



1. Operation Information

Operation ID

P155656

Operation Name

Second DRM DPL with a CAT-DDO

Country

Philippines

Practice Area (Lead)

Urban, Resilience and Land

Non-Programmatic DPF

L/C/TF Number(s)

IBRD-85760

Closing Date (Original)

30-Sep-2018

Total Financing (USD)

500,000,000.00

Bank Approval Date

22-Dec-2015

Closing Date (Actual)

30-Mar-2020

IBRD/IDA (USD)

Co-financing (USD)

Original Commitment

500,000,000.00

0.00

Revised Commitment

500,000,000.00

0.00

Actual

500,000,000.00

0.00

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2. Program Objectives and Pillars/Policy Areas

a. Objectives

The Program Document (PD, page 2) states that the objective of the Second Disaster Risk Management Development Policy Loan with a Catastrophe-Deferred Drawdown Option (Cat-DDO) -- henceforth, the Second DRM DPL-- is "to enhance the technical and financial capacity of the Government of the Philippines



to reduce disaster risk and manage the socio-economic and fiscal impacts of natural disasters." (Program Document dated December 1, 2015)

The Department of Finance (DOF) of the Government of the Philippines (GOP) was the Borrower and the Implementing Agency.

The Second DRM DPL was designed based on a World Bank-supported programmatic technical assistance (TA), particularly its risk reduction and risk financing aspects. The TA program—Reducing Vulnerability to Natural Disasters (P148631)—supported analytical activities with the goal of enhancing GOP's capacity to manage disaster risk through (i) measures to build resilience in key sectors and (ii) sustainable reconstruction and recovery, including disaster risk reduction and disaster risk finance and insurance. These analytical activities supported the high-level policy dialogue and the monitoring of the results indicators under the Second DRM DPL.

b. Pillars/Policy Areas

To achieve the Program's development objective, specific policy actions would be undertaken under two main pillars:

Pillar A: Strengthening risk reduction investment planning and regulations

Pillar B: Enhancing the financial capacity to manage natural disaster risk

The policy actions under each of these two pillars are presented below (the outcomes of these actions are assessed under Section 5 on Efficacy):

To reduce disaster risks by strengthening investment planning and regulations (Pillar A), the Program required the following prior actions:

Prior Action 1: The National Economic and Development Authority (NEDA) has issued the Midterm Update to the Philippine Development Plan, revising the Borrower's investment programming strategy to prioritize disaster risk reduction and management according to levels of vulnerability to multiple hazards.

Prior Action 2: The Borrower has provided specific allocations for Risk Resiliency Programs, through the 2015 General Appropriations Act.

To strengthen the Government's financial capacity to manage natural disaster risk (Pillar B) and deepen engagement in disaster risk financing instruments, the Program necessitated the following prior actions:

Prior Action 3: The Department of Finance has adopted the Disaster Risk Financing and Insurance (DRFI) Strategy, which provides a comprehensive framework for the implementation of financial protection solutions against natural disasters at national, local, and individual level.

Prior Action 4: The Borrower has included special provisions in the General Appropriations Act to allow four agencies (Department of Education, Department of Public Works and Highways, Department of Health, and



Department of Transportation and Communications) to use the National Disaster Risk Reduction and Management (DRRM) Fund to pay for insurance premiums.

The objectives of the Second DRM DPO are set at an appropriate level that is consistent with the scope of the prior actions. More specifically, the actions of (i) mainstreaming risk-informed and risk-prioritized investment planning in the Philippine Development Plan, (ii) allocating resources for risk resiliency, (iii) adopting a strategy for insuring and financing disaster risks, and (iv) allowing four government agencies to use a national disaster fund to finance insurance premiums--are all of sufficient scope and ambition to credibly achieve the properly pitched DPO objective of "enhancing the technical and financial capacity of the government to reduce disaster risk and manage the socio-economic impact of natural disasters".

c. Comments on Program Cost, Financing and Dates

Program Cost. The program used the Catastrophe Deferred Drawdown Option (Cat DDO) instrument to access a contingent credit line of US\$500 million on request following the official declaration of an emergency. The actual disbursement was US\$496.26 million. The reason for the difference is that for a Cat DDO, there is a front-end fee of 0.50 percent on the loan amount and a renewal fee of 0.25 percent on the undisbursed amount.

Financing. The Cat DDO's credit line was the sole financial instrument.

Key Dates. The program was approved on December 22, 2015 and became effective on April 15, 2016, with an original closing date of September 30, 2018.

On September 15 and 16, 2018, Category 5 Tropical Cyclone Mangkhut hit the Philippines, prompting the President to declare a State of Calamity. Over 700,000 families (around 3 million people) were impacted by the cyclone, injuring 138 and killing 68 in seven regions including the National Capital, and causing direct damages to infrastructure and agriculture estimated at around US\$623 million. (Source: National Disaster Risk Reduction and Management Council)

On September 27, 2018, in the aftermath of Tropical Cyclone Mangkhut, the Government requested the World Bank to draw down the undisbursed amount of US\$497.5 million. Within two days, the Bank transferred US\$496,256,250, while retaining US\$1,243,750 of an undisbursed amount, which would be sufficient to capitalize the renewal fee from the loan.

On September 28, 2018, the Bank renewed the Program's drawdown period, and at GOP's request the loan closing date was extended by 36 months, from September 30, 2018 to September 30, 2021, to maintain the dialogue on key policy and institutional actions intended to improve the country's physical and financial resilience to natural disasters.

3. Relevance of Design

a. Relevance of Objectives



Country Context. Among the development challenges facing the Philippines are natural disasters, whose frequency and severity place the country near the top of global vulnerability rankings. This high exposure to natural hazards constitutes a major threat to the country's economic growth. The Philippine government at all levels continues to face complex and intense disaster risks. Over the years, the government has engaged in reforms and taken actions to address these, thus laying the groundwork for this Second DRM DPO under review.

The program objectives were aligned with government strategies. At the apex, the Philippine Development Plan (PDP) recognizes the key role of disaster risk reduction and management (DRRM) in safeguarding hard-won development gains, focusing particularly in the most vulnerable areas. In turn, the National DRRM Plan aims to strengthen the government's technical capacity to build and institutionalize measures for reducing disaster risk by (i) mainstreaming DRRM in policy formulation and development planning and (ii) developing risk transfer mechanisms that enhance social and economic protection and increase resilience of communities to disasters. Further groundwork for this Second DPL was laid by successive governments through major reforms in public financial management that included disaster risk financing and insurance. Over the past decade, the Philippines has adopted progressively sophisticated post-disaster financing instruments, starting in 2011 with contingent credit (e.g., the World Bank-financed First DRM DPO with a CAT-DDO), proceeding to catastrophe insurance in 2017, and moving towards catastrophe bond issuance.

There was a need for further improvements in capacity to manage disasters. These past achievements and continuing efforts are underpinned by the DRRM Act of 2010. However, challenges remained in implementing the law in the years preceding the Second DRM DPO. The implementation of the Act had gaps in two areas: (i) planning that is informed by risks across sectors and geographical areas; and (ii) the scaling up of risk reduction investments. More specifically, there was a need to establish a strong foundation for rational investment programming with prioritization tools, updated and rigorous building codes and technical standards to promote disaster resilience in infrastructure investments, and provincial investment plans that are informed by levels of vulnerability. The Act also did not clearly define functions for coordination and implementation of recovery and reconstruction, especially for post-disaster shelter assistance. Finally, stronger support was required for the comprehensive management of the financial impacts of disasters, including risk transfer mechanisms among other instruments. Taken together, addressing these weak areas would help in strengthening the government's capacity to manage disaster risk.

In sum, the DPO's objectives were of satisfactory relevance to addressing gaps and weaknesses in two specific main areas: (i) enhancing the Government's technical capacity for risk-informed cross-sectoral planning and risk reduction; and (ii) implementing actions to strengthen the Government's financial capacity to manage natural disaster risk.

Relevance to Current Bank and Government Strategies. The relevance of the objective of this Second DRM DPL to the Bank's current strategy is **satisfactory**. According to the latest Country Partnership Framework (CPF) covering July 2019 to December 2023, a policy priority of the Systematic Country Diagnostic (SCD) is keyed to "addressing the country's intense vulnerabilities by scaling up efforts to protect the country from natural disasters and climate change impacts..." One of the CPF's three focal areas is "Promoting Peace and Building Resilience, by addressing the country's core vulnerabilities of conflict alongside natural disasters and climate change", for which the corresponding CPF objective is "Increased resilience to natural disasters and climate change." The CPF indicates (paragraph 45) that "WBG support to the Philippines will aim to help the country improve resilience to shocks such as situations of conflict and natural disasters." There is a clear and full congruence of these CPF goals with the PDO.



The relevance of the Second DRM DPO's objective to the Government's current strategy is also **satisfactory**. One of the key goals highlighted in the 2017-2022 Philippine Development Plan (PDP) is to empower communities by: (i) increasing their capacity to address conflicts and reduce their vulnerabilities; and (ii) strengthening the implementation of climate change adaptation and disaster risk reduction across sectors, particularly at the local level, as well as strengthening institutional response to disasters. (CPF, paragraph 65) The PDO is also fully consistent with the Government's National DRRM Framework, as evidenced by GOP's stated commitment to "safer, adaptive and disaster resilient Filipino communities towards sustainable development." Finally, the objective of the DPO is directly relevant to the need for addressing gaps in implementing the DRRM Act, specifically to strengthen investment planning and regulations, and to enhance financial capacity to manage risk, both of which constitute the goals of the Second DRM DPO's two Pillars.

b. Relevance of Prior Actions

Rationale

The relevance of each of the Prior Actions (PAs) in supporting PDO achievement is **satisfactory** (see discussion and rating of each PA below). This ICR Review found that the two Pillars, the PAs under those Pillars, and the results indicators measuring achievement of the PAs, were fully consistent with the GOP and Bank strategies. More specifically, PAs 1 and 2 served to integrate disaster risk reduction into investment planning (as intended by Pillar A), while PAs 3 and 4 laid the environment for strengthening the financial capacity for disaster risk management (as intended by Pillar B). The relatively low number of prior actions is balanced by the significant relevance and criticality of each within a straightforward but highly important program to put a disaster risk-informed investment plan in place, fund it, and enable insurance.

The prior actions addressed major constraints to achieving the pillar objectives with a clear and credible causal chain, and in turn, the PDO. The strengthening disaster risk reduction in investment planning required a results chain that includes (i) the integration of disaster risk reduction principles into the investment programming (PA1) and (ii) the appropriation of the resources needed to fund these investments (PA2). Similarly, the strengthening of financial disaster risk management capacity required a results chain that involves (i) the establishment of a framework for disaster financial protection (PA3) and (ii) the specific authorization to fund critical ministries in purchasing insurance (PA4).

Pillar A Objective: Strengthening risk reduction investment planning and regulations

PA1 consisted of articulating--in the publicly released Midterm Update of the Philippine Development Plan (PDP)--the explicit targeting of investment strategies according to differing levels of vulnerability to disasters and multiple hazards. The government developed and adopted more effective vulnerability assessment tools to identify highly susceptible communities, allowing disaster risk reduction investments to be more effectively targeted to meet priority needs. This represents a major change in the government's overall development strategy that directly supports Pillar A and the PDO, specifically by operationalizing and implementing the reduction of disaster risks as a cross-cutting strategy within the PDP, with support from PA2 as discussed immediately below. **The relevance of PA1 is satisfactory.**



PA2 involved the launching of Risk Resiliency Programs (RRP) that included (among other actions) a targeted, multi-agency approach to risk-mapping and geohazards assessment, which directly supports the risk-informed investment planning goals of Pillar A and the PDO. The RRP were formulated and implemented while also tagging climate change expenditures, starting with the 2015 General Appropriations Act. This new initiative ensures that the corresponding activities are budgeted and also monitored in the future. Specific budget allocations were given to agencies to support geospatial data for zoning and development, geohazard data to assess local vulnerabilities in cities and coastal communities, and earthquake and tsunami monitoring, among other activities. **The relevance of PA2 is Satisfactory.**

The rating of the Prior Actions 1 and 2 under Pillar A for strengthening risk reduction investment planning and regulations is **Satisfactory**,

Pillar B Objective: Enhancing the financial capacity to manage natural disaster risk

PA3 involved the official adoption by the Department of Finance (DOF) of the Disaster Risk Financing and Insurance (DRFI) Strategy and its associated action plan. The DRFI strategy, which was developed by DOF under the First DRM DPO with a Cat-DDO, aims to increase the financial disaster resilience of the Philippines at the national and local levels, as well as among poor, vulnerable households and small and medium enterprises (SMEs). The adoption of the DRFI strategy formalizes the implementation of the Government's program to strengthen financial resilience to disasters, as embodied in Pillar B and the PDO. This formalization is a final step in the results chain starting from DRFI development under the First DPO. **The relevance of PA3 is Satisfactory.**

PA4 involved the critical step (within the results chain of supporting the DRFI Strategy's operationalization) of allowing line agencies to use insurance. The premiums come from the National Disaster Risk Reduction and Management Fund for the protection of key public assets and for supporting faster reconstruction following disasters, thus directly supporting the enhanced financial capacity goal of Pillar B and the PDO. The four agencies included the Department of Education, the Department of Public Works and Highways, the Department of Health, and the Department of Transportation and Communications. Both PA3 and PA4 created the enabling environment for implementing the DRFI Strategy. **The relevance of PA4 is Satisfactory.**

The rating of the Prior Actions 3 and 4 under Pillar B for enhancing the financial capacity to manage natural disaster risk is **Satisfactory**.

The program was supported by parallel World Bank analytical work and technical assistance. This strengthened the quality of PAs by: (i) helping to elaborate on the detailed contents of the strategies for increasing resilience to disasters within the PDP Midterm update; (ii) advising on priority DRM investments to be funded by budget allocation (e.g., services for hazard mapping, flood management services, risk reduction, and disaster preparedness); and (iii) supporting the design of the framework for post-disaster financing instruments by weighing options on instrument design, amounts and combinations.

Rating



Satisfactory

4. Relevance of Results Indicators

Rationale

The relevance of Results Indicators (RIs) are discussed under each of the corresponding Prior Actions (PAs) for Pillars A and B of the DPO. (Note: There were two Pillars, four Prior Actions with two under each Pillar, and ten Results Indicators.)

Pillar A: Strengthening risk reduction investment planning and regulations

PA1 required NEDA to issue the Midterm Update of the Philippine Development Plan (PDP) that revises the Borrower's investment programming strategy to prioritize disaster risk reduction (DRR) and management according to levels of vulnerability to multiple hazards.

PA2 required the Borrower to provide specific allocations for Risk Resiliency Programs through the 2015 General Appropriations Act.

- **RI A1** monitored and measured the extent to which NEDA has developed and applied NEDA a methodology for national-level risk-informed planning public investment programming. This was achieved when the Government released the PDP 2011-2016 Midterm Update on April 13, 2014, which was one year before appraisal, and a year and a half before Board approval in December 2015. As further measures, the 2014 PDP Midterm Update articulated the need for an annual increase in the level of investments for disaster risk reduction and climate change adaptation to promote more disaster- and climate-resilient infrastructure. The Update also called for the development of more effective vulnerability assessment tools to identify and mitigate potential disaster impacts. A Mid-term Update was published once more in 2019. As a complement to the methodology, a Socio-Economic Resilience Index was developed. However, during the DPO's appraisal and negotiations, both NEDA and the Department of Finance were conservative in their approach and committed only to the development of a methodology, hence limiting the scope for formulating a more downstream and quantitative RI. Taking the more upstream pitching of this RI into account, the relevance of RI A1 is **moderately satisfactory**.
- **RI A2** measured the extent to which DRR provisions have been integrated in the National Building Code of the Philippines developed by the Department of Public Works and Highways. Updates and revisions to the building codes under RI A2 were done under PA2's Risk Resiliency Programs. In terms of specific measures, the revisions incorporated climate change and resilience factors into national building regulations. The relevance of RI A2 is **satisfactory**.
- **RI A3** measured the the number of Provincial Commodity Investment Plans (PCIPs) developed and adopted, which drew on the expanded Vulnerability and Sustainability Assessment (eVSA) tool. PCIPs were also done under PA2's Risk Resiliency Programs, and are approved by the Department of Agriculture under the Philippine Rural Development Program. The relevance of RI A3 is **satisfactory**.
- **RI A4** tracked and measured the formulation (by the members of NEDA's Social Development Committee (SDC) and approval of a policy framework for post-disaster shelter assistance, and the endorsement of the framework by the SDC's Technical Board. This Post-Disaster Shelter



Recovery Policy Framework (PDSF) was intended to support the Housing and Urban Development Coordinating Council (HUDCC) and required approval of its Management Committee. SDC's endorsement was made on September 2018, after the HUDCC's prior approval in January 2018. The relevance of RI A4 is **satisfactory**.

- **RI A5** tracked and measured (i) the Department of Tourism's completion of multi-hazard vulnerability assessments of priority cultural heritage sites and (ii) the adoption of the assessment methodology by the Philippine Standards for Conservation. Given the importance of the tourism sector in the Philippines, and importance of cultural heritage sites in the Risk Resilience Programs, the relevance of RI A5 is **satisfactory**.

Based on a weighted average of 4.8 for the five RIs, the overall rating of RIs related to Pillar A is **satisfactory**.

Pillar B: Enhancing the financial capacity to manage natural disaster risk

PA3 required the Department of Finance to adopt the Disaster Risk Financing and Insurance (DRFI) Strategy, in order to provide a comprehensive framework for implementing financial protection solutions against natural disasters at the national, local and individual levels.

PA4 required the Borrower to have included special provisions in the General Appropriations Act to allow four agencies to use the National DRRM Fund to pay for insurance premiums.

- RI B1 tracked and measured the extent to which the Department of Finance has developed and launched a long-term joint catastrophe risk insurance program for Local Government Units (LGUs), with a 2018 target of 10 LGUs participating. As discussed under the Efficacy section, the coverage for this program was almost doubled in 2018 but the Government decided not to renew the transaction, replacing it in 2019 with a sovereign catastrophe bond. Thus, the indicator is no longer applicable (no LGUs are currently covered), while the Government placed a sovereign catastrophe bond and at the same time initiated work on a national indemnity insurance program for critical public assets that has more targeted funding. Given that the indicator for the original risk insurance program is no longer applied, and the need for clear indicators to measure the results of the new catastrophe bond and indemnity insurance program that took its place, the relevance of this (original) indicator is **moderately satisfactory**.
- RI B2 measured the number of line agencies that have piloted their DRFI Strategy. This indicator directly corresponds with PA3 as its implementation stage. The relevance of RI B2 is **satisfactory**.
- RI B3 measured the extent to which the Department of Finance and the Insurance Commission have designed and established a property catastrophe risk insurance pool for homeowners. This indicator also directly supports the achievement of PA 3 above. However, as an indicator, it did not adequately capture the implementation stage of insurance pool. An indicator that captured a targeted magnitude of the insurance pool would have been useful. The relevance of RI B3 is **moderately satisfactory**.
- RI B4 tracked the extent to which the Department of Budget and Management, the Department of Social Welfare and Development, and the Department of Finance have developed a program for post-disaster emergency income support. As a direct measurement tool for the DRFI implementation, the relevance of RI B4 is **satisfactory**.



- RI B5 measures the extent to which the Insurance Commission has updated and adopted the catastrophe risk insurance data base. Given the key role of adequate supervision and regulation of the insurance market in delivering the DRFI strategy, the relevance of RI B5 is **satisfactory**.

Based on a weighted average of 4.6 for the five RIs, the overall rating of RIs related to Pillar B is **satisfactory**.

The RIs are causally linked to measuring their respective PAs, although many of them are formulated too upstream to accurately signal the achievement of the PDO. The RIs are all time-based and can tangibly be measured, tracked and/or recorded. Each RI was transparent and specific, with a clear baseline and a well-defined target. However, a few RIs could have been better calibrated to measure more downstream results, i.e., actual implementation and mainstreaming versus focusing on upstream development, design and adoption of policy actions, as originally formulated.

Regarding monitoring and evaluation (M&E) of results, the Second DPL's policy goals were realistic and well-grounded in the programs of the relevant agencies; moreover, the progress in achieving those policy targets were suitable for monitoring using the reporting mechanisms of those agencies. The Bank's concurrent programmatic TA enabled the regular M&E of the Second DPL's targeted results as part of the required reporting on the TA activities.

Based on a weighted average of 4.7 for the ten RIs, the overall rating for the relevance of the RIs is **satisfactory**.

Rating

Satisfactory

5. Achievement of Objectives (Efficacy)

OBJECTIVE 1

Objective

To enhance the technical and financial capacity of the Government of the Philippines to reduce disaster risk and manage the socioeconomic and fiscal impacts of natural disasters.

Rationale

The Second DRM DPL's efficacy in achieving its PDO was linked to achieving results under two Pillars, as summarized below.

Pillar A sought the strengthening of risk reduction in investment planning and regulations. Pillar A was supported by Prior Actions 1 and 2, and progress was measured by Results Indicators A1 to A5. The results achieved strengthened the GOP's risk reduction investment planning and regulations, as follows:



(i) The DPL developed and completed a methodology to plan for socio-economic resilience at the national level that is informed by disaster risk. With the aim of informing planning and the programming of public investments, NEDA developed a Socio-economic Resilience Methodology between 2015-2018, which assessed the benefits of interventions to build resilience in various provinces in the Philippines. Those interventions included: (i) climate adaptation measures, (ii) strengthening and retrofitting of buildings and infrastructure, (iii) early warning systems, and (iv) improved access to banking, insurance policies, and social protection systems to help people reduce their underlying risk, prepare for disasters and extreme climate events, and recover from shocks. The methodology is being used by NEDA as a tool to incorporate disaster resilience considerations in the PDP 2016–2022.

As part of the Bank's TA program, the Bank supported the analytical work for the Methodology, and also contributed to the design of a Socio-economic Resilience Index to monitor the PDP target of "Individuals and communities will be more resilient." The Index directly measured the socio-economic resilience of the poor and non-poor at the provincial, regional, and national levels, through a range of indicators such as those relating to social protection and insurance. NEDA applied both the Socio-economic Resilience Methodology and Socio-economic Resilience Index in the PDP's 2019 Midterm Update with the aim of using the methodologies to maximize resilience gains across sectors and geographic areas. The efficacy of completing and utilizing a methodology to carry out disaster risk-informed planning and investment programming--as measured by RI A1--is rated **Substantial**.

(ii) The DPL helped to integrate measures for disaster risk reduction in the Building Code of the Philippines. The Department of Public Works and Highways (DPWH) integrated measures into the NBCP to reduce disaster risks, by revising national building regulations in order to incorporate climate change and resilience factors into national building regulations. Moreover, in 2018, DPWH developed a new Philippine Building Act (PBA) to supersede the NBCP. Filed in Congress under House Bill 7804. The Bank continues to assist DPWH in the rollout and implementation of the PBA. The efficacy of integrating measures for disaster risk reduction in the Building Code of the Philippines--as measured by RI A2--is rated **Substantial**.

(iii) The DPL mainstreamed in 81 provinces the use of Vulnerability and Suitability Assessments for developing Provincial Commodity Investment Plans (PCIPs). By September 2018, the Department of Agriculture (DA) had approved 81 PCIPs, while mainstreaming the eVSA tool into programs led by DA under the Philippine Rural Development Program (PRDP). All the approved PCIPs have been adopted by the respective Provincial Development Councils. The LGUs and Regional Development Councils are using the three-year rolling PCIPs for (i) technically based planning and (ii) mobilizing additional investment resources from other government programs and through private sector investments. Resource mobilization was aggregated through the Risk Resiliency Programs and thus the development and updating of the PCIPs constituted the downstream indicator to track implementation. While serving as a basis for identifying and selecting priority subprojects for PRDP funding, the PCIPs also help to ensure that the agriculture investments address vulnerability to natural hazards and climatic suitability for various commodities. The PCIPs are updated as needed (57 have been updated; 21 are being updated). The efficacy of mainstreaming the use of Vulnerability and Suitability Assessments in PCIPs--as measured by RI A3--is rated **High**.

(iv) The DPL designed a Post-Disaster Shelter Recovery Policy Framework (PDSF). The agencies of the Social Development Committee formulated a PDSF to support the Housing and Urban Development Coordinating Council. The Council approved the Framework in January 2018, and NEDA's Social Development Committee-Technical Board endorsed the PDSF in September 2018. The PDSF was designed to continually improve the country's capacity to support full recovery of households, shelters, and communities after natural disasters occur. In 2019, the PDSF was made part of the Philippine Disaster



Rehabilitation and Recovery Framework, which was developed by NEDA. The adoption of the Framework was endorsed by the National Disaster Risk Reduction and Management Council (NDRRMC) as mandated under the Philippine Disaster Risk Reduction and Management (DRRM) Act (RA No. 10121). The efficacy of designing, adopting, and implementing a Post-Disaster Shelter Policy Framework--as measured by RI A4--is rated **High**.

(v) The DPL developed a methodology for vulnerability assessment that was subsequently adopted in the Philippine Standards for Conservation for priority cultural heritage sites. By September 2018, the DOT had completed vulnerability assessments of 16 priority cultural heritage structures to multiple natural hazards such as earthquakes, typhoons, and floods. The structures were in three pilot locations, namely, Intramuros in Manila, and the Cebu and Bohol Province). The assessments made specific recommendations on interventions to reduce risks for each structure, including conceptual designs and cost estimates for structural strengthening and restoration. This approach went beyond traditional DRM initiatives that focused on strengthening public facilities (e.g., schools and hospitals), not historical or cultural assets. Multi-hazard vulnerability assessment was adopted in the Philippine Standards for Conservation in September 2018, and by the Tourism Infrastructure and Enterprise Zone Authority (TIEZA) and the Intramuros Administration as well. Both agencies are using the methodology as a screening tool for assessing historical assets. TIEZA, in line with its mandate (RA 9593) to preserve cultural tourism sites, has established a team for vulnerability assessments of cultural heritage properties. In sum, the methodology has been adopted and applied by the DOT, TIEZA, and Intramuros Administration. The efficacy of developing, adopting and utilizing a methodology for vulnerability assessment of priority cultural heritage sites--as measured by RI A5--is rated **Substantial**.

Pillar B sought to enhance GOP's financial capacity to manage natural disaster risk. Pillar B was supported by Prior Actions 3 and 4; progress was measured by Results Indicators B1 to B5. The results achieved the enhanced financial resilience at the national, local and individual levels in the event of natural disasters, as follows:

(i) The DPL program advanced and launched a subnational parametric insurance program in 25 provinces. According to the ICR (paragraphs 39 and 40), the Philippines launched in July 2017 the world's first subnational parametric insurance program, providing 25 LGUs with US\$200 million in insurance against major typhoon and earthquake events. GOP renewed the transaction in December 2018 and almost doubled the coverage to US\$390 million by adding protection for school buildings to complement the Department of Education's Quick Response Fund. The 2018 General Appropriations Act paid the premium for both transactions. Since the GOP preferred to have more discretion over the disbursement of payouts (instead of individual provinces based on provincial triggers), GOP decided to evolve the coverage instead of renewing the transaction. It is unclear to what extent the catastrophe bond program realistically built on the prior action and the work related to building the parametric insurance program, and whether the latter effort was wasted. In December 2019, with World Bank technical support and intermediation by the World Bank Treasury, GOP placed a sovereign catastrophe bond (US\$225 million coverage, for earthquake and tropical cyclone), which replaced the parametric coverage for quick liquidity from the initial parametric pilot program. To provide more targeted funding, GOP also developed a national indemnity insurance program for critical public assets. These recent efforts--which built upon the July 2017 pilot and were adjusted in the 2018 program--are being maintained through a 2019 and 2020 budget appropriation. While noting that the original subnational parametric insurance program was not renewed, the efficacy of establishing the program--as measured by RI B1--is **Substantial**.



(ii) The DPL enabled line agencies to pilot their DRFI strategies by providing technical support for managing financial risks on public assets. DRFI strategies were developed and piloted by the Department of Public Works and Highways (DPWH), Department of Education (DepEd), Department of Health (DOH), Department of Social Welfare and Development (DSWD), and National Irrigation Administration (NIA). The strategies combined their Quick Response Fund allocation, parametric insurance for extreme events, and indemnity insurance for financing reconstruction of key strategic infrastructure. As mandated by the Inter-Agency Committee, the Bureau of the Treasury established an office of public asset registry that is collecting information from these agencies to further refine their approach to disaster risk finance. A Technical Working Group (TWG) for Asset Management within the Development Budget Coordination Committee was also created in 2019 to recommend public asset management policies. The efficacy of piloting DRFI strategies in selected line agencies--as measured by RI B2--is rated **Substantial**.

(iii) The DPL enabled a Philippine households insurance pool in collaboration with the Insurance Commission and the private sector. In September 2018, a Philippine Catastrophe Insurance Pool designed by the Philippine Insurers and Reinsurers Association was submitted for consideration and implementation by the DOF. The Pool, which was intended for homeowners and small and mid-sized enterprises (SMEs), supports the new Philippine Building Act (discussed under Result Indicator A2 above) by providing incentives for compliance, such as differentiation of premium rates. Following DOF's review, and with technical support from the World Bank, the Insurance Commission (the national regulatory body) has endorsed the design, which is being implemented by the financial industry. Catastrophe insurance penetration in the Philippines is low; Munich Re reports that only 0.5–0.6 percent of households are covered by catastrophe insurance (as of 2018). The work under the Cat DDO secured the initial DOF commitment to work on this agenda. This was formalized in an MOU between the Insurance Commission and the Insurance Industry Association in early 2020. The implementation is now supported under a Proposed Financial Sector DPL. The efficacy of developing, endorsing and implementing a household insurance pool--as measured by RI B3--is rated **Substantial**.

(iv) The DPL helped GOP prepare and adopt an emergency program to support incomes following disasters. The DSWD developed options for setting up a program that builds on existing safety net programs and provides emergency income support following disasters. The underlying analytical work was financed by the World Bank's TA program, which helped delineate the technical and operational guidelines that would establish mechanisms to achieve adequate scale. The analysis was incorporated GOPs post-disaster experiences in delivering cash transfers. Moreover, the TA gave emphasis on the use of gender-disaggregated data for providing income support and monitoring beneficiaries. A tangible result was the development of a Framework for Emergency Cash Transfer Programs during Disasters. In September 2018, the DSWD mandated the adoption of the Framework through an Administrative Order. In 2019, DSWD issued Memorandum Circular No. 17 outlining guidelines for the implementation of the Emergency Cash Transfer (ECT) program (post-disaster income support program as stated in the RI B4). In 2020, the National Disaster Risk Reduction and Management Council (NDRRMC) issued Memorandum Circular No. 03 authorizing DSWD to implement the ECT as one of its programs for disaster response. As of November 2020, DSWD is developing the ECT Manual of Operations to guide the program's implementation. The subsequent approval of the Manual of Operations and program implementation in disaster-affected areas under state of calamity is a results indicator under the ongoing Third Disaster Risk Management Development Policy Loan (P171440). As of now, DSWD is in the process of finalizing the ECT Manual of Operations. Implementation will commence in 3-6 months, upon final approval from DSWD. The efficacy of developing and adopting an emergency income-support program after disasters--as measured by RI B4--is rated **High**.



(v) The DPL updated the reporting templates for insurance databases, which the Insurance Commission adopted. In December 2017, the Insurance Commission adopted the updated catastrophe risk insurance database template through the issuance of Insurance Commission Circular Letter No. 2017-56 on Catastrophe/Property Insurance Reports. This requires all non-life insurance companies to submit their respective annual reports using updated database reporting templates. The Insurance Commission has finalized the associated manuals that provide insurance companies with guidance on how to comply. The Insurance Commission uses the information on the updated templates to maintain a well-regulated and sustainable insurance market. As of 2020, the insurance Commission reports that 75 percent of insurance companies are complying with the new reporting templates. The efficacy of updating the reporting templates for insurance databases--as measured by FI B5--is rated **Substantial**.

Given the critical role played by the Bank-supported programmatic TA approved in August 2014 (see Section 2(a) above), it is worth noting the assessment of the ICR (paragraph 59) regarding the TA's effectiveness: "The World Bank-financed TA program was instrumental in supporting the Government's reform efforts by bringing in global expertise and knowledge on the DRM agenda. The TA program was multidisciplinary and cutting edge in its approach. It directly informed (a) revisions to the NBCP to incorporate provisions for disaster risk reduction and CCA under the proposed PBA, (b) development of PCIPs using the eVSA tool, and (c) development of a joint catastrophe risk insurance program for LGUs."

Rating

Satisfactory

Overall Achievement of Objectives (Efficacy)

Rationale

The Second DPL satisfactorily achieved its objective of enhancing GOP's technical and financial capacity to (i) integrate risk reduction into investment planning and regulations, and (ii) implement a risk financing strategy. Targets that were either achieved or exceeded, compared to baselines. The Second DPL's key results include the following:

- (i) the DPL's CAT DDO instrument enabled GOP to quickly access liquidity and rapidly implement disaster recovery efforts right after Tropical Cyclone Mangkhut occurred;
- (ii) the DPL advanced and consolidated GOP's initiatives in risk reduction and risk financing, building on the sound policy framework established under the First DRM DPL with a CAT DDO; and
- (iii) the DPL helped diversify GOP's financial capacity to address broader fiscal risks caused by natural disasters.



Overall Efficacy Rating

Satisfactory

6. Outcome

Rationale

The Second DRM DPL's design relevance is **Satisfactory**. The Prior Actions are highly relevant to strengthening the Government and Bank strategies for disaster risk management, for which the Bank has provided long-term support, including a First DRM DPL with a CAT DDO. The relevance of the results indicators to measuring PDO achievement is also Satisfactory: the indicators consisted of actions that included adoption, implementation and mainstreaming of policies and instruments that were causally linked to supporting the achievement of the PDO, although they were quite upstream and in most cases captured only a single step of implementation..

The Second DRM DPL's efficacy is rated **Satisfactory**, based on significant new improvements in disaster risk management--specifically the demonstrably strengthened institutional, regulatory and financial capacity of the Government and other beneficiary stakeholders. The Second DPL program achieved or exceeded its 10 targeted results. The operation deepened the Bank-country policy dialogue on DRM, leading to significant progress in key policy areas, namely, the strengthening of risk reduction in investment planning and regulations, the mainstreaming of a systemic risk management approach at sectoral and territorial levels, and the enhancement of GOP's financial capacity to manage disaster risk. By providing a timely source of liquidity, the CAT DDO instrument also helped the country recover from the disaster caused by Tropical Cyclone Mangkhut.

On the foregoing basis, the Second DRM DPL's overall outcomes is rated **Satisfactory**.

a. Rating

Satisfactory

7. Risk to Development Outcome

In general, and in part because of the nature of the instrument, what could be observed as the achievements of this Second DRM DPL (and many DPLs in general) are more characteristic of upstream results, while leaving some gaps in terms of measuring downstream outcomes. It remains to be seen whether the program's policy changes will be fully implemented or sustained, especially in terms of providing adequate budgetary allocations and increased investment in disaster risk reduction, higher rates of insurance penetration, better management of financial risks, and so forth.

The sustainability of the Program's results faces fiscal and institutional capacity risks.

Fiscal risks. As one of the world's most disaster-prone countries, the Philippines incurs significant losses to public and private assets when natural disasters occur. Thus, while the risk seems modest to negligible, it is important to monitor whether GOP is willing to continue and expand, as needed, the funding insurance



premium payments or issuing catastrophe bonds, as well as investing in disaster risk reduction. The signals based on more recent and planned operations are that GOP remains committed and willing to finance DRR and DRM.

Institutional capacity risks. Efforts to increase technical capacity at the LGU levels are still required in order to effectively articulate and implement strategies for disaster resilience and financial protection. At the national level, it is important to ensure that GOP will continue to strengthen the technical and institutional capacity of government agencies in the areas of risk-informed cross-sectoral planning and risk reduction. This risk of neglecting these areas is modest to negligible, given the adoption of a national financial protection strategy, and DRM sector strategies and policies that have been more strongly integrated in Philippine laws and development plans; moreover, political representatives and technical staff in public administration have become more stable, thus ensuring continuity in institutional capacity. Thus, while weaknesses remain at the local level, the Program's outcomes have a significant likelihood of being sustained.

8. Assessment of Bank Performance

a. Bank Performance – Design

Rationale

At entry, the analytical groundwork for the Second DRM DPL was rigorous and relevant to both the Bank and country strategies. The macroeconomic policy framework was adequately appraised, and the DPL's policy areas were well defined, as required for DPLs. Moreover, a comprehensive TA program approved in August 2014 helped in the design of the Second DPL's risk reduction and risk financing aspects, as discussed in Section 2(a) above. The approaches developed under the TA informed the design of the Second DRM DPL's pillars and prior actions; moreover, the TA's findings and recommendations' implementation, were integrated into GOP's policies and regulatory framework in three areas: (i) planning and public investment programming; (ii) the revision of the National Building Code of the Philippines (NBCP); and (iii) the implementation of GOP's strategy for disaster risk financing and insurance (DRFI).

The Bank team prepared the DPL in close coordination with GOP to ensure its close linkage with the priorities of the Philippine Disaster Risk Reduction and Management (DRRM) Act of 2010. The Bank team also ensured the alignment of the DPL's Policy Framework with the National DRRM Plan, and focused on the following priority outcomes in its policy dialogue with GOP: (i) DRRM and Climate Change Adaptation (CCA) mainstreamed and integrated in national, sectoral, regional, and local development policies, plans and budgets; (ii) increased disaster resilience of infrastructure systems; and (iii) access to effective and applicable DRFI. Through the Philippine Development Forum, the Bank team also coordinated with the



Asian Development Bank and the Japanese International Cooperation Agency (JICA), given their sizeable DRM support in the Philippines.

Risks were rated appropriately as low (e.g., technical design) or moderate (e.g., capacity for DRFI), given the previous knowledge gained from the Bank's long-standing support for DRM. These risks were addressed under the Bank-supported TA program. Stakeholder commitment and participation was strong and sustained.

Rating

Satisfactory

b. Bank Performance – Implementation

Rationale

The Bank supported the Department of Finance (DOF) and its Technical Working Group (TWG) by helping to catalyze the policy and implementation dialogue among the key oversight and line agencies—to facilitate consultation, coordination with development partners, monitoring of the program implementation, and operationalization of the DRFI strategy. According to the ICR (paragraph 57), the TWG sessions “were a highly successful strategy in bringing counterparts together for monitoring progress of the DRM program and ensuring consistency in the quality and level of detail provided across the participating institutions.”

The Bank team regularly provided implementation support at two missions per year comprising a multidisciplinary team of DRM, financial sector, and DRFI specialists. Given the Bank's significant in-country presence and strong relationships with key agencies, the Bank team was able to engage in high-level policy dialogue, and coordinate with GOP and development partners, while closely monitoring the progress of implementing reforms. The ICR (paragraph 58) indicates that: “The information presented and filed in Aide Memoires and Implementation Status and Results Reports (ISRs) was comprehensive and provided a frank evaluation of progress and issues.” The Bank's team and relevant systems were ready to process the disbursement request for CAT DDO funds, thus enabling efficient transfers of funds and providing immediate liquidity to GOP after the Tropical Cyclone Manghkut disaster.

Rating

Satisfactory

c. Overall Bank Performance

Rationale



The Bank's quality at entry and its quality of supervision are both Satisfactory, leading to an overall Bank Performance rating of Satisfactory.

Overall Bank Performance Rating

Satisfactory

9. Other Impacts

a. Social and Poverty

The ICR (paragraph 49) indicates that "The operation supported the Philippines' most vulnerable populations by strengthening the country's DRM framework and providing quick access to liquidity in the event of a natural disaster. This led to faster emergency response and minimized disruptions to service delivery to the poor. Through the Cat DDO instrument, the program provided immediate liquidity so that there was no need to disrupt social programs in the aftermath of Tropical Cyclone Mangkhut."

b. Environmental

The ICR (paragraph 50) indicates that: "The Government, through its probabilistic Catastrophe Risk Model (developed through a World Bank TA linked to the first DPL with a Cat DDO), developed a strong evidence base for planning interventions to build the country's resilience to climate and weather-related events as well as earthquakes. This evidence was utilized by the DOF in the implementation of the DRFI strategy for national government agencies as well as the LGU Joint Catastrophe Risk Insurance Pool under this Second DRM DPL with a CAT-DDO." While noted here, this is really not a discussion of an environmental effect; rather, it refers to resilience from the environment.

c. Gender

The DPO recognizes that "The poor, especially women and girls, are disproportionately affected by the cost of disasters, which destroy their already limited assets and livelihoods." (ICR, paragraph 49). However, gender aspects were not an area of focus in the DPO.

d. Other

None



10. Quality of ICR

Rationale

The ICR is clearly written and well prepared overall. The ICR is results-oriented and focused strongly on presenting tangible evidence to support the the ratings on relevance and efficacy. The ICR (notably its Table 1) effectively traces causal chain from the results indicators and Prior Actions to the achievement of the PDO and its two Pillars. It is also well grounded on the macroeconomic context as well as the historical backdrop of the Bank's long-standing support for DRM in the Philippines. The lessons (on the need for a strong country champion, strong analytical foundations, and clear rules of the game) are well selected and articulated, and have broad relevance and applicability to other Bank DPLs intended to support DRM that have a CAT DDO option.

a. Rating

Substantial

11. Ratings

Ratings	ICR	IEG	Reason for Disagreement/Comments
Outcome	Satisfactory	Satisfactory	
Bank Performance	Satisfactory	Satisfactory	
Relevance of Results Indicators	---	Satisfactory	
Quality of ICR	---	Substantial	

12. Lessons

The ICR derived the following lessons from the DPL program's experience, with some adaptation for brevity:

A strong institutional champion is key to advancing complex reform programs. As the implementing agency, the Department of Finance played a central role in ensuring inter-agency coordination of DRM-related policy actions while advancing new thinking on financial protection. It also convened the key DRM agencies to sustain buy-in and maximize responsive to GOP's priorities.

Establishing clear rules of the game at preparation supports the effectiveness of the Cat DDO instrument. A clear understanding of the procedures and responsibilities of GOP and the World Bank to trigger the CAT DDO mechanism and process disbursement allowed the transfer of funds in only two days after the



country was hit by Tropical Cyclone Mangkhut in September 2018. The steps include: (a) the declaration of a state of emergency, (b) the decision-making process to activate the CAT DDO, (c) the necessary documentation to request Bank disbursement, and (d) the process to incorporate the resources in the national budget. The Bank team's close involvement and sustained dialogue on the DPL's financial aspects is crucial at all stages of the program.

An effective reform program needs to be supported by a solid analytical foundation. While the CAT DDO can provide timely liquidity following a disaster, it is also important to provide support throughout the program to enhance the country's capacity to implement its DRM program. In this case, the programmatic TA program was an effective supervision strategy to support and track policy reforms and also to compensate for the drawdown of funds in September 2018, thereby continuing the strengthening of DRM institutional systems and sectoral agency capacity until the closing of the program.

IEG also adds the following lesson:

A CAT DDO can be an effective tool for supporting policy reform when it selects Prior Actions that are highly relevant and critical, and uses results indicators wisely to provide impetus for sustained reform progress. As indicated earlier, the Second DRM DPO's Prior Actions are highly relevant to achieving the PDO of strengthening the Government and Bank strategies for disaster risk management. Moreover, the results indicators are also substantially to highly relevant, as they consisted of actions that included adoption, implementation and mainstreaming of policies and instruments that were causally linked to supporting the achievement of the PDO.

13. Project Performance Assessment Report (PPAR) Recommended?

No