siege
Period	May 23, 2017 to October 23, 2017	September 9, 2013 to September 28, 2013
Declaration of state of calamity	Whole of Mindanao under state of Martial Law through Presidential Proclamation No. 216 issued on May 23, 2017	
Affected areas	All 96 barangays of Marawi City, 20 municipalities of Lanao del Sur, and 2 municipalities in Lanao del Norte	14 barangays in Zamboanga City, and one barangay in Zamboanga Sibugay
Internally Displaced Persons (IDPs)	Internally displaced people (IDPs) in evacuation centers (ECs): 6,417 families (31,345 persons) Home-based IDPs: 76,988 families (353,875 persons) Total IDPs: 83,405 families (385,220 persons) Profiled IDPs of Marawi City: 77,170 families (353,921 persons) hosted in 8 regions (ARMM, VI, VII, IX, X, XI, XII, and CARAGA) that were either in evacuation centers (ECs) or home-based with relatives and friends.	IDPs in ECs: 17,913 families (90,738 persons) Home-based IDPs: 5,881 families (28,976 persons) Total IDPs: 23,794 families (119,714 persons)
Cost of damages	Total damages: Php11.5 billion Total losses: Php6.7 billion	Total damages: Php19.7 million

Number of damaged houses	Destroyed[38]: 5,627 (within the most affected areas or MAA)	Destroyed: 10,160
Response and Early Recovery – cost of assistance	DSWD: Php596.6 million ARMM Regional Government: Php114.0 million LGU: Php21.8 million NGOs: Php32.1 million Total: Php764.6 million *(as of April 3, 2018)*	DSWD: Php82.5 million DOH: Php10.8 million LGUs: Php1 million NGOs: Php1.7 million IOs: Php3.9 million Total: Php99.9 million *(as of September 25, 2013)*
Recovery and Reconstruction Plan	Bangon Marawi Comprehensive Rehabilitation and Recovery Program (BMCRRP) for FYs2018 to 2022 by the Task Force Bangon Marawi (TFBM) Total investment requirement: Php46.5 billion	Zamboanga City Roadmap for Recovery and Reconstruction Plan (Z3R Plan) for FY2014-2015 by Zamboanga City LGU Total investment requirement: Php3.5 billion
National government special purpose fund appropriations and allocations	FY2017: Php3.8 billion from the NDRRM Fund augmented by using DPWH savings FY2018: Php10.0 billion under the Marawi Recovery, Rehabilitation and Reconstruction Program (MRRRP) allocation of the NDRRM Fund; and Php5.0 billion provision under the unprogrammed funds. FY2019: Php3.5 billion under MRRRP allocation of the NDRRM Fund. FY2020: Php3.5 billion under MRRRP allocation of the NDRRM Fund.	FY2014: Php20.0 billion appropriations under the Rehabilitation and Reconstruction Program (a budget line separate from the NDRRM Fund) for areas devastated by typhoons “Yolanda”, “Santi” “Odette”, “Pablo”, “Sendong”, “Vinta”, and “Labuyo”, Bohol and Cebu earthquake, and Zamboanga City siege and unrest.

Lessons learned

Reconstruction was delayed, often taking several times longer than planned, after the Zamboanga armed conflict and similar challenges are already observed for Marawi rehabilitation; this worsens the disaster impact on the affected people. Delays were observed in implementation of both BMCRRP and Z3R Plan and hence government’s effort to rebuild areas affected by these man-made calamities. The Zamboanga rehabilitation has still to be completed 6 years after the disaster. The Z3R Plan was intended to be implemented in 18 months beginning January 2014 but was not complete as of 2019. For instance, the water and sanitation components of Z3R had started implementation in 2019 due to several failed biddings (although funding for this project from the NDRRM Fund of Php527.0 million was released to the Local Water Utilities Administration [LWUA] in 2015). While the national government is committed and plans to complete the Marawi rehabilitation by 2022, similar challenges might be faced and some delays in implementation are already observed. For example, the findings of 2019 confirmed some 50,000 people as still displaced, and infrastructure, particularly housing projects, have remained unrealized (see Annex 6, 5.1).

[38] Referred to as “totally damaged” in government reports.

Mobilization of the funding was among the constraints for recovering after the both armed conflicts. The BMCRRP had detailed its investment cost requirements for each sector and from various fund sources such as the NDRRM Fund, agency specific budgets, provincial or city LGUs, and others (Annex 9). The total required funding was Php46.5, out of which Php22.3 billion was estimated to be required from the NDRRM Fund. The allocation from the latter was provided from FY2018-20 in amount of Php17.0 billion; the rest was to be funded from Php5.0 billion in unprogrammed funds, but not all was released (provision of which is, however, dependent on fulfilment of conditions as discussed in Section 3.5). While specific allocations under the NDRRM Fund were made for the MRRRP in FY02018-20, there was no earmarked funding in FY2014 NDRRM Fund for the Zamboanga crisis. Both cases highlighted that timely recovery and reconstruction require timely provision of funding.

Sources: (a) DSWD DROMIC Reports No. 51A and 103 on the Armed Conflict in Marawi City as of June 27, 2017 and April 3, 2018, respectively. (b) NDRRMC Situational Report on Emergency Management for the Displaced Persons Resulting from Armed Conflict in Zamboanga City and Basilan Province as of September 25, 2013.

4.2 Typhoons

Table 17. Review of Typhoons Ursula, Ompong and Yolanda

	Ursula	Ompong	Yolanda
Period	December 23-28, 2019	September 12-15, 2018	November 06-09, 2013
Declaration of state of calamity	26 municipalities and/or cities under local state of calamity through respective Sanggunian Resolutions dated between December 25 and 30, 2019	Regions I, II, III, and the Cordillera Administrative Region (CAR) under state of calamity through Presidential Proclamation No. 593 dated September 25, 2018	Philippines under a state of national calamity through Presidential Proclamation No. 682 on November 11, 2013
Affected areas	3,133 barangays 15 provinces 173 municipalities and/or cities 5 regions: IV-B, VI, VII, VIII, and CARAGA	6,504 barangays 31 provinces 456 municipalities 35 cities 7 regions: National Capital Region (NCR), I, II, III, and CAR; and Regions IV-A, IV-B that were not placed under state of calamity.	12,139 barangays 44 provinces 591 municipalities 57 cities 9 regions: IV-A, IV-B, V, VI, VII, VIII, X, XI, and CARAGA.
Total affected population	808,365 families (3,355,842 persons)	931,892 families (3,816,989 persons)	3,424,593 families (16,078,181 persons)
Families/persons displaced and provided with relief assistance	Inside ECs: 47,576 families (198,399 persons) Outside ECs: 74,228 families (309,713 persons)	Inside ECs: 129,290 families (492,444 persons) Outside ECs: 269,384 families (1,078,232 persons)	Inside ECs: 20,924 families (101,527 persons) Outside ECs: 869,971 families (3,993,753 persons)

	Total displaced and served: 121,804 families (508,112 persons)	Total displaced and served: 398,640 families (1,570,804 persons)	Total displaced and served: 890,895 families (4,095,280 persons)
Cost of damages (infrastructure and agriculture)	Total damages: Php4.3 billion	Public infrastructure: Php7.1 billion Agriculture: Php26.8 billion Total damages: Php33.9 billion	Public infrastructure: Php19.5 billion Agriculture: Php20.3 billion Total damages: Php39.8 billion
Number of damaged houses	Destroyed: 68,685 Partially damaged: 503,205 Total: 571,890	Destroyed: 24,844 Partially damaged: 294,359 Total: 319,203	Destroyed: 550,928 Partially damaged: 589,404 Total: 1,140,332
Response and Early Recovery – cost of assistance	DSWD: Php83.3 million OCD: Php9.9 million DOH: Php2.0 million LGUs: Php32.4 million NGOs/Others: Php12.4 million Total assistance: Php140.0 million *(as of February 22, 2020)*	DSWD: Php148.4 million OCD: Php76.9 million DOH: Php13.8 million LGUs: Php56.5 million NGOs/Others: Php11.7 million Total assistance: Php307.3 million *(as of November 6, 2018)*	DSWD: Php867.0 million DOH: Php218.7 million LGUs: Php116.9 million NGOs/Others: Php56.9 million Total: Php1.3 billion *(as of April 3, 2014)*
Recovery and Reconstruction Plan			Yolanda Comprehensive Rehabilitation and Recovery Plan (YCRRP) for FY2014-16 by the Office of the Presidential Assistant for Rehabilitation and Recovery (OPARR) Total investment requirements: Php170.9 billion
National government special purpose fund appropriations and allocations	No funding was released from the NDRRM Fund as of May 2020	Php2.191.3 million releases from NDRRM Program under FY2019 and FY2020 NDRRM Fund.	FY2013: Supplemental appropriations for FY2013 through RA 10634 to augment NDRRM Fund by Php11.2 billion and DSWD QRF by Php3.4 billion. FY2014:

			Php20.0 billion appropriations under the Rehabilitation and Reconstruction Program (a budget line separate from the NDRRM Fund) for areas devastated by typhoons “Yolanda”, “Santi” “Odette”, “Pablo”, “Sendong”, “Vinta”, and “Labuyo”, Bohol and Cebu earthquake, and Zamboanga City siege and unrest. Supplemental appropriations for FY2014 through RA 10652 to fund NHA construction of permanent housing for victims of typhoon Yolanda for Php7.9 billion, and DSWD emergency shelter assistance for housing for victims of typhoon Yolanda for Php2.1 billion. FY2015: Php20.0 billion provision for YCRRP under the unprogrammed funds. FY2016: Php18.9 billion under the Yolanda Rehabilitation and Reconstruction Program allocation of the NDRRM Fund.

Lessons learned

Lack of proper planning of recovery and reconstruction, including funding sources and timeline, implementation responsibilities and capacities can cause delays. The YCRRP did not provide timeline of funding and implementation across FY2014-16 - concerned agencies were responsible to determine how to distribute recovery funds over implementation period to meet the needs and ensure disbursements are within capacities of implementing agencies. In fact, YCRRP PPAs were carried out in addition to respective regular agency mandates and outputs without providing for additional staff complement and funding. These had contributed to severe delays encountered in agency budget requests and releases and in implementation of the YCRRP as absorptive capacity of agencies were stretched. In terms of funding, there was no specific allocation for the YCRRP in FY2014 under the NDRRM Fund and the needs were funded through other sources. In 2015, funding was provided under the unprogrammed funds, for instance, Php11.2 billion was released to the DSWD to cover emergency shelter assistance in May 2015 and Php9.5 billion to NHA in the last quarter of 2015 for construction of permanent housing for the typhoon victims. Over 7 years after the disaster, the YCRRP is still to be completed.

Delays were observed also in provision of recovery funding after the typhoon Ompong (with funding released only a full year later after the typhoon), however, the reason for this delay is unknown. After the typhoon Ursula, no SARO has been released as of May 2020 to fund disaster rehabilitation from the NDRRM Fund, but the funding for relief assistance was mainly provided from the DSWD QRF.

Delays to serve families, especially located outside the evacuation centers (ECs), were observed in both typhoons Ompong and Ursula. For instance, by the time of this review, only 398,640 (43 percent) of the affected families received relief assistance from the DSWD and LGUs after the typhoon Ompong; after the Ursula, only 15 percent of the total number of the affected families reportedly received assistance.

Government reacted to delays in implementation, but the progress was not clear or documented. Citing delays in implementation due to lack of coordination among government agencies, the Inter-Agency Task Force-Yolanda (IATF-Yolanda)[39] was created in 2017. Its objective was to serve as the overall and central coordination committee of all government agencies in relation to the various aspects of implementation and monitoring of the rehabilitation and recovery programs in Yolanda-affected areas. The IATF-Yolanda was extended and to be dissolved[40] in 2022 to facilitate completion of the YCRRP particularly the Yolanda Permanent Housing Program (YPHP) (under which 49,112 housing units still undergoing construction and 122 permanent resettlement projects still for electrification). While the IATF-Yolanda is to publish a final report on its accomplishments, including projects and programs implemented and total budget utilized, there has been no comprehensive report on status of the YCRRP as of 2020.

Delays in releasing funds and lack of planning led to funding gaps and low utilization rates. After the typhoon Yolanda, the DSWD resorted to utilization of its other available funds (budget reallocation, realignment or modification of allotment) totaling Php489.5 million to purchase supplies for the Yolanda Relief Operations; these were replaced upon receipt of SARO from the NDRRM Fund for typhoon Yolanda. The DOH had reallocated its FY2013 appropriations for other programs in amount of Php254.8 million for emergency purchases. On the other hand, the OCD had utilized only 17 percent or Php121.2 million out of its total QRF of Php692.8 million available in FY2013 for its operational requirements after typhoon Yolanda, but not for assistance to the victims (i.e., non-food relief supplies). The government auditors [d] had attributed such to inadequate planning, gaps in allocations and fund restrictions. This is in contrast to DPWH that had utilized its QRF almost in full (Php579 million out of Php600 million) for FY2013 to cover clearing operations of national roads, construction of temporary shelters, repair/rehabilitation/improvement of bridges, drainage system and flood control structure, and supply and delivery of roofing materials for use in school buildings affected by typhoon Yolanda.

Utilization of cash donations that could have supplemented available government funds was likewise low. Php782.0 million in donations received by the DSWD had been unutilized as at the audit. These were intended for early recovery programs of typhoon Yolanda victims, such as core shelters, basic infrastructures, cash-for-work, and supplemental feeding, due to pending LGUs safety declaration of proposed locations of shelters. The OCD had likewise not utilized Php48.8 million in local and foreign donations it had received for the typhoon victims. The DOH also have had procedural lapses in liquidation, reporting and audit related to the receipt and utilization of Php114.1 million in donated funds from government institutions, and on emergency purchases out of regular fund for Php89.3 million.

[39] Administrative Order No. 5 signed August 8, 2017: Creation of an Inter-Agency Task Force for the Unified Implementation and Monitoring of Rehabilitation and Recovery Projects and Programs in the Yolanda-Affected Areas.

[40] Administrative Order No. 33 signed September 16, 2022: Extending the Term of the Inter-Agency Task Force for the Unified Implementation and Monitoring of Rehabilitation and Recovery Projects and Programs in the Yolanda-Affected Areas, Amending for the Purpose Administrative Order No. 5.

Adherence to emergency procurement regulations proved to be a concern. In 2013, the Government Procurement Policy Board (GPPB)[41] had granted authority to all government procuring entities to apply Negotiated Procurement for contracts of at least Php500 million for the duration of the state of national calamity in order to facilitate post-Yolanda disaster response[42]. However, in the COA's special audit of the relief operations for Typhoon Yolanda in 2014, concerns were raised on adherence to procurement and contracting policies brought about by expediting transactions such as compliance to accounting and audit documentary requirements, and issues on logistics, delivery, and distribution. The World Bank assessment of Lessons Learned from Yolanda[e] indicated that fear of audit implications arising from lack of specific guidelines on conduct of emergency procurement had likewise caused delays in implementation by NGAs and LGUs.

Sources: (a) Typhoon "URSULA" OCD Situational Report No. 28 dated January 30, 2020; and DSWD DROMIC Report No. 36 as of February 22, 2020. (b) Typhoon "OMPONG" OCD Situational Report No. 55 dated October 5, 2018; and DSWD DROMIC Report No. 66 as of November 6, 2018. (c) Typhoon "YOLANDA" NDRRMC Situational Report No. 108 dated April 3, 2014. (d) COA 2014 Report on the Audit of Typhoon Yolanda Relief Operations; (e) WBG Policy Note, Philippines: Lessons Learned from Yolanda, An Assessment of the Post-Yolanda Short and Medium-Term Recovery and Rehabilitation Interventions of the Government.

4.3 Earthquakes

Table 18. Review of Mindanao and Bohol Earthquakes

	Mindanao	Bohol
Date of occurrence	Between October 29 and 31, 2019	October 15, 2013
Declaration of state of calamity	2 provinces, 1 city and 1 municipality under local state of calamity through respective Sanggunian Resolutions dated between October 18 and November 5, 2019.	Provinces of Bohol and Cebu under local state of calamity through respective Sanggunian Resolutions
Affected areas	379 barangays 22 municipalities 2 cities 5 provinces 2 regions: XI and XII	1,527 barangays 60 municipalities 6 cities 6 provinces 2 regions: VI and VII
Affected population	72,578 families (355,983 persons)	671,103 families (3,221,248 persons)
Families/persons displaced and provided with relief assistance	Inside ECs: 18,059 families (86,025 persons) Outside ECs: 27,726 families (137,080 persons)	Inside ECs: 17,203 families (79,773 persons) Outside ECs: 54,619 families (268,734 persons) Total displaced and served: 71,822 families (348,507 persons)

[41] The GPPB is an inter-agency body that was established to formulate and amend public procurement policies, and rules and regulations, and to ensure proper implementation by procuring entities of RA No. 9184, its IRR and all other relevant rules and regulations pertaining to public procurement. GPPB is also tasked to develop and ensure capacity of government procuring entities through sustainable training programs.

[42] GPPB Resolution No. 34-2013 dated November 14, 2013. Negotiated Procurement under Emergency Cases is allowed in accordance with Section 53 of RA No. 9184 or the Government Procurement Reform Act, and its 2016 Revised IRR in case of imminent danger to life or property during a state of calamity, or when time is of the essence arising from natural or man-made calamities.

	Total displaced and served: 45,785 families (223,105 persons)	
Cost of damages (infrastructure and agriculture)	Agricultural infrastructure: Php32.4 million	Public infrastructure: Php2.3 billion
Number of damaged houses	Destroyed: 25,895 Partially damaged: 21,767 Total: 47,662	Destroyed: 14,512 Partially damaged: 58,490 Total: 73,002
Response and Early Recovery – cost of assistance	DSWD: Php103.6 million OCD: Php25.3 million DOH: Php7.7 million Total: Php136.6 million *(as of March 4, 2020)*	DSWD: Php35.6 million DOH: Php14.7 million LGUs: Php3.3 million NGOs/Others: Php17.9 million Total: Php71.5 million *(as of November 3, 2013)*
Recovery and Reconstruction Plan		Post-Great Bohol Earthquake Rehabilitation Plan by Bohol Provincial LGU Total proposed funding requirements: Php12.3 billion
NG special purpose fund appropriations and allocations	FY2020: Php5.0 billion under Comprehensive Aid to Repair Earthquake Damage (CARED) allocation of the NDRRM Fund	FY2014: Php20.0 billion appropriations under the Rehabilitation and Reconstruction Program (a budget line separate from the NDRRM Fund) for areas devastated by typhoons “Yolanda”, “Santi” “Odette”, “Pablo”, “Sendong”, “Vinta”, and “Labuyo”, Bohol and Cebu earthquake, and Zamboanga City siege and unrest.

Lessons learned

National and local government post-disaster initiatives were not aligned following the Bohol earthquake; availability of funding challenged implementation of the planned activities. The Bohol LGU led development of the Bohol Earthquake Rehabilitation Plan, proposing local and national priority projects by NGAs but did not propose or plan for LGU post-disaster initiatives. This plan also did not detail sources of funds for these initiatives at national and local level (including no plans for the LDRRMF). In fact, Bohol earthquake faced challenges in implementation; lack of earmarked funding is especially critical in implementation of large infrastructure projects. There was no plan developed so far for the reconstruction post-Mindanao earthquake and it might encounter similar issues, but the plan could still be prepared harmonizing national and local government activities with sources of funding. So far funding for both earthquakes was made in different ways: national government funds for post-disaster interventions in relation to the Mindanao earthquake were earmarked in FY2020 NDRRM Fund, unlike in FY2014 wherein no specific allocations were made for the Bohol earthquake.

Delays were observed in return of displaced families, and reconstruction of damaged houses. Four months after the Mindanao earthquake, 72 percent of the reported displaced families or 32,984 families had still to return to their homes. While shelter assistance was provided by the DSWD and some non-governmental organizations, there was no clear leadership by the LGUs in the immediate reconstruction of houses of the

earthquake victims. Given the large number of damaged houses out of total disaster damages (96 percent after the Mindanao earthquake), this area requires strengthening. At the same time, as observed during the Mindanao earthquake if compared to the reviewed typhoons: longer recovery time leads to higher costs of assistance (see Annex 6 for details).

Sources: (a) Tulunan, North Cotabato Earthquake Incident NDRRMC Situational Report No. 39 dated January 22, 2020; and DSWD DROMIC Report No. 55 as of March 4, 2020. (b) NDRRMC Situational Report No. 35 Effects of Magnitude 7.2 Sagbayan, Bohol Earthquake as of November 3, 2013

4.4 Lessons Learned from the Case Studies

In the reviewed case studies, the national government covered 80 percent of assistance costs, primarily through the DSWD (Table 19). Although LGUs are on the frontline of disaster relief, the national government, and specifically the DSWD, has been consistently providing augmentation support to LGUs through the QRF and incurring higher costs than LGUs (Annex 7).

Table 19. Cost of Assistance by Case Study
(in Php Million)

Case Study	National Government (Including DSWD)	DSWD	LGUs
Marawi Siege	596.7	596.7	21.8
Typhoon Ompong	239.1	148.4	56.5
Typhoon Ursula	95.1	83.3	32.4
Mindanao Earthquakes	136.6	103.6	-
Total	**1,190.1**	**953.2**	**247.5**

Note: Annex 7 includes a complete breakdown of costs.
Source: NDRRMC Situational Reports and DSWD DROMIC Reports.

NGAs involved in disaster response relied on their respective QRFs as well as regular funds from agency-specific budgets, because release of the NDRRM Fund was delayed. The NDRRM Fund releases were delayed, for instance, after typhoon Yolanda, when the DSWD resorted to utilization of other available funds (budget or allotment) totaling Php489.5 million to purchase relief supplies that were replaced upon receipt of the NDRRM Fund support. The DOH utilized its FY2013 appropriations for other programs totaling Php254.8 million for emergency purchases. After typhoon Ompong, agencies received assistance from the NDRRM Fund for post-disaster activities only a full year later. While waiting for the NDRRM Fund, the agencies relied on their existing funds, for instance, for rapid assessments; evacuation; logistics such as transport of supplies, equipment, and personnel; and repairs and maintenance. However, among the agencies involved in disaster response and reconstruction, the OCD, DSWD, DPWH, DOH, and DepEd were provided with QRF allocations, while agencies such as the DILG (and its attached agencies Bureau of Fire Protection [BFP] and Philippine National Police [PNP]) were not allocated with such readily available funds.

Delays in reconstruction private houses were observed following several disasters. As of May 2020, there have been no reported public interventions that target houses that were partially or fully destroyed by the typhoons Ompong or Ursula or the earthquakes in Mindanao. The respective LGUs, together with national government, should ensure that adequate investment is made in the reconstruction of houses to achieve more resilient communities, thereby lowering the risk and exposure to higher response and rehabilitation costs in the future. This is besides a limited financial or shelter material assistance (Emergency Shelter Assistance) that DSWD has provided to disaster victims with partially or totally damaged houses.

Coordination between the national and local government authorities is among the challenges for effective post-disaster financing. Alignment of local and national recovery and reconstruction plans was not always in place as highlighted by the case studies. LGUs would not always play a leading role in post-disaster recovery and reconstruction, not detailing plans for utilization of their LDRRMF. Despite the LGUs being on the frontline of disaster relief, the national government and specifically DSWD has been consistently providing augmentation support using QRF to the LGUs and incurred higher costs than the LGUs. However, LGUs are key for effective and targeted post-disaster recovery. A faster response to disasters will not only lead to better outcomes for the population, it can also make post-disaster efforts more cost-effective. The longer affected families remain displaced, the higher the costs incurred by DSWD, as reported in the case of the Mindanao earthquakes. While DSWD provides relief assistance particularly to displaced individuals or families inside evacuation centers or shelters, national government and LGUs should ensure delivery of relief assistance as well to the rest of affected population such as "home-based IDPs" (i.e. people who lost houses and moved to their relatives or friends).

Capacity of agencies to implement and mobilize funds and implement emergency procurement regulations was insufficient. Delays in recovery PAPs were often attributed to absorptive capacity of implementing agencies to complete additional tasks efficiently and effectively in coordination with other concerned agencies under applicable rules and regulations. Common capacity challenges after disasters also included failed biddings, delays in procurement (even with the activation of the emergency procurement), low fund utilization, and substandard projects (i.e., Zamboanga Recovery collapsed footbridge and defective or inferior housing units for Yolanda victims). Insufficient technical guidance from oversight agencies to the LGUs and NGAs to effectively implement and deliver PAPs and apply procedural guidelines might have been among the challenges.

Follow-through on all aspects of disaster rehabilitation and recovery for the affected population was not in place from the start in the reviewed disasters. Throughout the studied disasters, there was no comprehensive reports detailing all the planned activities at national and local level and, further, their accomplishments. There also was no special audit of major RRPs, their utilization from all the sources (i.e., N/LDRRMF, ODA's, CSO funding and private donations) and implementation progress by key agencies. Following delays in implementation, the GoP established working groups/commissions, but this approach was reactive.

Reporting on post-disaster spending is incomplete or missing in some sectors. While the GoP invests in audit of post-disaster fund, there are no comprehensive reports available for the studied disasters that would cover all sources of funds (including LDRRMFs), all sectors and all key agencies. In fact, agencies tend to maintain their respective utilization reports that are not analyzed in the audit reports and are not made public. Fragmented reporting and tracking of disaster-related spending could affect both accountability and transparency. More comprehensive reporting could help to expedite recovery and reconstruction efforts, as in the case of the rehabilitation of Marawi City and strengthen accountability of NGAs and LGUs for the successful delivery of the intended results of recovery and reconstruction efforts.

5 Conclusions and Policy Recommendations

This PER reviewed spending of the Government of the Philippines on disaster response, recovery, and reconstruction form pre-arranged and ex-post budget mechanisms. The government spent an average of Php91.9 billion (US$1.9 billion) per year, or 0.6 percent of GDP, on disaster-related response, recovery, and reconstruction activities in FY2015-18. The main expenditure areas included public infrastructure, social assistance, and rehabilitation for agriculture and housing. In each year studied the government spent more than officially reported disaster-related damages. This is the result of incomplete disaster damage and loss reporting. The national government covered between 66 to 100 percent of total expenditure with the rest financed by LGUs. Key recipients of national government funding through pre-arranged sources of funds were DPWH and DSWD.

Data on utilization of post-disaster funds is incomplete and it is especially challenging to track and quantify budget reallocations. The COA's audit reports on DRRM funds and agency-specific audit reports provide limited and fragmented information on the status of disaster funds and often they show underutilization. Understanding the cause of underutilization was also complicated by country's obligation-based budgeting (prior to the shift to cash-based budgeting in 2019). The national government allowed funds to be utilized indefinitely if allotments were obligated before they expired. Funds transfers to other NGAs, GOCCs, LGUs, and/or implementing entities, when executed according to valid agreements, were considered obligated and would no longer expire as well. Transparency of utilization is especially a concern for LGUs. Unspent LDRRMF resources can be spent over a period of five years, but monitoring is weak, and a considerable amount has likely been used on other activities.

Despite limitations, the PER uncovered challenges to efficiency and effectiveness of public spending after disasters. It was not feasible to evaluate the efficiency and outcomes of public spending after disasters, as compared to needs. But the PER identified many challenges and bottlenecks in spending. This includes the complexities in processes such as approvals from the NDRRM Fund which can take over a year. To cope with this delay, implementing agencies need to source funds internally in order to complete programmed post-disaster activities. It means that activities could already be completed once funds from the NDRRM Fund are released. At the same time, decisions on post-disaster funding are often ad hoc and depend on where the funding can be sourced from (in some cases, the first year after a disaster was funded through a special budget allocation, QRFs, or use of savings, whereby in the following years it would be covered under the NDRRM Fund).

Post-disaster recovery and reconstruction were often delayed in the reviewed case studies. This frequently was not only due to delayed funding but often due to a lack of accurate assessment of needs, technical and financial capacity constraints, coordination challenges, and procurement challenges. Beyond the human impact of delayed assistance, the cost of assistance per person increases with delays.

The challenges identified in this PER highlight important policy reforms that can ensure funding is available after disasters and disbursed timely for effective response and reconstruction in the Philippines. The policy recommendation below aims to address potential funding gaps and subsequent delays for both immediate disaster response and longer-term post-disaster reconstruction. They are structured along three main pillars: (i) ensure sufficient resources; (ii) streamline expenditure from the budget; and (iii) enhance oversight and control mechanism for transparency and accountability.

Policy Recommendations

The findings of this PER highlight several areas for improvement in public spending on disaster response, recovery, and reconstruction. The government of the Philippines has made significant progress in improving financial protection to disasters through the development and implementation of a National Disaster Risk Financing and Insurance Strategy since 2015. The focus so far has been on putting in place the financial instruments to ensure access to sufficient funding when disasters strike. A key next step will be to further strengthen the efficient and transparent execution of funds. These policy recommendations build on long experience of the World Bank in supporting countries around the world to strengthen public financial management of disasters.[43,44]

To strengthen the public financial management of disasters, authorities should consider reforms along three main pillars: (i) ensure sufficient budget; (ii) streamline expenditure from the budget; and (iii) enhance oversight and control mechanism for transparency and accountability.

1. Ensure that adequate funding is available for immediate post-disaster needs

Develop a comprehensive risk financing strategy, integrated to national fiscal planning and fiscal risk management. To ensure efficient planning for the total funding required for disaster response the government should prepare an annual disaster risk financing strategy or plan, as a next step form the current DRFI strategy which sets out priorities to strengthen financial resilience. Such an annual risk financing plan should set out how the government plans to finance its contingent liability from disasters, bringing together all financial instruments including budgetary mechanisms, risk transfer, and development partner funding. This could be comparable to a public debt management strategy. This should closely build on the annual fiscal risk statement prepared under the Development Budget Coordination Committee (DBCC), which should quantify the government's contingent liabilities from disasters, climate risks and other exogenous shocks such as pandemics. Such a quantitative approach to disaster related contingent liabilities would then inform the efficient implementation of the government's risk layering strategy. The government may want to nominate or establish a dedicated unit with a fiscal risk management function and mandate to include disasters, climate risks and other exogenous shocks such as pandemics.

Revise QRF allocations to ensure adequate funding and minimize the need for replenishments. While the QRF is a useful and effective source of contingency funding for disaster response efforts it can be strengthened further. Oversight agencies should consider allocating funds to QRFs by using estimates based on past expenditure data coupled with a forward-looking analysis of potential disaster costs, instead of simply allocating fixed amounts based on the previous year's allocation. This should aim to reduce replenishments with often benefitted just a couple of agencies and reduce transaction costs. Government should also regularly review which agencies currently have – or if additional agencies should receive – a QRF. Equally, the guidance for QRFs could be reviewed, to ensure it is used for response and recovery, while reconstruction costs are covered through the NDRRM Fund or regular budget allocations. In addition, agencies could receive more leeway to utilize respective QRFs on prepositioning of specified or essential disaster response goods and equipment for rapid onset disasters (i.e., typhoons) or early action for slow onset disasters (i.e., drought and animal diseases) to speed up government response and fund utilization. Agencies could also consider channeling donations to complement their respective QRFs, increasing transparency and timeliness in the use of donations. Actions to encourage agencies to use regular budget allocations for planned and institutionalized expenditures should further protect the QRF.

Strengthen the NDRRM Fund by streamlining procedures and revising the design and operations. While the NDRRM Fund is a key government fund (budget line) to respond to disaster, it does not

[43] World Bank Group. 2019. Boosting Financial Resilience to Disaster Shocks: Good Practices and New Frontiers. World Bank Technical Contribution to the 2019 G20 Finance Ministers' and Central Bank Governors' Meeting;. World Bank, Washington, DC. © World Bank. https://openknowledge.worldbank.org/handle/10986/31887 License: CC BY 3.0 IGO.
[44] OECD; World Bank. 2019. Fiscal Resilience to Natural Disasters: Lessons from Country Experiences. OECD: Paris. © OECD and World Bank. https://openknowledge.worldbank.org/handle/10986/32341 License: CC BY-NC-ND 3.0 IGO.

achieve its potential due to delays in releasing funds and a lack of flexibility in the use of the fund. Beyond delays in approvals, there are other signs that it is not working as intended. For example, the NDRRM Fund is expected to also finance pre-disaster activities and provide support to LGUs but has barely done so. The planned establishment of a new Department for Disaster Resilience under a new law provides an entry point to rethink the design and use of the NDRRM Fund. The government could consider to:

- Revisit allocations to the NDRMM Fund, by considering historical and technically estimated future needs, developed in consultation between DBM, DOST, OCD, and BTr. This should build on an annual risk financing strategy (above) to determine the optimal level of risk retention in the NDRMM Fund, taking into account all other risk financing instruments available to the government.
- Update the damage approval and funding request process. Adopting new technology solutions should help speed up on the ground damage assessments, coordination and communications. Pre-approved lists of assessors in regions could support damage assessment processes.
- Streamline the approval process in line with the prescribed timelines and ensure the NDRRM Fund can provide rapid support by reducing the number of steps, documentary requirements, and signatories to improve the speed of approval for projects; possibly allowing advances that require less documentation; and finding a balance between the documents / level of approval required and the amount and time sensitivity of funding requests. Fund approvals should be based on purely technical parameters, approved by technical staff, without political considerations.
- Focus limited funds in the NDRRM on post-disaster activities, disaster preparedness, and small or unforeseen risk reduction investments. Regular risk reduction and management should be funded through planned regular budgets under the public investment process. This could include requiring agencies to allocate a percentage of their budget for DRRM projects and activities.
- Directly link funding to existing programs for providing disaster assistance, such as the Emergency Cash Transfer Program building on the Pantawid Pamilya Pilipino Program or the National Community Driven-Development Program - Disaster Response Operations Modality (both under DSWD) or emergency infrastructure maintenance and rehabilitation programs under DPWH. This requires agreeing in advance on standard operating procedures, the eligible expenditures/beneficiaries, amounts to be disbursed, triggers and approval processes for such additional funding, and clear pre-established fund flow arrangements. The government can then model the resulting liability to the NDRRM Fund and more efficiently determine the appropriate size for future years.
- Redesign the NDRRM Fund as a financial vehicle to more efficiently leverage the national budget allocation. This could include setting up a special purpose fund that can enable the fund to be the mechanism for the government to efficiently and transparently channel additional financial instruments that backstop the fund in case of severe disaster years, including contingent financing from development partners, sovereign risk transfer (Insurance, Cat Bonds), or to receive post-disaster donations. This could also include allowing the fund to accrue across fiscal years as a self-insurance mechanism to help balance good with bad disaster years if the government wants to smooth out unexpected expenditures. Such a redesign would require specific attention to the institutional and legal structure as well as governance and operational arrangements to ensure appropriate oversight, transparency, and implementation capacity.

The bill under consideration for the proposed establishment of the Department of Disaster Resilience (DDR) includes key changes to the appropriations of national government disaster funds. This may already address a number of challenges and recommendations raised here. The details, however, will depend on the final bill to be passed and the implementing rules and regulation. Proposed changes include bringing disaster funds together under a new National Disaster Resilience Fund to be managed by DDR. This could help streamlining fund approvals and releases and facilitating transfer of funds to implementing agencies. The above proposals could be considered in light of any such larger reform. The GoP may want to consider keeping initial allocations of QRFs or funds for immediate response, relief and quick recovery measures incorporated in the agency budgets to ensure an immediate disposition of the fund for disaster response, while providing for additional requests for QRFs or contingency funds from DDR and reporting on the use of the QRF to the DDR.

Reforms to the Local Disaster Risk Reduction and Management Funds to improve fund allocation, management, utilization, and transparency. There are currently more than 43,000 separate LDRRMFs in all LGUs with total allocation equivalent to over 1 percent of the annual national budget (or over 0.15 percent of GDP). Yet there is limited transparency how much was actually allocated or utilized. COA reports shows low utilization rates, utilization of funds for non-designated purposes, and a lack of transparency in funds carried over in the special trust fund if not utilized. Reforms to LDRRMFs could explore ways to decrease the inefficiency of having 43,000 standalone contingency funds, and increase transparency and effectiveness through the following options:

- Enhance oversight and transparency of the LDRRMFs by building the capacity of LGUs in managing and reporting on the use of post-disaster funds and provide incentives for or enforce reporting requirements (for example, provide additional national government support for good governance achievements or make additional national support contingent on submission of adequate reporting).
- Explore ways to establish a joint structure for LGUs to work together and pool all or part of their LDRRMFs. Such a joint facility should be owned by LGUs and aim to provide predictable and fast access for each LGU. A centralized fund could manage the total liability of local governments more efficiently through financial structuring and reducing total funds held as not all LGUs will be disaster affected every year, thereby lowering the opportunity costs of the LDRRMFs. The national government could provide incentives for a well-functioning mechanism by using the same structure for any additional post-disaster support. Such a structure could also explore similar reforms as suggested for the NDRRM Fund above. Importantly, this would also enhance transparency and simplify oversight and reporting.

2. Streamline the process for using funds after disaster and climate-related shocks

Increase the use of the regular budget for planned recovery and rehabilitation activities and simplify NDRRM Fund approvals for unforeseen expenditures only. For rehabilitation and reconstruction programs in future fiscal years, government agencies should institutionalize these programs by integrating these funding requests under agency-specific medium-term budgets with pre-approved, multi-year allocations. The NDRRM Fund processes and procedures should then be streamlined to minimize delays in approval by putting in place standard operating procedures, guidelines on pre-approved expenditures and contracting, and reducing layers of reviewers and signatories to make allocation decisions non-political but based on technical considerations. This should link closely to recommendations on broader NDRRM Fund reforms as set out above.

Assist implementing agencies in implementing emergency procurement frameworks. Emergency procurement procedures such as negotiated procurement[45] can be used after disasters in the Philippines but are not always used. While the COA provides advisory services to help resolve operational or procedural issues, it could further provide guidance on common emergency procurement and procedural scenarios and on how to comply with its requirements. The COA and Government Procurement Policy Board (GPPB) could develop clear guidance and a sustainable capacity building program for government entities in conducting emergency procurement with harmonized pronouncements.

Utilize financial mechanisms including market-based instruments to help clarify liability for disaster reconstruction costs and introduce additional discipline into spending. Financial mechanisms, such as contingent financing arrangements or insurance programs can be valuable not only to pre-arrange additional funding, but also to clearly set out who is responsible for shouldering (paying for) the risk and how any payout will reach the intended beneficiaries. For example, the National Indemnity Insurance Program (NIIP) under preparation by BTR, DBM, DOF, and GSIS will enhance the use of insurance for strategically important public assets and infrastructure. This means when an asset is damaged or destroyed, a private sector loss adjuster will verify the damage, estimate the rehabilitation costs and submit a detailed report back to the government and the insurance companies. The program will then pay out directly for the repair or reconstruction of the damaged asset. Not only will this help ensure adequate funding to restore damaged assets, it also prescribes a clear and transparent process for assessing damages and disbursement of funds. The BTr has been investing in new technology for innovative ways to raise funds for the government (see Box 3).

Box 3: Raising fund for crises using financial innovations

Domestic market could offer opportunities for a government to raise funds for such crises as the COVID-19 pandemic or natural disasters and to boost economic recovery. While governments often use domestic markets, size of funding available is limited with specific difficulties in reaching small and unbanked investors.

Over 2019-2020, the GoP launched and strengthened an innovative platform that allows retail investors to access treasury bonds while promoting financial inclusion, strengthening capital markets and raising funds for the pandemic response and recovery. The efforts began in February 2019, with the launch of a first online ordering platform by the BTr. This platform allowed to purchase retail treasury bonds via the Treasury's official website. The platform, originally partnered with Government Financial Institutions, has grown with every retail issuance and now partners with four banks. This is a first digital platform in the region to use blockchain technology, allowing for more safety and sustainability, automated processes and cost-savings. To further promote financial inclusion, reach more people and strengthen domestic capital markets, in June 2020, the BTr launched Bonds.PH, an app that allows retail investors to easily purchase retail treasury bonds by downloading the app and signing up. The app offers several cash in options with the placements ranging from Php500 to Php20,000.

The funding raised through this innovative technology will also be used for recovery and response to COVID-19. The offer of the first tranche of the Premyo Bonds, launched in 2019, was met with strong market demand, generating nearly Php 5.0 billion in proceeds compared to the Php 3.0 billion offer. In November 2020, the BTr launched the second tranche of the Premyo Bonds, earmarking the proceeds to fund the country’s response to COVID-19 as well as to boost the Philippine economy.

Sources: Asia Blockchain Review, https://www.asiablockchainreview.com/philippines-is-leveraging-dlt-for-bond-distribution/; Business Insider, https://business.inquirer.net/303055/philippine-treasury-is-asia-pioneer-

[45] Section 53 of RA No. 9184 or the Government Procurement Reform Act, and its 2016 Revised IRR that allows negotiated procurement under emergency cases when imminent danger to life or property during a state of calamity, or when time is of the essence arising from natural or man-made calamities.

in-leveraging-distributed-ledger-technology-blockchain-for-treasury-bonds; Press Release, Bureau of the Treasury Launches 2nd Premyo Bonds Offering

3. Enhance the control over the expenditure and tracking of post-disaster funding

Improve transparency of post-disaster spending through strengthening periodic audit reports and introduce budget tracking for disaster-related spending. Currently no comprehensive system exists to track and monitor all disaster-related expenditures or their effectiveness. The post-disaster financing process is complex, with various interrelated sources of funds, many recipients of fund transfers, implementation over multiple years, and some funds are embedded within agency-specific budgets. This makes it difficult to ensure efficient budget allocations for disaster risk management and response and to assess quality of disaster related spending. Reforms to consider include:

- Strengthening existing audit reports to address fragmented reporting by: (i) auditing key or lead agencies to cover the source, use, and status of all post-disaster funds, including disaster-related PAPs funded by agency-specific budgets and fund transfers; (ii) improving the COA Consolidated Report on the Audit of DRRM Funds in close coordination with oversight agencies and fund administrators, such as the DBM and OCD for the NDRRM Fund and other GAA sources, and DILG and LGUs for the LDRRMF to provide a more complete representation of all DRRM funds; (iii) ensuring completeness and accuracy of agency disclosures by prescribing minimum information disclosures in Notes to Financial Statements of respective agency audit reports; (iv) given intensified responsibility on the reporting agencies, providing incentives for the complete and accurate reporting by the agencies, e.g. through the integration of complete and timely reporting in the NDRRMC's annual DRRM awards; and (v) establishing a framework for multi-agency thematic performance audits to assess expenditures by event (e.g. flood, typhoon) or type of activity (e.g. emergency response, reconstruction and rehabilitation).
- Establishing and implementing a methodology for budget tracking to increase efficiency and transparency of disaster related expenditures. This should ideally provide information for spending on the department or agency, programs and activities, and object of expenditure such as salary, goods and services, capital expenditure, and subsidies. This should also allow assessment by information such as type of disaster (by event), disaster phase (i.e., response, recovery, or reconstruction), and funding source. The government could leverage the tagging for climate change expenditures under implementation and its lessons learned. Introducing a more comprehensive and activity-specific methodology for budget tracking such as monitoring specific budget items and expenditures rather than tagging at program level, entails efforts and costs and should be carefully considered to find appropriate solutions to complement the regular audit, monitoring and evaluation practices.

Introduce uniform reporting on budget reallocation and including budget reallocation in COA reports. The government should more efficiently track and monitor budget reallocations that are not reflected in the COA's audit reports, as these may be a large source of post-disaster funding. Without adequately accounting for such unattributed expenditures the government will likely continue to underestimate total disaster-related spending. In addition, agencies will face funding shortfalls for regular spending needs such as operations and maintenance of infrastructure, which further increases the risk of assets to disaster damage if insufficiently maintained because funds are used for disaster response instead. This could be done leveraging budget tracking mechanism as discussed above and could be introduced for a specific agency or take a whole-of-government approach.

Strengthen the financial management and reporting capacity of LGUs. The national government should strengthen technical assistance to LGUs to improve their financial planning to act as first responders. The rollout of the Philippines Rehabilitation and Recovery Planning Guide by the NDRRMC provides a framework for both NGAs LGUs to prepare rehabilitation and recovery plans before a disaster, including for identifying sources of funding and activities to be carried out. Government should ensure the full rollout of this report, including the adequate involvement of LGU finance officials. Support to LGUs should further include help to improve financial reporting and utilization of LDRRMFs. This could be carried out in collaboration with the Bureau of Local Government Finance through integration in ongoing training activities or the competency framework for local treasurers. Moreover, the government could implement specific policies and procedures for determining LGUs' estimated revenues as basis of respective LDRRMF allocations, including creating separate bank accounts for the LDRRMFs to more effectively monitor the allocation and utilization of funds. The scope of the audit by COA should be improved to cover all LDRRMFs, and the timeliness of audit submissions of fund utilization reports should be enforced.

Improve disaster damage and loss assessment and recording. The absence of accurate, reliable, complete, and consolidated disaster damage and loss data makes it challenging to assess adequacy or efficiency of disaster spending. Even if all disaster related spending is accurately tracked, unless there is clarity on the actual damages incurred, agencies cannot evaluate if spending and outcomes are sufficient to protect the population, the economy, and government property. This should be explored further jointly between finance oversight agencies (e.g. DOF, DBM, COA) and agencies involved in disaster risk management, response and reconstruction planning (e.g. DOST, NEDA, NDRMMC, and OCD). Such damage reporting should aim to capture accurately damage to public assets to inform financial decisions and reconstruction planning. The disaster damage and loss recording should store the detailed loss reports not just aggregate data to allow granular understanding of needs and inform planning. It should further be developed in an open and collaborative platform that allows all relevant agencies to contribute to and access the data. This should be explored in collaboration with the National Asset Registry (NARS) under development by BTr to tie loss reporting directly to assets, as well as the GeoRiskPh platform rolled out by DOST. The recent issuance of the Philippine Government Asset Management Policy might assist in implementing these reforms.

Further analysis could provide a more complete understanding of post-disaster spending in the Philippines and carry out in depth analytics of specific bottlenecks. This could include analysis on: (i) effectiveness and cost-efficiency of post-disaster spending against policy targets; (ii) understanding underutilization rates and their relation to institutional capacity vs funding flow and budgeting (with particular focus on LGUs and GOCCs; (iii) size of budget reallocation within the existing budget lines; (iv) emergency procurement procedures and how these facilitate or complicate post-disaster spending; (v) expanding the period of time covered in this PER to capture additional information, highlight the different types of disasters and further inform policy recommendations.

Annex 1. Methodology

This PER is among the first to systematically capture post-disaster expenditures. The report draws on the experience of PERs in other sectors and various studies that quantified disaster-related expenditure. Climate change PERs provided important lessons, as they face many comparable challenges with cross spending and often untagged expenditures.

This analysis focuses on public spending on disaster response, reconstruction or rehabilitation and recovery. The National Disaster Risk Reduction and Management Plan 2011-2028 defines post-disaster activities in the Philippines as follows. Disaster response is defined as the provision of emergency services and public assistance during or immediately after a disaster in order to save lives, reduce negative health impacts, ensure public safety, and meet the basic subsistence needs of the people affected. This thematic area is predominantly focused on immediate and short-term needs and is sometimes referred to as disaster relief. Rehabilitation pertains to measures that ensure the ability of affected communities and/or areas to restore their normal level of functioning by rebuilding livelihood and damaged infrastructure and increasing the communities' organizational capacity. Recovery means the restoration and improvement of facilities, livelihood and living conditions of disaster-affected communities, including efforts to reduce disaster risk factors, in accordance with the principle of "build back better."

Key Questions

As this is the first comprehensive review of post-disaster spending in the Philippines, this analysis focuses on establishing a baseline for total disaster expenditures and related processes. It does not aim to systematically assess the adequacy, effectiveness, or efficiency of post-disaster spending, but provides first indications on gaps. It also does not review spending on prevention or risk-reduction measures. Both areas would be helpful to investigate further as follow-up work. Key questions that this review aimed to answer include:

- How much is the Government of the Philippines spending after disasters?
- How much spending is captured by dedicated ex-ante/pre-arranged disaster funds, and how much spending is done through other budget lines?
- Which agencies are primarily involved in the management and utilization of disaster-related funds?
- How does funding flow after disasters, and how do different sources of funds interact?
- How is spending monitored, and what mechanisms are in place to ensure accountability for the use of unplanned post-disaster funds?
- What are the utilization rates of post-disaster funds?
- What is the relative amount of funding allocation and utilization between NGAs and LGUs?
- Are there bottlenecks in the allocation, disbursement, and utilization of post-disaster spending? If so, what causes these bottlenecks, and what steps can be taken to address them?
- What lessons can be learned from previous disaster events?

Steps Followed

Step 1: Identify stakeholders. This involved defining all stakeholders involved in post-disaster financing at the national level and identifying the relevant stakeholders for assessment and consultations. The list of selected agencies was split among oversight agencies (e.g., the DBM) and implementing agencies (e.g., the DPWH). Oversight agencies are responsible for mobilizing funding and overseeing the process of budget implementation, while implementing agencies are responsible for budget execution. Public agencies were selected based on the following criteria: (i) they have disaster-related mandates or functions; (ii) they receive budget allocations from the QRFs; and/or (iii) they receive resources from the NDRRM Fund. The list of agencies was finalized in consultation with the DBM.

Step 2: Map the budget flow after disasters at the national and agency level. A key step was to understand how the budget flows after disasters to and within implementing agencies (this is visualized in Annex 2).[46] The budget flows include a description of steps needed for approving budget requests, utilizing different sources of funds, reporting on the use of funds, and requesting supplementary budgets.[47] The mapping of budget flows also highlight interconnections between different instruments. For instance, the NDRRM Fund is sometimes used to replenish agencies' QRFs, and agencies' savings can replenish the NDRRM Fund. An important consideration highlighted by government counterparts was to compare prescribed and actual timelines, the latter of which was discussed through consultations with public agencies.

Step 3: Identify and describe budget categories that explicitly or implicitly include disaster-related spending. Beyond explicit disaster expenditures, post-disaster spending is often embedded within other budget lines. This PER reviewed agency budgets under the annual national budget legislation (the GAA) and the government Chart of Accounts. Based on the title, purpose, and description of the different programs, it identified budget lines that could contain post-disaster expenditures (e.g., the Protective Social Welfare Program that should provide protective services for individuals and families in difficult circumstances, which could include aid to victims of disasters).

Step 4: Review budget documents and financial reports to identify and quantify post-disaster-related expenditures. After relevant budget lines were identified, they were reviewed through budget documents and financial reports, such as consolidated audit report and allocations through the GAA, to estimate expenditures on disaster. The analysis identified issues such as the underutilization of funds and fragmented reporting by LGUs. This helped create the first estimate of post-disaster expenditures in the Philippines.

Step 5: Carry out case studies to illustrate and understand the reason behind bottlenecks. This included analyzing the available budget information for case studies and consultations with agencies.[48]

Step 6: Consult with agencies on the identified budget categories, flow of funds, and financial reporting. The team consulted with government agencies to collect feedback and reviews of the initial assessment, confirming selected expenditures through different sources of funds and case studies. Restrictions imposed due to COVID-19 pandemic control measures limited the number of agencies that could be consulted.

Stakeholders Selected for the Review

The team consulted and reviewed expenditures by thirteen government departments and GOCCs involved in post-disaster activities. These were selected jointly with the DBM and include the key recipients of post-disaster funds, including: (i) the OCD, which is the operating arm of the national council for DRRM activities; (ii) the DSWD, which is the agency responsible for overall disaster response and primary provider of social protection in times of crisis; (iii) the DPWH, which is the specified implementing agency of infrastructure, reconstruction, and rehabilitation projects; (iv) the DepEd, which is responsible for the maintenance, rehabilitation, and reconstruction of education

[46] This was done by reviewing the relevant policies and legal framework, general procedures and processes and specific disaster-related provisions, and guidelines or issuances by oversight agencies.
[47] This was done for several selected sources of funds, including the regular budget as well as reserve funds of national and local agencies.
[48] A list of findings and assumptions of steps 3-5 was prepared and shared with selected agencies for confirmation.

facilities; and (v) the DA, the agency responsible for addressing the needs of the farming sector. Table 20 includes a full list of the reviewed agencies and examples of their roles in disaster response activities, while Annex 4 includes an overview of their roles in disaster response and reconstruction.

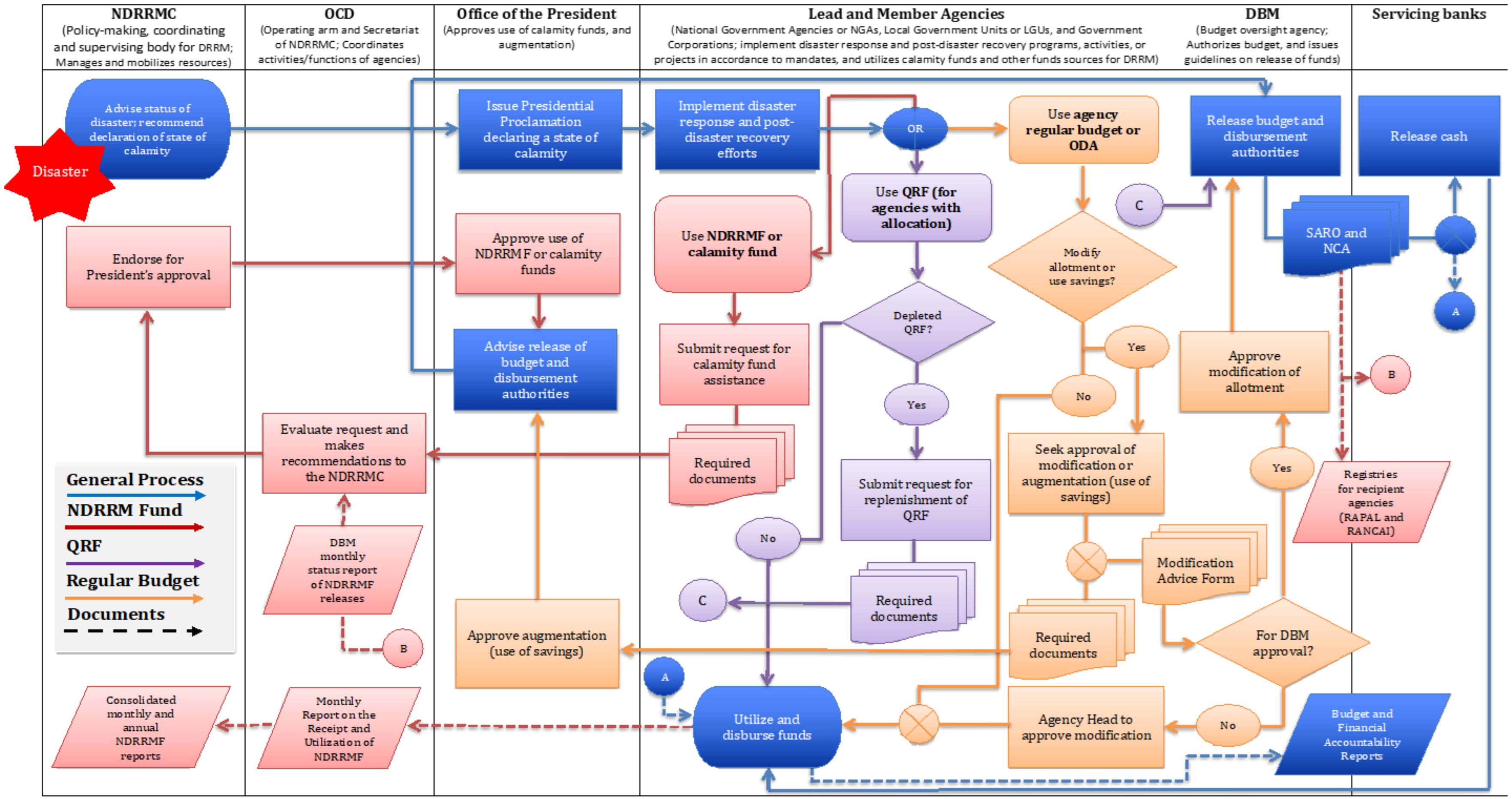
Table 20. Key Implementing National Government Agencies and Public Corporations

Agency	Mandate
Office of Civil Defense (OCD)	The OCD acts as the implementing arm of the NDRRMC. It has primary responsibility for administering a comprehensive national civil defense and DRRM program by providing leadership in the continuous development of strategic and systematic approaches, along with measures to reduce the vulnerabilities and risks related to hazards and managing the effects of disasters.
Department of Social Welfare and Development (DSWD)	The DSWD is the lead agency in social welfare and development and provides social protection services to poor, vulnerable, and disadvantaged groups. It also provides augmentation funds for LGUs to deliver social welfare and development services to disaster-affected municipalities and barangays as well as protective services to individuals, families, and communities in crisis.
Department of Public Works and Highways (DPWH)	The DPWH is mandated to undertake maintenance of national roads and bridges as well as major flood control systems. It serves as the engineering and construction arm of the government.
Department of Health (DOH)	The DOH is the lead agency in health emergency response services, including referral and networking systems for trauma, injuries, and catastrophic events. It is mandated to be the overall technical authority on health, and it provides technical assistance to health providers, especially LGUs.
Department of Agriculture (DA)	The DA is responsible for the promotion of agricultural development by providing the policy framework, public investments, and support services.
Department of Education (DepEd)	The DepEd is mandated to establish and maintain a complete, adequate, and integrated system of basic education, which includes school buildings and non-classroom facilities such as water and sanitation, multi-purpose buildings, gymnasiums, stages, courts, fences, and walkways.
Department of the Interior and Local Government (DILG)	The DILG assists in the general supervision of LGUs, and it is tasked with formulating plans, policies, and programs to respond to and manage local emergencies arising from natural and man-made disasters.
Department of Trade and Industry (DTI)	The DTI is the government authority responsible for promoting and regulating trade, industry, and investment activities.
[GOCC] **National Housing Authority (NHA)**	The NHA is a government corporation tasked with developing and implementing a comprehensive and integrated housing program to cover housing development and resettlement, sources and schemes of financing, and delineation of government and private sector participation.
[GOCC] **National Food Authority (NFA)**	The NFA is mandated to ensure national food security.
[GOCC] **National Electrification Administration (NEA)**	In the national policy objective, the NEA is the government corporation responsible for the total electrification of the country.
[GOCC] **Local Water Utilities Administration (LWUA)**	The LWUA promotes and oversees the development of water supply systems in provincial cities and municipalities outside of Metropolitan Manila.
[GOCC] **National Irrigation Administration (NIA)**	The NIA develops and maintains agricultural irrigation systems in partnership with farmers and LGUs.

Source: Government authorities' official websites.

Annex 2. Flow of Funds

Figure 12. Flow of Funds at the National Government Level



Note on the flow of funds:

1. The **NDRRMC** recommends declaration of state of calamity in areas extensively damaged and advises the Philippine President of the status of ongoing disaster response and rehabilitation operations.

2. The **OP** issues a Presidential Proclamation declaring a state of calamity, which shall make mandatory per RA No. 10121 the immediate undertaking of the following relevant remedial measures: (a) Programming/reprogramming of funds for the repair and safety upgrading of public infrastructures and facilities; and (b) Granting of no-interest loans by government financing or lending institutions to the most affected section of the population through their cooperatives or people's organizations.

3. The concerned **NGAs** and **GOCCs** implement post-disaster related PAPs within their respective mandates.

4. The implementing agency can tap the **NDRRM Fund (or NDRRMF)** by submitting request for calamity fund assistance to the NDRRMC through the **OCD**. The request is to be supported by the following documents:
    a. Complete description/justification of the project
    b. Work and financial program/plan of the agency
    c. Endorsement of the head of the agency requesting for assistance
    d. Pertinent documents may be required on a case to case basis

5. The **LGUs** submit requests to the NDRRMC through the Regional/Provincial/City/Municipal DRRM Councils, supported by the following documents.
    a. Complete description/justification of the project LDRRMC
    b. Damage Report/Calamity Impact Assessment Report/Work and Financial Plan (to include pictures)
    c. Sanggunian Resolution declaring the area under a State of Calamity/Imminent Danger and appropriating local counterpart for the project
    d. Certification by the Local Chief Executive (LCE) through a Sanggunian Resolution assuring that whatever amount will be provided by the Office of the President, the project will be completed/finished
    e. Endorsement of the Regional DRRMC (RDRRMC) Chairperson (OCD Regional Director)
    f. Certification and justification by the LCE concerned that funding requests chargeable against the Calamity Fund are emergency in character
    g. Certification by the Local Accountant or Finance officer that their Local Calamity Fund is already depleted/exhausted and/or non-availability of funding source other than the Calamity Fund
    h. Certification that the infrastructure being requested for funding support are not covered by insurance

i. Pertinent documents may be required on a case to case basis

6. The OCD evaluates request and makes recommendations to the NDRRMC, for the latter's endorsement of said request to the President.

7. The OP approves the use of calamity fund and advises the **DBM** to release the requested funds to the implementing agency.

8. The DBM releases budget (SARO) and disbursement (Notice of Cash Allocation or NCA) authorities.

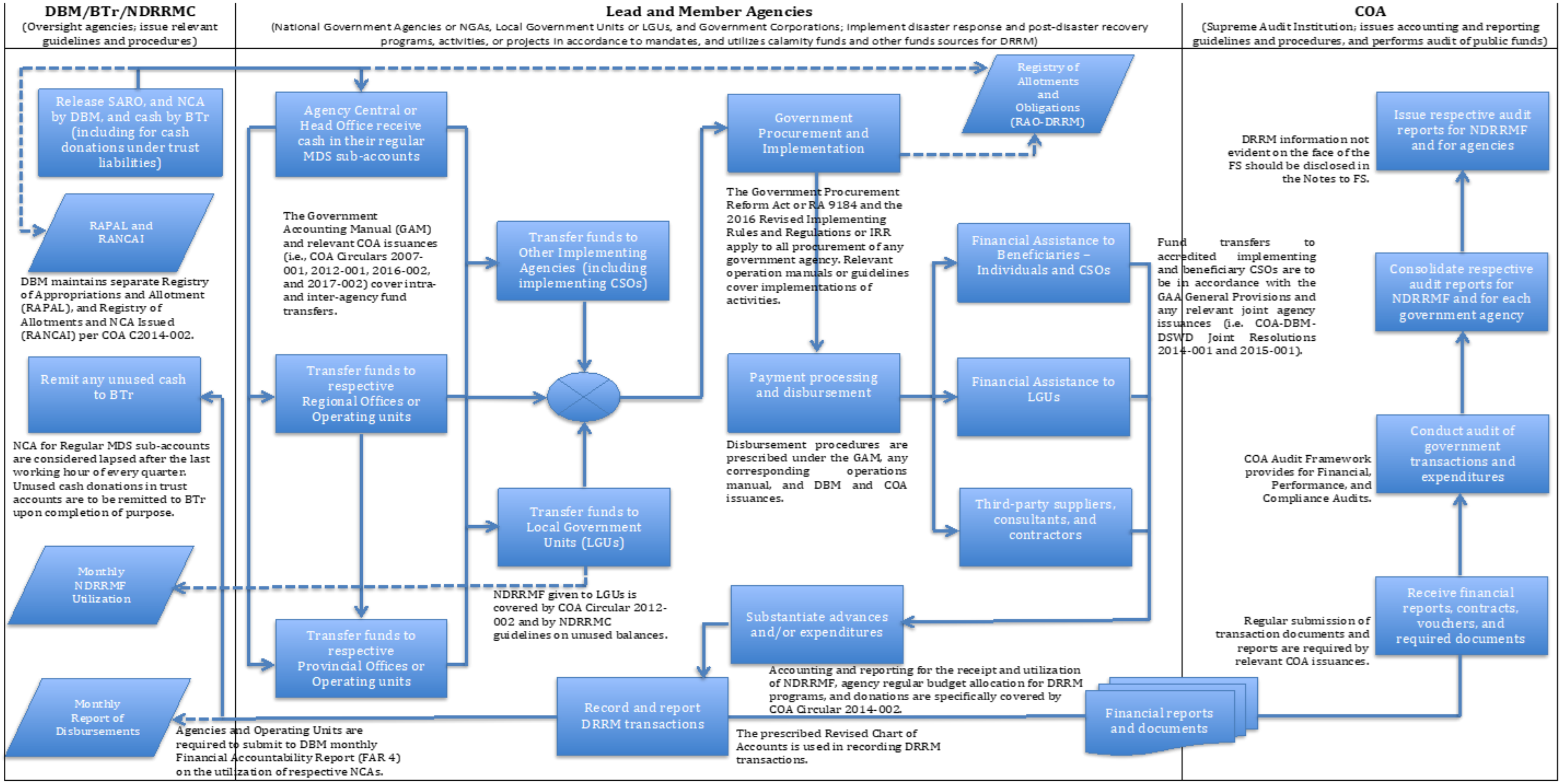
9. Upon receipt of a copy of the corresponding NCA, the **BTr** deposits cash to the implementing agency's Modified Disbursement System (MDS) sub-account.

10. The following implementing agencies, alternatively, use the **QRF** allocation without the need to submit any fund request to NDRRMC for OP approval.

11. Once respective QRF reaches a critical level (50 percent of the original allocation), the concerned implementing agency submits request for replenishment to the DBM. If approved, the DBM issues SARO and NCA; the release is charged against the NDRRMP (if said the NDRRMP is insufficient, the DBM requests for OP approval to augment the NDRRM Fund from available funding sources as identified by the Budget Technical Bureau of the DBM). Following this, the BTr deposits cash to the concerned implementing agency's MDS sub-account.

12. The implementing agency opts to use its regular agency budget.

Figure 13. Flow of Funds at the Agency Level



Narrative to Agency Level Funds Flow

1. NGA receives funds. DBM can also directly release funds to operating units of NGAs as indicated in fund requests and/or Budget Execution Documents.
2. NGA may transfer funds to its Regional and/or Provincial Offices or Operating Units specifically implementing the related activities. Regional Offices may further transfer funds to Provincial Office or Operating Units.
3. NGAs and/or Operating Units may transfer to funds to Other Implementing Government Agencies, accredited CSOs, and LGUs through execution of MOAs.
4. All implementing entities or units conduct procurement in accordance with government procurement law.
5. Implementing entities or units disburse funds as financial assistance to beneficiary individuals and CSOs, and LGUs; and for payments to suppliers, service providers, and contractors.
6. Disbursing entities or units ensure expenditure documentation are in order.
7. DRRM expenditures are recorded in the books of the office or unit accountable for the received funds. NGAs report in Financial Accountability Reports to DBM.
8. Financial reports and disbursement supporting documents are submitted to assigned auditors from COA Regional Offices.
9. COA conducts separate audit of NGA offices and operating units.
10. COA consolidates audit reports for NGA head or central office and its operating units.
11. COA issues consolidated audit reports.

Annex 3. Key Documents on Budget Appropriation and Execution

- *The General Appropriations Act (GAA)* is enacted annually as the national budget that contains programs, activities, and projects of each government agency, including funds with the corresponding appropriations and allotment. The GAA also provides the general and special statutory provisions applicable to the approved funds or allocations.
- *The DBM National Budget Circular on the Guidelines on the Release of Funds* is issued annually at the beginning of each fiscal year to provide policies, procedures, rules and regulations on the release, utilization of funds, and monitoring of items authorized under the GAA.
- *The DBM Status of National Disaster Risk Reduction and Management Fund (NDRRM Fund)* is an internal report maintained for monitoring the status of the NDRRM Fund, including details of releases. This report is publicly available and released annually.
- *The DBM Special Allotment Release Order (SARO) Releases Report* contains details of obligational authorities issued by the DBM for funds that required subsequent budget authority before utilization such as the NDRRM Fund.
- *Agency Annual Audit Reports* issued by the COA include observations and recommendations noted in the audit of an agency on all funds received and utilized, including disaster risk reduction and management.
- *The COA Consolidated Report on the Audit of DRRM Funds* consists of observations and recommendations noted in the audit of DRRM funds received and utilized by NGAs, LGUs, and GOCCs. This annual report aims to improve the availability, reliability and quality of financial information on disaster funds, promote transparency, enhance accountability and mitigate potential risks in disaster related transactions. It highlights the financial and operational data on DRRM that were included in respective annual audit reports of agencies.
- *The NDRRMC Memorandum Circular No. 45 dated March 14, 2017* sets out guidelines on the administration of the NDRRM Fund. Its stated purpose is to provide an updated, comprehensive, and rationalized system for the management of the NDRRM Fund.
- *The NDRMMC, DBM, and DILG Joint Memorandum Circular No. 2013-1 on the Allocation and Utilization of LDRRMF* serves as a guide to LGUs in the allocation and use of their respective LDRRMF.
- *COA Circular No. 2014-002, dated April 15, 2014 on accounting and reporting guidelines on the receipt and utilization of NDRRM Fund*, cash and-in kind aids/donations from local and foreign sources, and funds allocated from the agency regular budget for DRRM program was promulgated to achieve better quality financial reports and availability of information in the receipt and utilization of NDRRM Fund, disaster relief aid/donations in cash and in-kind, and funds allocated from the regular agency budget for DRRM program.
- *COA Circular No. 2012-002, dated September 12, 2012* sets out accounting and reporting guidelines for the LDRRMF of LGUs, NDRRM Fund given to LGUs and receipts of LGUs from other sources (NG or other LGUs).
- *DBM Local Budget Memorandum on IRA* and *Guidelines on the Preparation of FY Annual Budgets of LGUs* is issued annually to inform LGUs of their IRA shares and prescribe guidelines on the preparation of LGU budgets, including the required budget forms. It also defines the priorities in the use of IRA and other local resources of the LGUs.

Annex 4. Overview of the Legal Framework and Agencies in DRM

Legal framework

The following key legislations and regulations guide disaster risk management and financing in the Philippines:

The RA No. 10121 "Philippine Disaster Risk Reduction and Management Act of 2010" is the country's key DRRM legislation[49], which provided for the development of policies and plans and implementation of actions and measures pertaining to all aspects of DRRM, including good governance. RA No. 10121 acknowledged the government's role to institutionalize policies, structures, coordination mechanisms and programs with budget appropriation on DRRM at all government levels towards building a disaster resilient nation and communities[50].

RA No. 10121 reorganized the DRRM institutional structure in the Philippines as: (i) NDRRMC at the national level; (ii) Regional DRRM Councils at the regional level; (iii) Provincial, City, and Municipal DRRM Councils at the local government level; (iv) Barangay DRRM Committee at every barangay level. The RA also specified appropriating funds for DRRM activities through the NDRRM Fund and the LDRRMF, including allocations to the QRF.

The Implementing Rules and Regulations of RA No. 10121 prescribed the manner, procedures and guidelines for the implementation of the RA that are applicable to all levels of the government, civil societies, private sectors, and other stakeholders. It also provided for the development of policies and plans and the implementation of actions and measures pertaining to all aspects of DRRM and preparedness for effective response and recovery, among others.

The NDRRM Plan 2011-2028 set out expected outcomes, outputs, key activities, indicators, lead agencies, implementing partners and timelines under each of the four disaster thematic areas: prevention and mitigation; preparedness; response; and rehabilitation and recovery. The NDRRM Plan highlighted the need for institutionalizing DRRM policies, structures, coordination mechanisms and programs with continuing budget appropriation. The said document also identified fund sources that can be mobilized for various DRRM programs and projects such as existing budgets of NGAs under the GAA and donor funds in addition to the National and Local DRRM Funds provided under RA No. 10121.

The plan also defined activities under the post-disaster thematic areas relevant to this review. Disaster response was defined as the provision of emergency services and public assistance during or immediately after a disaster in order to save lives, reduce negative health impacts, ensure public safety and meet the basic subsistence needs of the people affected. This thematic area is predominantly focused on immediate and short-term needs and is sometimes referred to as disaster relief. Rehabilitation pertains to measures that ensure the ability of affected communities and/or areas to restore their normal level of functioning by rebuilding livelihood and damaged infrastructure and increasing the communities' organizational capacity. Recovery means the restoration and improvement of facilities, livelihood and living

[49] An Act Strengthening the Philippine Disaster Risk Reduction and Management System, providing for the National Disaster Risk Reduction and Management Framework and Institutionalizing the National Disaster Risk Reduction and Management Plan, Appropriating Funds Therefor and for Other Purposes as enacted and approved on May 27, 2010.

[50] The law caused the repeal of Presidential Decree No. 1566 of 1978 (Strengthening the Philippine Disaster Control, Capability and Establishing the National Program of Community Disaster Prevention).

conditions of disaster-affected communities, including efforts to reduce disaster risk factors, in accordance with the principle of “build back better”.

The Philippines Rehabilitation and Recovery Planning Guide provides the rehabilitation and recovery framework, rehabilitation planning process and plan structure, institutional arrangements for plan coordination, implementation mechanisms and proposed monitoring and evaluation arrangements. The Guide was formulated by the NEDA in line with its mandate as Vice Chair for Disaster Rehabilitation and Recovery of the NDRRMC.[51] It was approved by the NDRRMC through a resolution in 2019 wherein it was also determined that the NDRRMC through the OCD will monitor and will ensure the Guide’s implementation by providing technical assistance to the LGUs.

Disaster Risk Financing and Insurance Strategy of the Philippines. Strategic Priorities of the Department of Finance in Managing Disaster Risk identifies measures on strengthening financial resilience of the Philippines to natural disasters with three overarching goals: (i) To maintain sound fiscal health at the national government level, necessary to support long-term rehabilitation and reconstruction needs; (ii) To develop sustainable financing mechanisms for local government units, necessary to provide immediate liquidity at the onset of a disaster; and (iii) To reduce the impact on the poorest and most vulnerable and prevent them from falling into a cycle of poverty, while also shielding the near-poor from slipping back into poverty. It also includes three priority areas to addressing these goals, including: (i) National Level: improve the financing of post-disaster emergency response, recovery, and reconstruction needs; (ii) Local Level: provide local governments with funds for post disaster recovery and reconstruction efforts. (iii) Individual Level: empower poor and vulnerable households and owners of small and medium-sized enterprises to quickly restore their livelihoods after a disaster.

Agencies and their Responsibilities in Disaster Response and Rehabilitations

Coordination:

The NDRRMC is an inter-governmental body for the policy-making, coordination, integration, supervision and monitoring and evaluation functions related to disasters. It is headed by the DND Secretary as the chairperson, with the following vice chairpersons: DSWD Secretary for disaster response; Department of Science and Technology (DOST) Secretary for disaster prevention and mitigation; and the National Economic and Development Authority (NEDA) Director-General for disaster rehabilitation and recovery. NDRMMC’s responsibilities related to disaster risk financing include managing and mobilizing resources for DRRM such as the NDRRM Fund; and monitoring and providing the necessary guidelines and procedures on the LDRRMF.

The NDRRMC’s counterparts at the regional level is the Regional DRRM Council, while at local government levels are the Provincial / City / Municipal DRRM Councils. The BDC serves as the local council in every barangay. The Regional Directors of OCD function as the chairperson of Regional Councils that will coordinate, integrate, supervise, and evaluate activities of Local DRRM Councils, which in turn will lead in preparing for, and responding to,

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[51] http://www.neda.gov.ph/disaster-rehabilitation-and-recovery-planning-guide/

and recovering from the aftermath of any disaster. The respective Local Chief Executive heads the Local DRRM Councils.

The OCD performs as the operating arm of the NDRRMC. It advises the NDRRMC on matters relating to DRRM. It functions also include implementing the NDRRM Plan; reviewing and evaluating Local DRRM Plans; and providing technical assistance and support mobilizing necessary resources to increase the overall capacity of LGUs.

NGAs and GOCCs implement DRRM programs, activities, and projects in relation to respective mandates and functions. All government departments, bureaus, offices, and agencies are authorized to use their appropriations to implement DRRM activities in accordance with the guidelines issued by the NDRRMC in coordination with the DBM.

Disaster response:

For disaster response, the NDRRM Fund plan provides for different agencies involved and leading specific activities (Table 21 Error! Reference source not found.**).** The plan provides for key activities and agencies involved, such as in needs assessment, search and rescue, relief operations, and early recovery activities. The plan also provides for the operational timeline to initiate and complete the identified activities in the NDRRM Plan (from day 1 up to beyond 3 months after the occurrence of the disaster).

Table 21. Outcomes, Activities; Involved Agencies; and Timeline for Disaster Response

Outcome / Activities	Agencies Involved	Operational Timeline
Well-established disaster response operations: 1. Activation of the Incident Command System and Command, Control and Communication (C3) Centers at the national and local levels. 2. Issue public advisories. Activation of relief distribution points/centers.	**Lead Agency:** DSWD **Implementing Partners:** AFP, Republic of the Philippines Ship (BRP), CSOs, DA, DILG, DOE, DOTr, LGUs, OCD, MMDA, National Telecommunications Commission (NTC), Philippine Institute of Volcanology and Seismology (PHILVOLCS), Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA), Philippine Information Agency (PIA), Philippine Coast Guard (PCG), Professional Regulation Commission (PRC)	1 to 7 days; Activation for slow onset disaster is 24 hours prior to incident, and within 12 hours after impact for rapid onset disasters.

Adequate and prompt assessment of needs and damages at all levels: 1. Activation of assessment teams at all levels, as needed. Consolidate, analyze and disseminate data by the L/NDRRMCs.	**Lead Agency:** DRRMCs, OCD, and DSWD **Implementing Partners:** AFP, Armed Forces of the Philippines Reserve Command (AFPRESCOM), Air Transportation Office (ATO), BFP, CSOs, DA, DepEd, DPWH, LGUs, PCG, PNP, PRC	1 to 7 days; Within 12 to 48 hours.
Integrated and coordinated Search, Rescue and Retrieval (SRR) capacity: Develop and implement a system of for SRR.	**Lead Agency:** DND, DILG, DOH **Implementing Partners:** AFP, BFP, CSOs, DILG, DSWD, National Bureau of Investigation (NBI), PCG, PNP, PRC, Volunteers	1 to 7 days; Within 48 hours.
Evacuated safely and on time affected communities: 1. Coordination w/ appropriate agencies. Activate an evacuation system and/or set of procedures.	**Lead Agency:** LGUs **Implementing Partners:** AFP, CSOs, PNP	1 to 7 days; Within hours.
Temporary shelter needs are adequately addressed: 1. Identification, of standard-based, relief, shelter sites. 2. Provision of tents and other temporary shelter facilities. 3. Implement a set of minimum standards for temporary shelters. 4. Establishment of child-friendly spaces/temporary learning area in the evacuation center for continuity of education. 5. Provide spaces for people's livestock, poultry and pets in the evacuation centers. Conduct livelihood-oriented activities for IDPs.	**Lead Agency:** DSWD **Implementing Partners:** AFP, CSOs, DepEd, LGUs, NGOs, PCG, PNP	1 to 7 days; up to 1 to 3 months.
Basic health services provided to affected population whether inside or outside evacuation centers: 1. Medical consultation and nutritional assessment. 2. Assessment of water quality and conduct of quick damage repairs and road clearing operations. 3. Determination if there is enough clinics and hospital to address the casualties. Immediate restoration of lifelines.	**Lead Agency:** DOH **Implementing Partners:** DSWD and Health Sector Partners	1 to 7 days; up to 1 to 3 months.

Psychological well-being promoted and mental health problems and risks reduced: 1. Coordination among heads of mental health and psychological services. 2. Psychological programs and referral. Conduct of traumatic and/or psychological stress debriefings.	**Lead Agency:** DOH **Implementing Partners:** CSOs, DILG, DND, DSWD, NBI, PRC	1 to 7 days; up to 1 to 3 months with different phases in accordance with DOH guidelines and/or protocols.
Coordinated, integrated system for early recovery implemented on the national and local levels: 1. Conduct of Post-Damage and Needs Assessment (DANA) 2. Develop and implement a system for early recovery, to include specific activities addressing the needs identified. 3. Develop partnership mechanisms with utility providers and key stakeholders. Design and implement temporary livelihood and/or income generating activities (i.e., cash or food for work; micro and small enterprise recovery).	**Lead Agency:** DSWD **Implementing Partners:** CSOs, DA, DPWH, NFA, PRC	Beyond 3 months.

Source: NDRRM Plan 2011-2028

Disaster recovery and reconstruction:

The disaster rehabilitation and recovery are under the overall responsibility of the NEDA in coordination with other agencies for different activities (Table 22). This thematic area covers the concerns related to employment and livelihoods, infrastructure and lifeline facilities, housing and resettlement. Operational timelines are from within 1 year up to beyond 6 years after the occurrence of the disaster.

Table 22. Outcomes, Activities; Involved Agencies; and Timeline for Recovery and Reconstruction

Outcomes / Activities	Agencies Involved	Operational Timeline
Damages, Losses and Needs Assessed: 1. Conduct of Post-Disaster Needs Assessment (PDNA). 2. Coordinate the formulation of the Strategic Action Plan for disaster-affected areas.	**Lead Agency:** OCD **Implementing Partners:** NGAs, Regional line agencies and local offices	Within 1 year (Immediate term)
Economic activities restored and, if possible, strengthened or expanded: 1. Identify the needed assistance and formulate or implement appropriate programs. 2. Identify or mobilize funding sources.	**Lead Agency:** To be determined based on the sectors affected. **Implementing Partners:** AFP, CSOs, DA, DBM, DILG, DSWD, DTI, LGU, Mindanao Development Authority (MINDA), OP, Congressional Development Authorities	Within 1 year (Immediate term); up to within 1 to 3 years (Short term)

DRRM/CCA elements incorporated in human settlement: 1. Identify and provide suitable relocation sites for affected population. 2. Design or construction of disaster resilient housing. 3. Conduct trainings for social preparation of host communities and those that will be relocated to reduce conflict. 4. Organize Neighborhood Association for Shelter Assistance (NASA); construct core shelter; engage in Cash/Food for Work; organize SELF-Employment Assistance-Kaunlaran (SEA-K) groups.	**Lead Agency:** NHA **Implementing Partners:** AFP, DAR, DENR, DILG, DOST, DPWH, DSWD, Housing and Land Use Regulatory Board (HLURB)*, LGUs, NEDA, Home Development Mutual Fund (PAGIBIG)	Within 1 year (Immediate term); up to within 1 to 3 years (Short term). Within 3 to 6 years (Medium term) for disaster resilient housing designed and constructed.
Disaster and climate change-resilient and infrastructure reconstructed: 1. Undertake the necessary rehabilitation or repair of damaged infrastructures 2. Implement building code and promotion of green technology. 3. Close monitoring and/or tracking of approval of infrastructure projects and permits.	**Lead Agency:** DPWH **Implementing Partners:** AFP, Association of Structural Engineers of the Philippines, Inc. (ASEP), Civil Service Commission (CSC), DENR, DepEd, DILG, Department of Justice (DOJ), LGUs, Philippine Institute of Civil Engineers (PICE)	Within 1 to 3 years (Short term) up to beyond 6 years (Long term).
A psychologically sound, safe and secured citizenry that is protected from the effects of disasters able to restore to normal functioning after each disaster. 1. Develop systems for appropriate risk protection measures. 2. Conduct of post-disaster or conflict needs analyses with affected communities. 3. Develop systems of support and communication among key stakeholders. 4. Build capacities of psychological care providers.	**Lead Agency:** DOH and DSWD **Implementing Partners:** AFP, CSOs, DILG, NBI, PNP, PRC, Office of the Presidential Adviser on the Peace Process (OPAPP)	Within 1 year (Immediate term); up to within 1 to 3 years (Short term)

Source: NDRRM Plan 2011-2028

*Note: *By virtue of RA 11201 that was approved on February 14, 2019, the Department of Human Settlements and Urban Development was created as the central housing authority in the country thereby absorbing the duties and functions of HLURB and HUDCC.*

Annex 5. NDRRM Fund Releases per Recipient FY2015-18

Table 23. NDRRM Fund Releases per Recipient FY2015-18

Agency/GOCC	NDRRM Program and QRF charges*	Yolanda RRP	Marawi RRRP	Total
National Government Agencies				
DPWH	31,091	1,062	3,007	**35,160**
DSWD	21,784	-	2,286	**24,070**
DA (OSEC, BFAR)	2,874	5,214	280	**8,368**
DOF (BTr)	4,000	-	12	**4,012**
DTI	56	935	873	**1,864**
DENR	-	271	1,016	**1,287**
DND (OSEC, AFP, Navy)	893	-	123	**1,016**
Other Executive Offices (Commission on Higher Education [CHED], Commission on Higher Education [PCUP], HLURB, Technical Education and Skills Development Authority [TESDA], National Commission on Indigenous Peoples [NCIP], National Youth Commission [NYC])	5	894	6	**905**
DOH	636	-	245	**881**
DILG (OSEC, Bureau of Jail Management and Penology [BJMP], BFP)	114	452	235	**801**
DepEd	700	-	-	**700**
OCD	500	-	-	**500**
Department of Tourism (DOT)	-	330	-	**330**
State Universities and Colleges (SUCs)	302	-	14	**317**
DOST	-	78	221	**299**
DOLE	-	157	-	**157**
DOTr (OSEC, PCG)	133	15	-	**149**
CDA	2	-	76	**78**
Presidential Communications Operations Office (PCOO (PIA and Bureau of Broadcast Services [BBS]))	27	-	46	**73**
Department of Agrarian Reform (DAR)	-	-	47	**47**
ARMM	3	-	44	**47**
DBM	38	-	-	**38**
OPAPP	-	-	25	**25**

Sub-total	**59,157**	**9,408**	**8,556**	**77,120**
Budgetary Support to GOCCs				
NHA	1,222	7,400	-	**8,622**
NIA	2,427	247	-	**2,674**
NEA	1,068	509	320	**1,897**
LWUA	567	371	309	**1,247**
People's Television Network, Inc. (PTNI)	-		55	**55**
Social Housing Finance Corporation (SHFC)	-	-	43	**43**
NFA	-	5	-	**5**
Sub-total	**5,284**	**8,533**	**727**	**15,454**
Total	**64,441**	**17,941**	**9,282**	**91,664**
DOF (BTr) – PSF and Insurance coverage				4,000
DPWH – RRP				29
Grand total				**95,693**

Source: DBM NDRRM Fund Consolidated Report, and COA Consolidated Audit Report on DRRM Funds
**Included 2017 initial QRF allocations earmarked from NDRRM Fund, and all QRF replenishments*

Annex 6. Details on the Selected Case Studies

Marawi Siege (Marawi City in May 2017)

The Marawi siege was a five-month long armed conflict in the city of Marawi in Lanao del Sur. As a result of the conflict, 77,170 families, or 353,921 persons, were displaced in eight regions. The recovery and reconstruction of Marawi City is still ongoing three years after the disaster ended in October 2017. An inter-agency task force, known as the Task Force Bangon Marawi (TFBM), was created by the President of the Philippines in June 2017.[52]

The national government allocated a total of Php17.5 billion from the NDRRM Fund for the recovery and reconstruction of Marawi City in FY2017-19, with 96 percent of funds released to projects. An average of Php4.4 billion was released each year from the NDRRM Fund over the period (Table 24). A brief summary of appropriations by fiscal year is included below.

FY 2017: Funds were sourced from available funds of member agencies and other sources identified by the DBM, including the NDRRM Fund. The NDRRM Fund released Php3.8 billion in SAROs to TFBM agencies (NGAs and GOCCs) to cover early recovery requirements of the TFBM in advance of completing a post-conflict needs assessment (PCNA). These funds came from augmentations to the NDRRM Fund provided through reallocating DPWH savings. In addition, the Regional Government of the Autonomous Region in Muslim Mindanao (ARMM) provided Php113.9 million for relief assistance, and LGUs and NGOs reported releasing Php21.8 million and Php32.1 million, respectively.

FY 2018: The national government allocated a total of Php15 billion in special purpose funds for the Marawi Recovery, Rehabilitation and Reconstruction Program (MRRRP)[53] under the NDRRM Fund. Php10 billion was earmarked against the NDRRM Fund, while the other Php5 billion was provisioned under unprogrammed funds. Under the NDRRM Fund, Php9.3 billion, or 93 percent, were released. In FY2018, only 50 percent of MRRRP allocations were initially used. The national government, through a joint Congressional resolution (approved by the President) extended the validity of appropriations and enabled the release and use of another Php4.4 billion in FY2019. However, the balance of Php717.6 million had expired at end-FY2019. The NHA was provided Php2.4 billion from unprogrammed funds, but the rest of the funds expired.

FY2019: Php3.5 billion was appropriated under the GAA for the NDRRM Fund, almost all of which was completely released by May 2020. The GAA includes provisions that allow NDRRMP allocations to be used to fund the MRRRP in case of lack of funds.

FY2020: An additional Php3.5 billion was appropriated under the NDRRM Fund for the MRRRP in FY2020, but it is subject to conditional implementation that requires the approval of the president as well as appropriate implementing agencies with mandates and capabilities to implement the proposed activities. As of May 31, 2020, appropriations worth Php2.8 billion have been released.

[52] Administrative Order No. 03 dated June 28, 2017: Creating an Inter-Agency Task Force for the Recovery, Reconstruction, and Rehabilitation of the City of Marawi and Other Affected Localities; as amended by Administrative Order No. 9 dated October 27, 2017.
[53] The MRRP was introduced in FY2018.

Table 24. Total NDRRM Fund Releases to TFBM Agencies, FY2017-19
(in Php Billion)

	FY2017	FY2018	FY2019	Total
National Government Agencies				
DSWD	3.0	2.3	-	5.3
DPWH	0.2	3.0	0.1	3.3
DENR	-	1.0	-	1.0
DTI	0.1	0.9	-	0.9
Sub-total	**3.2**	**7.2**	**0.1**	**10.6**
Other NGAs	0.3	1.4	0.7	2.3
Total releases to NGAs	**3.5**	**8.6**	**0.8**	**12.9**
Budgetary Support to Government Corporations				
NHA	0.2	-	1.9	2.1
LWUA	0.04	0.3	0.8	1.1
NEA	0.02	0.3	-	0.3
Sub-total	**0.3**	**0.6**	**2.7**	**3.6**
Other GOCCs	-	0.1	0.003	0.1
Total budgetary support to GOCCs	**0.3**	**0.7**	**2.7**	**3.7**
Total releases	**3.8**	**9.3**	**3.5**	**16.6**
MRRRP allocations	**4.0**	**10.0**	**3.5**	**17.5**
Share of releases to MRRRP allocations (percent)	**95.2**	**92.8**	**99.9**	**96.0**

Source: DBM SARO Listing and NDRRM Fund SARO Releases Report.
Note: FY2017 allocations sourced from approved augmentations or savings of the DPWH. NDRRM Fund releases include releases made against the NDRRM Fund in the following years.

Releases to NGAs comprise 92 percent of the total NDRRM Fund SARO for TFBM member agencies. The DSWD received the highest allotment during the response and early recovery stage for assistance to affected families, or 78 percent of total assistance. The rest of the cost was covered by the Regional Government of ARMM, LGUs, and NGOs. The DSWD also provided continuing relief assistance and cash-for-work for the IDPs of Marawi City, which was funded through the NDRRM Fund. The DPWH received Php3.3 billion for housing programs, infrastructure projects, and the rehabilitation or construction of classrooms at permanent shelters. The Department of Environment and Natural Resources (DENR) implemented solid and debris waste management, while the DTI provided livelihood starter kits for IDPs. GOCCs prioritized water supply systems, power distribution lines, and housing at transitional shelter sites.

The TFBM prepared the Bangon Marawi Comprehensive Rehabilitation and Recovery Program (BMCRRP) for FY2018-22. The total cost of the program is Php46.5 billion, of which the national government is expected to cover 62 percent. Funds are to be used for investments to implement 743 PAPs across different sectors. Almost half (46 percent) of planned investments pertain to physical infrastructure, with the DPWH as the main implementing agency. The national government is expected to cover Php29.0 billion of the investment costs using the NDRRM Fund and the budgets of implementing NGAs. The private sector, CSOs, and development partners are expected to fund 23 percent of planned rehabilitation costs. While the plan required Php8.9 billion in the NDRRM Fund for FY2019, only Php3.5 billion were earmarked for the MRRRP in the FY2019 GAA.

No consolidated report is publicly available on NDRRM Fund utilization by recipient government agencies (over 30 agencies) as they separately maintain their respective utilization reports. The NHA, which received the highest national government subsidy, had obligated or contracted for 95 percent of the allotment it received from the unprogrammed funds for debris management in the most affected areas and land acquisition in Marawi City. The NHA had also disbursed 76 percent of the NDRRM Fund received in FY2017 for construction of transitional housing, while DTI had obligated 91 percent of allotment received for implementation of various livelihood projects and programs.

Two years after the crisis, the Special Committee on Marawi City Rehabilitation was reconstituted to carry out an inquiry into reconstruction and rehabilitation efforts due to reports of poorly utilized funds and slow progress that have led to continued displacement and distress of siege victims. Public hearings have been conducted in accordance with various Senate resolutions filed in 2019 directing a formal investigation and inquiry to determine actual implementation status of the BMCRRP, including funds utilization and to identify and resolve progress issues. The resolutions cited some 50,000 people as still displaced, and infrastructure, particularly housing projects, have remained unrealized. The inquiries also aimed to ensure that resources are utilized for the benefit of IDPs and reconstruction is expedited.

Typhoons Ompong (Northern Luzon, Sept 2018) and Ursula (Eastern Visayas, Dec 2019)

A State of Calamity was declared on September 25, 2018, for Regions I, II, III, and the Cordillera Administrative Region due to the effects of typhoon Ompong [54] between September 12-15, 2018. The typhoon also affected Regions IV-A, IV-B, and the National Capital Region. Areas affected included 35 cities and 456 municipalities in 31 provinces across the seven regions. A total of 931,879 families from 6,504 barangays were reported affected, and 319,203 houses were damaged.

Total damages in the seven affected regions amounted to Php33.9 billion (Table 25 Error! Reference source not found.**).** The typhoon damaged Php7.2 billion worth of public infrastructure, mainly flood control systems (Php5.2 billion) and roads and bridges (Php1.8 billion). Agricultural products and infrastructure with total estimated value of Php26.8 billion were also destroyed, of which crops (i.e., rice, corn, and cassava) represented 85 percent and high-value commercial crops (i.e., mango, banana, papaya, and vegetables) represented 13 percent of damages. Damages to irrigation and agricultural-related facilities, infrastructure, and equipment totaled Php528 million, with livestock and fisheries accounting for the rest.

Table 25. Estimated Cost of Damages Caused by Typhoon Ompong
(in Php Billion)

Affected Regions / Sector	Estimated Cost of Damages		
	Public Infrastructure	**Agriculture**	**Total**
Region I	2.5	6.1	8.7
Region II	1.3	13.9	15.3
Region III	1.9	2.3	4.2

[54] Known as Mangkhut internationally.

Region IV-A	-	0.1	0.1
Region V	0.02	0.2	0.2
Region VI	-	0.01	0.01
CAR	1.4	4.1	5.5
Grand total	**7.2**	**26.8**	**33.9**

Note: CAR: Cordillera Administrative Region.
Source: Typhoon OMPONG NDRRMC Situational Report No. 55 dated October 5, 2018.

No SARO was released in FY2018; NGAs received assistance from the NDRRM Fund for post-disaster activities related to typhoon Ompong only a full year later on September 2019. The reason for the delay is unknown. A total of Php2.2 billion was released from the FY2019 NDRRM Fund to: (i) the DPWH for the repair, re/construction, rehabilitation, and maintenance of flood control systems and roads as well as other disaster-related projects; (ii) the NIA for the repair of damaged irrigation systems; and (iii) the DA for various agricultural projects (Table 26**Error! Reference source not found.**). Php144.8 million was also provided to state universities and colleges for the repair or rehabilitation of damaged facilities and equipment.

Table 26. NDRRM Fund SARO Releases for Typhoon Ompong, FY2019-2020
(in Php Million)

Affected Regions / Sector (Agencies)	NDRRM Fund		
	Public Infrastructure (DPWH)	Agriculture (DA and NIA)	Total
Region I	56.5	480.4	536.9
Region II	633.2	-	633.2
Region III	-	64.1	64.1
Region IV-A	49.3	-	49.3
Region V	-	-	-
Region VI	-	-	-
CAR	702.7	205.0	907.7
Grand total	**1,441.7**	**749.6**	**2,191.3**

Note: Data exclude funding for state universities and colleges; CAR: Cordillera Administrative Region.
Source: DBM FY2019 and FY2020 Status of NDRRM Fund Reports.

Only 398,640 (43 percent) of families affected by Ompong received relief assistance from the DSWD and LGUs. A total of 129,193 displaced families were accommodated inside 4,082 evacuation centers, while another 269,384 families were served from other locations. The reported cost of assistance was Php307.2 million, of which 78 percent was covered by the national government through the QRFs of the OCD, DOH, and DSWD (Annex 7). The DSWD provided the most funding at Php148.4 million worth of family food packs and non-food items. The OCD distributed family packs, hygiene kits, and rice worth Php76.9 million to the affected regions, while LGUs contributed Php56.5 million, or 18 percent of total assistance. The remaining costs were covered by the DOH and NGOs.

Typhoon Ursula[55] hit Regions IV-B, VI, VII, and VIII between December 23 and 28, 2019, and all regions declared a local state of calamity. Region V and the Caraga region were also affected. Damages to agricultural products and infrastructure were estimated at Php4.3 billion

[55] Known as PHANFONE internationally.

as of end-January 2020. The typhoon also partially damaged 605 public health facilities, schools, and other structures, and it damaged 571,890 houses.

A total of 808,365 families were affected by Ursula, although only 15 percent of them were served in evacuation centers and other temporary shelters. This does not include families, for instance, who moved to different houses. A total of 47,576 displaced families were accommodated inside 1,604 evacuation centers in the affected regions, except Region V, while another 74,228 families were served from other shelters. The total cost of assistance was estimated at Php139.9 million, of which 68 percent was provided by the national government, while LGUs and NGOs contributed 23 percent and 9 percent, respectively, of total assistance.

There is no estimated cost of housing reconstruction. Typhoon Ursula was more destructive than Ompong, and almost half of all houses destroyed (253,952) were in Region VIII (Table 27). A region which was already previously hit by super typhoon Yolanda in 2013.

No SARO has been released to fund interventions related to Ursula. As of May 2020, no SARO has been issued from the NDRRM Fund for interventions related to the impact of typhoon Ursula.

Table 27. Number of Houses Damaged by Typhoons Ompong and Ursula

Affected Regions	Typhoon OMPONG		Typhoon URSULA		Total
	Totally	Partially	Totally	Partially	
Region I	3,800	78,510	-	-	82,310
Region II	19,101	172,364	-	-	191,465
Region III	122	2,180	-	-	2,302
Region IV-A	-	-	7,121	28,194	35,315
Region VI	-	-	34,380	209,853	244,233
Region VII	-	-	8,155	30,235	38,390
Region VIII	-	-	19,029	234,923	253,952
CAR	1,821	41,305	-	-	43,126
Grand total	**24,844**	**294,359**	**68,685**	**503,205**	**891,093**

Note: No public housing assistance was reported at the time of the preparation of this report; CAR: Cordillera Administrative Region.
Source: NDRRMC Typhoon "OMPONG" Situational Report No. 55 dated October 5, 2018; and Typhoon "URSULA" Situational Report No. 28 dated January 30, 2020.

Mindanao Earthquakes (October 2019)

Between October 29 and 31, 2019, two major earthquakes in Tulunan, North Cotabato, affected 72,578 families. A total of 349,266 individuals from 379 barangays in Regions XI and XII were affected, and a State of Calamity was declared for both regions.

A total of 45,785 displaced families received public assistance inside and outside of the 138 designated evacuation centers (Table 28 Error! Reference source not found.**).** Four months after the incident, 8,666 families (47 percent) were still living in 67 evacuation centers. Another 24,318 families, or 88 percent of those temporarily staying with relatives and friends or in open spaces, had still to return to their homes. The national government extended Php137 million in social relief assistance through the DSWD, OCD and DOH to affected families in the two regions. Due to the prolonged recovery period, the DSWD incurred considerably higher costs and served fewer displaced families during this incident than during its normal response to typhoons.

Table 28. Displaced Families Served Inside and Outside Evacuation Centers

Affected Regions	Displaced Persons		
	Evacuation Centers	**Families**	**Individuals**
Inside evacuation centers			
Region XI	56	7,254	32,000
Region XII	82	10,805	54,025
Outside evacuation centers			
Region XI	-	12,943	63,165
Region XII	-	14,783	73,915
Grand total	**138**	**45,785**	**223,105**

Source: DSWD DROMIC Report No. 55 on Tulunan, North Cotabato Earthquake Incident as of March 4, 2020.

The earthquakes damaged public and private assets and infrastructure in the affected regions, 96 percent of which were residential houses (Table 29). While there is no consolidated information on damages, the NDRRMC estimated at least Php4 billion in funding needs. The DepEd estimated Php3.5 billion was needed to repair schools that collapsed or sustained major damages during the earthquakes, and damages to agricultural infrastructure were estimated at Php32.3 million. At the time of the preparation of this report, there had been no NDRRM Fund releases to support the reconstruction efforts.

Table 29. Infrastructure and Property Damages

	Totally	**Partially**	**Total**
Houses	25,895	21,767	47,662
Schools	37	1,508	1,545
Health facilities	50	224	274
Other public structures	28	70	98
Private/commercial establishments	10	47	57
Roads and bridges	-	30	30
Places of worship	5	19	24
Grand total	**26,025**	**23,665**	**49,690**

Source: Tulunan, North Cotabato Earthquake Incident NDRRMC Situational Report No. 39 dated January 22, 2020.

As of May 2020, no SARO had been issued for the rehabilitation or reconstruction of infrastructure and assets damaged by the Mindanao earthquakes. In FY2020, Php5 billion was specifically appropriated under the NDRRM Fund for the Comprehensive Aid to Repair Earthquake Damage to be used for recovery, rehabilitation, reconstruction, aid, and relief projects in Regions XI and XII. However, the allocation is subject to conditional implementation (similar to the MRRRP), which requires the President's approval of specific projects and appropriate implementing agencies or LGUs with the mandate and capability to implement the proposed activities.

Annex 7. Cost of Assistance for the Selected Case Studies

Table 30. Cost of Assistance per Region Affected by Typhoon "OMPONG"
(in Php Million)

Affected Regions	Cost of assistance					
	OCD	DOH	DSWD	LGUs	NGOs / Others	Total
NCR / CO	76.87	6.30	2.64	-	-	**85.81**
Region I		1.26	60.25	24.79	0.06	**86.36**
Region II		3.61	37.61	8.24	7.84	**57.31**
Region III		0.74	9.60	6.46	0.51	**17.31**
Region IV-B		-	0.63	0.01	-	**0.63**
CAR		1.88	37.63	16.97	3.34	**59.82**
Grand total	**76.87**	**13.79**	**148.37**	**56.47**	**11.75**	**307.25**

Source: Typhoon "OMPONG" NDRRMC *Situational Report No. 55 dated October 5, 2018; and DSWD DROMIC Report No. 66 as of November 6, 2018*

Table 31. Cost of Assistance per Region Affected by Typhoon "URSULA"
(in Php Million)

Affected Regions	Cost of assistance					
	OCD	DOH	DSWD	LGUs	NGOs / Others	Total
Region IV-B	9.91	1.04	2.57	4.91	11.61	**30.04**
Region VI	-	0.72	46.41	4.92	0.78	**52.83**
Region VII	-	-	14.52	-	-	**14.52**
Region VIII	-	0.21	19.76	22.59	-	**42.56**
Grand total	**9.91**	**1.97**	**83.26**	**32.42**	**12.39**	**139.95**

Source: Typhoon "URSULA" NDRRMC *Situational Report No. 28 dated January 30, 2020; and DSWD DROMIC Report No. 36 as of February 22, 2020*

Table 32. Cost of Assistance for Cotabato Earthquake per Region
(in Php Million)

Affected Regions	Cost of assistance			
	OCD	DOH	DSWD	Total
Region XI	19.66		49.32	**68.98**
Region XII	5.61		54.33	**59.94**
Grand total	**25.27**	**7.71**	**103.65**	**136.63**

Source: Tulunan, North Cotabato Earthquake Incident NDRRMC *Situational Report No. 39 dated January 22, 2020; and DSWD DROMIC Report No. 55 as of March 4, 2020*

Annex 8. Size of the Affected Population in the Case Studies

Table 33. Population per Regions Affected by Typhoon "OMPONG"

Affected Regions	Affected Population		
	Barangays	Families	Individuals
NCR	41	6,620	29,885
Region I	2,485	363,287	1,484,271
Region II	1,847	290,927	1,147,264
Region III	863	145,848	627,289
Region IV-A	198	8,013	31,676
Region IV-B	54	1,923	7,415
CAR	1,016	115,261	489,189
Grand total	**6,504**	**931,879**	**3,816,989**

Source: Typhoon "OMPONG" NDRRMC *Situational Report No. 55 dated October 5, 2018; and DSWD DROMIC Report No. 66 as of November 6, 2018*

Table 34. Population per Regions Affected by Typhoon "URSULA"

Affected Regions	Affected Population		
	Barangays	Families	Individuals
Region IV-B	132	31,636	155,317
Region VI	1,009	351,128	1,491,876
Region VII	100	36,830	184,150
Region VIII	1,871	388,434	1,523,148
CARAGA	21	337	1,351
Grand total	**3,133**	**808,365**	**3,355,842**

Source: DSWD DROMIC Report No. 36 as of February 22, 2020

Table 35. Population per Regions Affected by the Cotabato Earthquake

Affected Regions	Affected Population		
	Barangays	Families	Individuals
Region XI	168	25,817	122,178
Region XII	211	46,761	233,805
Grand total	**379**	**72,578**	**355,983**

Source: DSWD DROMIC Report No. 55 on Tulunan, North Cotabato Earthquake Incident as of March 4, 2020

Annex 9. Task Force Bangon Marawi (TFBM) Priorities

The TFBM Head have operational control and supervision of the task force and the overall responsibility to ensure that objectives are accomplished. Below are the functions and responsibilities of the TFBM as enumerated in Administrative Order (AO) No. 03:

- Organize and deploy a quick response team that will provide for the immediate needs of displaced and/or adversely affected families;
- Conduct a PCNA of Marawi City and, based thereon, develop and implement a BMCRRP;
- Facilitate and oversee the construction of temporary and/or permanent shelters for the displaced persons;
- Coordinate the immediate restoration of public utilities, such as water and electricity, and the repair and re-construction of public buildings and infrastructure;
- Attend to health, sanitation, food, and other basic needs of affected residents;
- Provide an environment conducive to the revival of business and livelihood activities;
- Ensure the restoration and maintenance of peace and order; and
- Perform such other functions as may be directed by the President.

Table 36. TFBM Sub-Committees under the Supervision of the TFBM Head

Sub-committee	Responsibilities	Agencies
Reconstruction	Primarily responsible for the immediate repair, rehabilitation, and reconstruction of public schools, national roads and bridges, and government buildings.	**Lead:** DPWH
Housing	Primarily responsible for the immediate rehabilitation and construction of temporary or permanent shelters, and the restoration of water, electricity, and other public utilities.	**Lead:** Housing and Urban Development Coordinating Council (HUDCC)*
Health and Social Welfare	Primarily responsible for taking measures to provide sanitation and health facilities, medical supplies, food, potable water, and other necessities.	**Lead:** DSWD and DOH
Business and Livelihood	Implement an active campaign for the revival of businesses and livelihood projects in the city.	**Lead:** DTI
Security, Peace and Order	Responsible for the restoration and maintenance of peace and order, and the continuity of public services in the city.	**Lead:** DND and DILG

Source: AO 03 as amended by AO 09

*Note: *By virtue of RA 11201 that was approved on February 14, 2019, the Department of Human Settlements and Urban Development was created as the central housing authority in the country thereby absorbing the duties and functions of HLURB and HUDCC.*

Table 37. NDRRM Fund Releases for TFBM
(in Php Million)

Implementing Agencies / PPAs	FY2017	FY2018	FY2019	Total
National Government Agencies				
DSWD Continuing Relief Assistance and Cash-for-Work for the IDPs of Marawi City. In 2019, Basic Transitory Family	3,000	2,286	-	**5,286**

Support Package; Provision of Livelihood Settlement Grants (LSG); and Operational Support Fund.				
DPWH Reconstruction, improvement, and/or repair of Agus Bridge I, II, and III. In 2019, Housing Program and infrastructure projects of Marawi City LGU, and re/construction of school classrooms in permanent shelter.	-	184	2,823	**3,007**
DENR (OSEC, EMB) Solid Waste Management Sewerage Treatment (RO X); Land Resource Management (RO X); Debris Management Project Monitoring Team.	-	565	451	**1,016**
DTI Space for Livelihood Capacity Building and Development included in the Pre-PCNA Requirements of TFBM. / Bangon Marawi Livelihood Project. Provision of livelihood starter kits for the IDPs.	53	873	-	**926**
DOH Implementation of health-related activities. In 2019, construction of various health facilities and public toilet and procurement of medical equipment.	136	-	245	**381**
DILG (OSEC, BJMP, BFP) Peace and order activities relative to Marawi Pre PCNA in 2017. Purchase of essential BFP and BJMP equipment, supplies and materials; installation of fire hydrants; construction of BFP facilities; land acquisition. In 2019, support to the New Marawi City Jail.	99	102	133	**334**
DA (OSEC, BFAR) Provision of seeds and panting materials, inputs, dispersal of livestock, infrastructure, farm machineries and equipment (Regional Field Unit [RFU] X). Fishery inputs, fingerlings dispersal, fishing gears and equipment, fishery development, fish culture farming, post-harvest equipment, and other fishery-related sub-projects (Regional Office [RO] X)	41	280	-	**321**
DOST Science and technology innovations projects (RO XII)	-	69	152	**221**
DND (OSEC, AFP) Acquisition of land in Marawi City as site for new military camp; and Support to Bangon Marawi Security Project in 2018. Security Operations; and clearing and operational requirements in 2019.	-	55	68	**123**
CDA Implementation by CDA Kidapawan Extension Office.	-	76	-	**76**
PCOO (PIA and BBS) Information Management and Strategic Communications for FYs 2017-2018. Enhancement of and acquisition of ICT equipment for BBS DXSO-Radyo Pilipinas in 2019.	27	19	27	**73**
DAR For implementation by DAR-ARMM of common service facilities, Islamic micro-finance, and sustainable livelihood proposal.	-	47	-	**47**
ARMM/BARMM For implementation by Regional CDA and Regional DepEd.	-	42	2	**44**
OPAPP Social healing and peace building activities.	-	25	-	**25**

SUCs Replacement costs of looted and destroyed facilities, tools and equipment of Mindanao State University - Lanao National College of Arts and Trades.	-	14	-	**14**
DOF (BTr) Marawi Ciy Government Civil Registration System; Support to Local Economic Recovery; Help Desk; and IEC Support on Land Claims.	-	11	-	**11**
Other Executive Offices (CHED, PCUP, HLURB, TESDA, NCIP, NYC) Set-up of child and youth-friendly spaces. Augmentation of mental and health psycho-social services.	5	4	2	**11**
Sub-total	**3,361**	**4,652**	**3,903**	**11,916**
Budgetary Support to Government Corporations				
LWUA Construction of water supply system in transitional shelter sites at Brgy. Sagonsongan, Marawi City. Provision of water supply for temporary and permanent shelters; and reactivation of operations by and repair, replacement, and expansion of water systems of Marawi City Water District in 2018. Provision of sewerage treatment plant and bulk water supply for most affected areas of Marawi City in 2019.	40	175	134	**349**
NEA Construction of power distribution lines and installation of KWH meters in NHA Transitional Shelter sites in Brgy. Sagonsongan, Marawi City. Support to Lanao del Sur Electric Cooperative Inc. on rehabilitation or revamp of distribution lines, and electrification of temporary and permanent shelters in 2019.	16	-	320	**336**
NHA Funding requirement for the Marawi Transitional Housing at Brgy Sagonsongan, Marawi City inclusive of community facilities, power and water connection and other Maintenance and Other Operating Expenses (MOOE).	218	-	-	**218**
PTNI PTNI-PCOO Broadcast Hub with accessories, and annual MOOE.	-	55	-	**55**
SHFC Land acquisition as part of the Marawi Shelter Project.	-	-	43	**43**
Sub-total	**274**	**230**	**497**	**1,001**
Total	**3,616**	**4,882**	**4,400**	**12,917**

Source: DBM SARO Listing and NDRRM Fund SARO Releases Report

Table 38. TFBM Sector Investments per Funding Source
(in Php Million)

Funding Source	**Physical Infrastructure**	**Social Services**	**Housing and Settlement**	**Livelihood and Business Development**	**Local Governance and Peacebuilding**	**Land Resource Management**	**Total estimated cost**
NDRRM Fund	7,123	1,908	7,278	5,281	516	1,345	23,451
Agency Specific Budgets	879	3,134	453	928	170	1	5,565

Regional Government – B/ARMM	2,700	21	191	36	13	-	2,961
Lanao del Sur PLGU	16	25	30	-	-	-	70
Marawi City LGU	-	-	-	-	1	8	9
Cost-Sharing (government plus development partners)	2050	26	176	1,225	5	-	3,482
Non-Government/ Development Partner/ Private Sector	8,727	4	2,029	2	-	-	10,762
To be determined	181	-	-	-	-	-	181
Total estimated cost	**21,675**	**5,118**	**10,156**	**7,472**	**706**	**1,354**	**46,480**

Source: BMRCCP June 2018

Table 39. TFBM Annual Planned Investments per Funding Source
(in Php Million)

Funding Source	**FY2018**	**FY2019**	**FY2020**	**FY2021**	**FY2022**	**Total estimated cost**
NDRRM Fund	12,053	8,849	1,443	673	434	23,451
Agency Specific Budgets	4,830	610	84	21	19	5,565
Regional Government – B/ARMM	1,127	251	721	782	80	2,961
Lanao del Sur PLGU	58	13	-	-	-	70
Marawi City LGU	9	-	-	-	-	9
Cost-Sharing (government plus development partners)	588	1,650	944	300	-	3,482
Non-Government/ Development Partner/ Private Sector	2,951	3,857	3,120	600	234	10,762
To be determined	173	8	-	-	-	181
Total estimated cost	**21,789**	**15,238**	**6,312**	**2,376**	**766**	**46,480**

Source: BMRCCP June 2018

Annex 10. Example of Disaster Response Activities of Concerned Agencies for the Case Studies

Table 40. Agencies Response to the Effects of Typhoon "OMPONG"

Agencies	Response Activities and Interventions
OCD	• Facilitation and deployment of NDRRMC Rapid Deployment Team, SRR, Emergency Telecommunication Cluster (ETC), and Rapid Damage Assessment and Needs Analysis (RDANA) Teams. • Transport, pre-positioning of equipment and kits and family packs for distribution. • Distributed assistance, and augmented relief resources of DSWD with 5,000 sacks of rice.
DSWD	• 70,183 affected families served inside and outside 1,502 evacuation centers. • Deployment of Quick Response Teams as psycho-social support and friendly space facilitators; to coordinate with and augment LGUs in monitoring and management of evacuation centers; and to provide technical support to P/MDRRM Councils. • Provision of food and non-food items to affected families staying in evacuation centers. • Mobilization of volunteers for repacking of Family Food Packs. • Transport, pre-positioning, and augmentation of Family Food Packs, and Food and Non-Food Items to DSWD Field Offices. Hauled 5,739 bags of NFA rice. • Release of Php57.180 million to DSWD Field Offices for the purchase of additional food and non-food items, and for operational expenses.
DPWH	• Road clearing operations, including pre-positioning of various equipment and personnel for such purpose. • Activation of all Regional and District Disaster Reduction Management Teams.
DOH	• Deployed 37 Health Emergency Response Teams (HERTs) in the affected regions, and Rapid Health Assessment Teams to assess damages to health facilities and health needs in evacuation centers. • Conducted medical consultations in evacuation centers, barangay health stations, and rural health units; and provision of medications. • Transport, pre-positioning, and augmentation of logistics, health commodities, and medicines to DOH Regional Offices. • Conduct of mental health and psycho-social support services. • Provision of health services by DOH retained hospitals in accordance with Philippine Health Insurance Corporation (PhilHealth) No Balance Billing Policy during emergencies and disasters.
DepEd	• Use of schools as evacuation centers. • Deployment of personnel for the conduct of RDANA, to the 24/7 NDRRMC Operation Center, and for other response interventions. • Clean-up and minor repair of affected schools; provision of learning materials, hygiene kits, and teachers' kits; and conduct of emergency school feeding. • Establishing temporary learning spaces for resumption of classes in affected schools; • Replacement, repair and reconstruction of schools with infrastructure and non-infrastructure damages
DILG	• Involved in the management of fatalities. • The BFP conducted and participation in clearing, roving, search and rescue operations; and continuous monitoring of flood prone areas, dams, rivers and water reservoir. • The PNP mobilized and equipped communication teams.

Source: OCD Typhoon "OMPONG" Situational Report No. 55 dated October 5, 2018

Annex 11. Disaster Risk Financing and Insurance Strategy of the Government of the Philippines

Republic of the Philippines

Department of Finance

Strategic Priorities of the Department of Finance in Managing Disaster Risk

The government of the Philippines has identified three overarching goals in managing the financial effects of natural disasters:

- To **maintain sound fiscal health** at the national government level, necessary to support long-term rehabilitation and reconstruction needs;
- To **develop sustainable financing mechanisms** for local government units, necessary to provide immediate liquidity at the onset of a disaster; and
- To **reduce the impact on the poorest and most vulnerable** and prevent them from falling into a cycle of poverty, while also **shielding the near-poor** from slipping back into poverty.

The Department of Finance has proposed to focus on three priority areas to support these development goals:

- **National Level:** Improve the financing of post-disaster emergency response, recovery, and reconstruction needs.
- **Local Level:** Provide local governments with funds for post disaster recovery and reconstruction efforts.
- **Individual Level:** Empower poor and vulnerable households and owners of small and medium-sized enterprises to quickly restore their livelihoods after a disaster.

Strategic Priority 1: National Level

Improve the financing of post-disaster emergency response, recovery, and reconstruction needs

To improve the financial management of disasters it is important to understand the timing of post-disaster funding needs and the longer-term cost of different sources of financing. Access to immediate liquidity is crucial to support relief and early recovery operations, while the financing of post-disaster reconstruction usually starts several months later, giving the government more time to mobilize the required resources.

The Department of Finance recommends combining different risk financing instruments to protect against events of different frequency and severity. Such risk layering aims to minimize the cost of financing and optimize the timing of financing. It ensures that cheaper sources of money are used first, with the most expensive instruments used only in exceptional circumstances.

To further improve the financing of post-disaster emergency response, recovery, and reconstruction needs, the Department has identified the following key steps:

- **Quantifying and clarifying the contingent liabilities faced by the government.** Gathering and developing the necessary risk information is crucial to quantify the government's (explicit and implicit) contingent liability in regard to future natural disasters.
- **Acquiring contingent credit lines to protect against moderate disasters.** Contingent loans are an effective instrument to provide rapid financing in the case where a disaster may exceed the capacity of calamity fund reserves. Pre-negotiated rates and conditions ensure that such loans are cost-effective and are immediately available when needed.
- **Using risk transfer to access international private reinsurance and capital markets.** Risk transfer instruments such as reinsurance, catastrophe bonds, or catastrophe swaps aim to improve the government's disaster response capacity in case of infrequent but potentially devastating disasters by providing access to immediate liquidity following such events.

Strategic Priority 2: Local Level

Provide local governments with funds for post disaster recovery and reconstruction efforts

Local governments and government agencies need to financially plan ahead for disasters by increasing their access to immediate liquidity following a disaster, as well as to longer-term financing for the reconstruction of public assets and infrastructure. The Department of Finance plans to help local governments and government agencies in achieving this by:

- **Developing a catastrophe risk insurance facility for local government units.** The Department proposes to carry out a feasibility study and develop options for a catastrophe risk insurance facility for local government units.
- **Pooling local governments' calamity funds.** The Department is exploring the possibility of creating budgetary mechanisms to allow unutilized local calamity funds to be used by local government units struck by natural disasters.
- **Improving insurance of public assets.** The Department hopes to provide for support to local government units and other public entities to improve their property insurance coverage, for example by providing standardized policies to be adopted by all public agencies. The Department will also explore ways to improve compliance of local government units with existing laws and/or new legislation.

Strategic Priority 3: Individual Level

Empower poor and vulnerable households and small and medium-sized enterprises to quickly restore their livelihoods after a disaster.

The government has a major role to play in supporting the development of private domestic catastrophe risk insurance markets, in close partnership with the private insurance and reinsurance markets. The development of property insurance markets through public-private partnerships requires policy and regulatory decisions in order to encourage and incentivize the uptake of insurance. It will also require technical and financial support for the development of risk market infrastructure and potentially a catastrophe insurance facility for homeowners, farmers, and small businesses.

The Department recommends expanding the capacity of domestic insurance markets to protect individuals and small businesses by strengthening micro-insurance and disaster-linked social protection schemes, through:

- **Broadening private property catastrophe risk insurance and micro-insurance coverage.** The Department will explore the feasibility and benefits of establishing a catastrophe risk insurance facility for the retail sector, and the expansion of disaster micro-insurance products.
- **Linking disaster risk financing and social protection.** The Department hopes to promote stronger integration of the risk financing and social protection agendas, particularly in the form of disaster-linked social safety nets.