

Republic of the Philippines

FY2017 Ex-Post Evaluation of Japanese ODA Loan

“Post Disaster Stand-by Loan”<sup>1</sup>

External Evaluator: Keishi Miyazaki, OPMAC Corporation

## 0. Summary

The objectives of this program loan project are to support quick post disaster restoration, and to strengthen the country’s capacity on disaster risk reduction and management by: (i) responding to temporary financial needs when large-scale disasters occur to support immediate recovery processes, and (ii) assisting the Government of the Philippines in the implementation of the policy actions, which will contribute to the said capacity building in collaboration with JICA's technical assistance, ongoing or being planned, thereby contributing to the sustainable economic growth of the country. This program loan has been highly relevant to the Philippines’ development plan and development needs, as well as Japan’s ODA policy. Also, the project plan and approach are appropriate. Therefore, its relevance is high. For effectiveness, this program loan played a positive role in the financial management of the Philippines, and all expected outcomes in the Policy Matrix were realized. As for impacts, this program loan contributed to stabilizing the financial base of the country during the post-disaster period as well as reducing human damages and loss due to the natural disaster in Mindanao. This program loan has achieved its objectives, therefore, effectiveness and impacts of this program loan are high. No major problems have been observed in the institutional aspect of the operation and maintenance system. Therefore, sustainability of the project effects is high.

## 1. Project Description



Project Location



Feedback-off workshop with the Philippine counterparts

<sup>1</sup> This ex-post evaluation is a joint evaluation between the Department of Finance, the Government of the Philippines and the JICA.

## 1.1 Background

The Philippines is regarded as one of the most disaster-prone countries in Southeast Asia. Natural disasters hit the country every year, causing enormous economic and human losses as well as frequent damages on social infrastructure. Such damages have affected the economic activities of the country in the long-term. For instance, the Central and Northern Luzon were struck by Tropical Storm Ondoy (international name: Ketsana) and Typhoon Pepeng (international name: Parma) in September 2009, while the Mindanao Area was hit by Tropical Storm Sendong (international name: Washi) in December 2011, and Typhoon Pablo (international name: Bopha) in December 2012. Most recently, November 2013 witnessed Typhoon Yolanda (international name: Haiyan) which directly hit the Visayas islands including Leyte, Samar, Cebu, Bohol, and Negros, and certain parts of Luzon (e.g. Northern Palawan) and Mindanao, causing catastrophic damages with more than 6,000 deaths. The Government of the Philippines has declared State of National Calamity after the said disasters hit the country. Hence, there remains serious concern over future disasters due to possible occurrences of stronger storms and sea level rise in coastal areas caused by climate change. Given this scenario, responding to disaster risks has been an urgent priority of the Government of the Philippines.

In order to act on these circumstances, the Government of the Philippines has intended to improve its capacity on disaster risk reduction and management, through setting of policies which include: (1) formulation of the National Disaster Risk Reduction and Management Plan, as well as capacity enhancement of Local Government Units; (2) introduction of integrated water resources management; and (3) information management on disaster risk reduction and management.

## 1.2 Project Outline

The objectives of this program loan are to support quick post disaster restoration and to strengthen the country's capacity on disaster risk reduction and management by: (i) responding to temporary financial needs when large-scale disasters occur to support immediate recovery processes, and (ii) assisting the Government of the Philippines on the implementation of the policy actions which will contribute to the said capacity building in collaboration with JICA's technical assistance which are ongoing or being planned, thereby contributing to the sustainable economic growth of the country.

### Concept of Post Disaster Stand-by Loan

#### (1) Prerequisite of the Loan

- The macro-economic management is appropriately made, and no major issues are observed in the public financial management in the recipient country.

- The establishment and implementation of disaster risk management programs in the recipient country is compulsory (a donor and a recipient need to agree on the Policy Matrix describing action programs) (see Appendix: Policy Matrix of Post-Disaster Standby Loan).
- The status of the said prerequisite is to be monitored periodically (at least once a year) based on the Policy Matrix.

(2) Disbursement schedule

- The loan can be drawn down up to four (4) times within the agreed loan amount during the period between March 2014 and March 2017.

(3) Timing of disbursement (Trigger of disbursement)

- The timing of disbursement is determined by a declaration of “State of National Calamity<sup>2</sup>” by the Government of Philippines as a trigger.
- The Policy Matrix is not a condition to the loan disbursement.

(4) Utilization of the Loan

- The disbursed loan money shall be incorporated into the general budget of the Philippine government and be utilized as a counterpart fund for import settlement. As a result, conceptually, the same amount of peso to be used for import settlement should be used for the purpose of disaster restoration.

Loan Approved Amount/ Disbursed Amount	50,000 million yen / 50,000 million yen
Exchange of Notes Date/ Loan Agreement Signing Date	December 13, 2013 / March 19, 2014
Terms and Conditions	Interest Rate 0.01 % Repayment Period 40 years (Grace Period 10 years) Conditions for Procurement General Untied
Borrower / Executing Agency(ies)	The Government of the Republic of the Philippines / Department of Finance
Project Completion	February 27, 2015
Main Contractor(s)	Not applicable
Main Consultant(s)	Not applicable
Related Studies (Feasibility Studies, etc.)	Not applicable

<sup>2</sup> The Disaster Risk Reduction and Management Act defines the state of national calamity as “a condition involving mass causality and/or major damages to property, disruption of means of livelihoods, roads and normal way of life of people in the affected areas as a result of the occurrence of natural or human-induced hazards”.

Related Projects or Programs	<p><u>JICA</u></p> <ul style="list-style-type: none"> <li>• Disaster Risk Reduction and Management (DRRM) Capacity Enhancement Project (2012-2015)</li> <li>• Dispatch of JICA expert on Disaster Risk Management (2012-2014)</li> <li>• Dispatch of JICA expert on Disaster Risk Reduction and Management (2015 up to present)</li> <li>• Dispatch of JICA expert on Flood Control (2014 up to present)</li> <li>• Project for Strengthening Capacity of Integrated Data Management of Flood Forecasting and Warning (2016-2019)</li> </ul> <p><u>World Bank</u></p> <ul style="list-style-type: none"> <li>• Disaster Risk Management Development Policy Loan with a Catastrophe Deferred Drawdown Option (CAT-DDO) (2011-2014)</li> </ul>
------------------------------	--

## 2. Outline of the Evaluation Study

### 2.1 External Evaluator

Keishi Miyazaki, OPMAC Corporation

### 2.2 Duration of Evaluation Study

This ex-post evaluation study was conducted with the following schedule.

Duration of the Study: October 2017 – January 2019

Duration of the Field Study: January 4-30, April 22-28, August 5-9, 2018

### 2.3 Constraints during the Evaluation Study

#### (1) Evaluation criteria

This ex-post evaluation does not evaluate the efficiency of this program loan, as it is categorized as a policy-based lending, and it is difficult to compare the inputs and outputs quantitatively. Regarding the sustainability, the analysis is made only on the institutional aspect of operation and maintenance of this program loan as it is also difficult to identify the technical and financial aspects of operation and maintenance. For the above reasons, the sub-rating of each evaluation criterion is given to the relevance, effectiveness, and sustainability, and the overall rating is not made.

#### (2) Re-definition of project impact

At the appraisal of this program loan, the expected impact was mentioned as “contribution to the sustainable growth of the country”. It can be understood that the Philippine government can save the same amount of local currency equivalent to the disbursed ODA loan amount by allocating the loan amount to the foreign reserves. Thus, it can be considered that this program loan was aimed at minimizing negative effects on fragile Philippine financial base caused by

large-scale public expenditure when large-scale disasters occur, and avoiding further negative effects on the Philippine economy. In addition, it is assumed that this program loan will have a positive impact on the reduction of human damage and loss due to the natural disasters, since this program loan intended to strengthen the DRRM capacity of the Philippines.

Based on the above considerations, it is reasonable that the expected project impacts can be interpreted as “Stabilization of the financial base of the Philippines”, “Avoiding negative effects on the economic and industrial activities of the Philippines” and “Reduction of human damage and loss due to the natural disasters”. This ex-post evaluation examines the project impact based on the above understanding.

### **3. Results of the Evaluation**

#### 3.1 Relevance (Rating: ③<sup>3</sup>)

##### 3.1.1 Consistency with the Development Plan of the Philippines

###### (1) Consistency with the Philippines Development Plan (PDP)

At the time of appraisal, PDP 2011-2016 adopted a framework of inclusive growth as an overall development vision, and the Plan set a strategic development policy framework focusing on: (i) improving the competitiveness of industries for employment creation, (ii) accelerating infrastructure development, (iii) strengthening the financial sector and capital mobilization, (iv) improving access to quality social services (social development), (v) enhancing peace and security, (vi) ensuring sustainable and climate-resilient environment and natural resources, and (vii) improving transparency and accountability in governance. Regarding (vi) sustainable and climate-resilient environment and natural resources, the improvement of access to innovative national and international financing schemes for Climate Change Adoption/Mitigation (CCA/M) and Disaster Risk Reduction and Management (DRRM) was set as one of the key strategies to achieve (vi).

At the time of ex-post evaluation, PDP 2017-2022 that is in effect, aims to lay a stronger foundation for inclusive growth, a high-trust society, and a globally-competitive economy toward realizing the vision by 2040, and sets three pillars: (i) enhancing the social fabric (Malasakit), (ii) reducing inequality (Pagbabago), and (iii) increasing growth potential (Patuloy na Pag-unlad). Under the three pillars, the Plan sets 15 cross-cutting strategies including (a) ensuring safety and building resilience, (b) accelerating strategic infrastructure development, and (c) ensuring ecological integrity, clean and healthy environment. Regarding (c) ensuring ecological integrity, “maximize access to Climate Change and DRRM financing and risk transfer mechanisms” is one of the specific strategies.

---

<sup>3</sup> ③: High, ②: Fair, ①: Low

The necessity of access to Climate Change and DRRM financial scheme/mechanism was commonly mentioned both in PDP 2011-2016 and PDP 2017-2022. Therefore, the project objectives were consistent with the Philippines' national development policy both at ex-ante and ex-post evaluation.

## (2) Consistency with the Disaster Risk Reduction and Management Policy

At the time of appraisal, the Philippine government enacted the Disaster Risk Reduction and Management Act (Republic Act No. 10121) in May 2010. Based on the DRRM Act, the National Disaster Risk Reduction and Management Council (NDRRMC) was established as a supreme decision-making body for implementation of DRRM in the country. After that, the National Disaster Risk Reduction and Management Framework (NDRRMF) was formulated in June 2011 followed by the formulation of the National Risk Reduction and Management Plan (NDRRMP) (2011-2028) in February 2012. The NDRRMP was a comprehensive DRRM plan focusing not only on the conventional post-disaster recovery, but also on prevention and reduction of disasters<sup>4</sup>. In order to strengthen the capacity of the national government and the local government units (LGUs) together with partner stakeholders, the NDRRMP outlined the activities with which to build the disaster resilience of communities and institutionalize arrangements and measures for reducing disaster risks, including projected climate risks and enhancing disaster preparedness and response capabilities at all levels.

At the time of ex-post evaluation, the NDRRMP is being reviewed in order to align with the global development frameworks such as the Sendai Framework for Disaster Risk Reduction, the Sustainable Development Goals (SDGs), the World Humanitarian Summit (WHS), and an international agreement such as Paris Agreement.

As the NDRRMP was established in line with NDRRMF, the NDRRMP and NDRRMF share same objectives and policy directions which highlight not only the post-disaster recovery but also prevention and reduction of disasters. Therefore, the project objectives were consistent with the DRRM policies both at ex-ante and ex-post evaluation.

### 3.1.2 Consistency with the Development Needs of the Philippines

#### (1) Consistency with the Financial Scheme of the Philippines for Response to Natural Disaster

At the time of appraisal, the National Calamity Fund (NCF)<sup>5</sup> was established to respond to the capital needs for the damage recovery of natural disasters that occurred annually. When the scale

---

<sup>4</sup> The NDRRMP serves as "the principal guide to DRRM efforts to the country and fulfills the requirement of RA No. 10121 of 2010, which provides the legal basis for policies, plans and programs to deal with disasters. The NDRRMP covers four thematic areas, namely, (i) disaster prevention and mitigation; (ii) disaster preparedness; (iii) disaster response; and (iv) disaster rehabilitation and recovery, which correspond to the structure of the NDRRMC.

<sup>5</sup> The National Calamity Fund (NCF) and the Local Calamity Fund (LCF) were renamed to the National DRRM Fund (NDRRMF) and Local DRRM Fund (LDRRMF) respectively after that. The LDRRMF expanded its utilization for four thematic areas of DRRM such as (i) disaster prevention and mitigation, (ii) disaster preparedness, (iii) disaster response and (iv) disaster rehabilitation and recovery.

of damage is unusually big, a supplementary budget is required for damage recovery in addition to the fund allocation by the NCF. The role of Post Disaster Stand-by Loan (PDSL) was to provide the necessary liquidity funds for the damage recovery of natural disasters that exceeded the normal scale of disasters as a general budget support. The funds were to be disbursed, as triggered by the Declaration of State of National Calamity.

In 2015, the Department of Finance (DOF) formulated a National Disaster Risk Financial Instrument (DRFI) Strategy<sup>6</sup> and identified priority areas in three levels: national, local and individual (Figure 1). In line with the DRFI Strategy, the Catastrophe Risk Model for the Philippines<sup>7</sup> was completed.

	Strategic Priorities	Key Steps and Initiatives	Related Initiatives
National Level	Improve the financing of post-disaster emergency response, recovery, and reconstruction needs	<ul style="list-style-type: none"> <li>Quantifying and clarifying the contingent liabilities faced by GPH</li> <li>Acquiring contingent credit lines to protect against moderate disasters</li> <li>Using risk transfer to access international private reinsurance and capital markets</li> </ul>	<ul style="list-style-type: none"> <li>Philippines Catastrophe Risk Model (2014) Risk Analytics</li> <li>CAT-DDO1 (2011-2014) (World Bank)</li> <li>CAT-DDO2 (2016-2018) (World Bank)</li> <li>PDSL (2014-2016) (JICA)</li> </ul>
Local Level	Provide local governments with funds for post disaster recovery and reconstruction efforts	<ul style="list-style-type: none"> <li>Developing a catastrophe risk insurance facility for local governments</li> <li>Pooling local governments' calamity funds (LDRRM funds)</li> <li>Improving insurance of public assets</li> </ul>	<ul style="list-style-type: none"> <li>Philippine City Disaster Insurance Pool (with Asian Development Bank)</li> <li>Local Disaster Resilience Insurance Fund (with World Bank)</li> </ul>
Individual Level	Empower poor and vulnerable households and owners of small and medium-sized enterprises to quickly restore their livelihoods after a disaster	<ul style="list-style-type: none"> <li>Broadening private property catastrophe risk insurance and micro-insurance coverage</li> <li>Linking disaster risk financing and social protection</li> </ul>	<ul style="list-style-type: none"> <li>Potential Residential Insurance Pool (World Bank, IC and PIRA)</li> </ul>

Source: DOF document

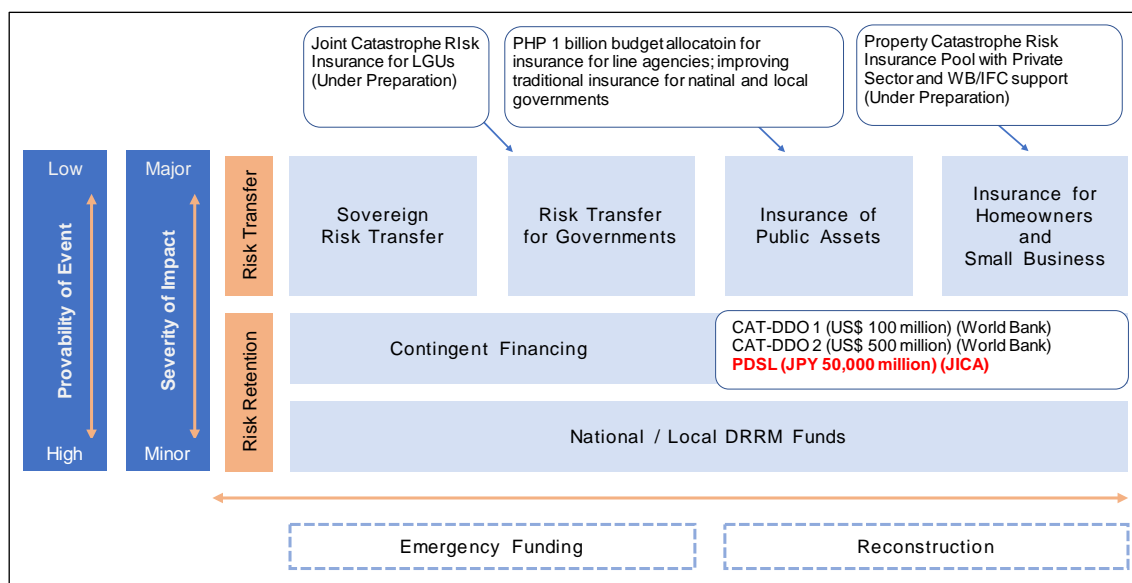
Figure 1: National Disaster Risk Financial Instrument Strategy

At the time of ex-post evaluation, DOF has been working on development of risk transfer financial instruments such as joint catastrophe risk insurance program for LGUs, property catastrophe risk insurance pool for homeowners with collaboration with the World Bank. Also, DOF has been working with the Department of Social Welfare and Development (DSWD) to

<sup>6</sup> The overall objectives of the DRFI Strategy are: (i) to ensure overall financial resilience in times of disaster at the national, local and individual levels, (ii) at the national level, maintain sound fiscal health to meet rehabilitation and reconstruction requirements, (iii) at the local level, develop and improve sustainable financing instruments or mechanisms to provide local governments with necessary funds for post-disaster requirements, and (iv) at the individual level, 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.

<sup>7</sup> The outputs of the Catastrophe Risk Model were: (i) historical database for natural disasters, (ii) geo-referenced catalogue of all national government assets, (iii) disaster risk model which will generate economic loss values for potential disaster events, and (iv) assistance in developing a risk transfer instrument.

create a system of post-disaster cash transfers through the Pantawid Pamilya CCT system (a name coined as Philippines' conditional cash transfer program). In 2017, DOF launched a parametric catastrophe risk-insurance program for government properties with the collaboration with Government Service Insurance System (GSIS), the World Bank and the Department for International Development (DFID), UK. A picture of the Disaster Risk Layering in the Philippines is shown in Figure 2 below.



Source: (i) Deanna T. Villacin, "A Review of Philippines Government Disaster Finance for Recovery and Reconstruction – Discussion Paper Series No. 2017-21", 2017, PIDS, and (ii) World Bank document.

Figure 2: Disaster Risk Layering in the Philippines

As explained above, DOF has been developing a new mechanism of DRFI. However, a stand-by credit such as PDSL and CAT-DDO is necessary as a contingent credit line that provides immediate liquidity after a large-scale natural disaster because (i) National DRRM Fund (NDRRMF) and Local DRRM Fund (LDRRMF)<sup>8</sup> appropriations are limited and usually used for emergency response, and (ii) preparation of supplemental budget for reconstruction or access to other sources of DRFI takes time. Therefore, the necessity of PDSL is high both at the time of appraisal and ex-post evaluation.

<Reference Information>

(2) Other donor's assistance for DRRM in the Philippines

#### World Bank

The World Bank implemented the Disaster Risk Management Development Policy Loan with a Catastrophe Deferred Drawdown Option (CAT-DDO) (2011-2014) (loan amount: USD 100

<sup>8</sup> Previously they were called the National Calamity Fund and the Local Calamity Fund respectively.



million) in order to enhance the capacity of the Philippine government to manage the impacts of natural disasters. CAT-DDO not only provided the funds for damage recovery of disasters triggered by the Declaration of State of National Calamity, but also facilitated the implementation of policy actions regarding (i) strengthening the institutional capacity for disaster risk management efforts, (ii) mainstreaming disaster risk reduction into development planning and (iii) improving the management of government's fiscal exposure to natural hazard impacts.

As a successor project of CAT-DDO, the World Bank has been implementing CAT-DDO 2 (2015-2018) (loan amount: USD 500 million) aiming at the two pillars: (a) improving risk-informed sectoral planning and implementation of resilience-enhancing programs, and (b) supporting the implementation of the DRFI strategy of the Philippines to strengthen financial resilience at the national, local and individual levels. The above two pillars are linked to the policy areas prioritized in the 2010 Philippine DRRM Act and the National DRRM Plan. According to World Bank Philippines office, there is no drawn down yet at the time of ex-post evaluation and the discussion is being made for the possibility of extension of another two years.

#### French Development Agency (AFD)<sup>9</sup>

AFD implemented Disaster Risk Reduction and Management Facility (2016) (loan amount: EUR 50 million) aiming at three objectives: (i) to consolidate the strategic and regulatory framework of DRRM to support its implementation work at the local level; (ii) to improve the consideration of DRRM in the urban planning; and (iii) to support institutionalization and strengthen local capacities in DRRM. Similar to PDSL and CAT-DDO, this loan set a policy matrix, and the trigger was the Declaration of State of Calamity.

#### Merit/Advantage of PDSL

According to DOF, the merit/advantage of PDSL in comparison with CAT-DDO is that the lending terms and conditions of PDSL<sup>10</sup> are more flexible and favorable to DOF in terms of (i) cost burden of the Philippines government (interest rate and repayment period), and (ii) number of tranche operation that enabled flexible resource mobilization (Table 1). DOF said that matching of available funds when a specific currency was needed was the motivating factor for using tranche operation of PDSL.

---

<sup>9</sup> L'Agence Française de Développement.

<sup>10</sup> The Japanese government adopted the new lending terms and conditions for Stand-by Emergency Credit for Urgent Recovery (SECURE), which is a same scheme of PDSL, in October 2017, in which the front end fee was reduced to 0.2% of the commitment amount, but the rate of 0.1% would retroactively be applied instead of 0.2% in the event that all disbursement was completed within the original disbursement period. PDSL adopts 0.5% for the front end fee as the previous terms and conditions before 2017 amendment was applied.

Table 1: Comparison of lending terms and condition between PDSL and CAT-DDO

Item	CAT-DDO	PDSL
Interest	6 months LIBOR + 0.48%	0.01%
Commitment charge	Not applicable	Not applicable
Front end fee	0.5%	0.5%
Repayment period	25 years	40 years
Grace period	10 years	10 years
No. of tranche operation	Single (one time)	Maximum 4 times
Drawdown period	3 years (Stand-by period can be renewed up to 4 times, for a maximum period of 15 years)	
Trigger for Drawdown	Declaration of State of National Calamity	

Source: JICA and World Bank documents.

Note: LIBOR: London Interbank Offered Rate.

Also, PDSL complements CAT-DDO in terms of (i) provision of contingent finance between 2011-2016 in seamless manners, and (ii) action areas in each Policy Matrix. For example, CAT-DDO concentrated on the institutional and capacity building on DRRM in the regional level. Meanwhile, PDSL focused on utilization of water resource management, ICT and hard infrastructure as well as supporting DRMM capacity development.

There is a similarity between PDSL, CAT-DDO, and AFD loan, that is, they are the program loans geared towards providing budgetary support. However, AFD loan was a part of the regular annual budget program (i.e. inside the annual financing plan), while PDSL and CAT-DDO are contingency funds which are external to the annual financing plan. In this sense, PDSL and CAT-DDO are more flexible to DOF in utilizing the fund.

#### Possible improvements of PDSL for the similar type of future projects

Based on the discussion with DOF, the World Bank Philippines office as well as the study of the Inter-American Development Bank (IDB)<sup>11</sup>, the following issues were revealed in operation of a similar type of this program loan.

The first issue is how to promote an involvement of related agencies indicated in the Policy Matrix. In case of PDSL, it was not a critical issue since the related agencies were explained about their roles at the time of appraisal, and they involved in the monitoring of the Policy Matrix during the project period. However, it is generally observed that the difficulty of budget support loan is that only few agencies knew about its mechanism, other than the oversight agencies. In particular, when many agencies are involved in the action areas in the Policy Matrix, it is not easy for the oversight agency to manage the implementation of each action by its self. In order to successfully undertake the necessary actions agreed in the Policy Matrix by the related agencies as well as monitor the Policy Matrix effectively, it is important to promote the commitment of relevant agencies at the planning and implementation stages.

<sup>11</sup> Corporate Evaluation: Contingent Lending Instruments (2016), Office of Evaluation and Oversight, IDB.

The second issue is how to develop a trigger for a drawdown. In the case of CAT-DDO 2, drawdown has not been requested yet by the Philippine government since the signing of loan agreement in April 2017. According to the World Bank Philippines office, they have an impression that some political factors contribute to the resistance in the issuance of declaring state of natural calamity even when the Philippines experienced severe damages in Mindanao by Typhoon Vinta in December 2017. This is partly because there was no clear-cut parameter that determines the issuance<sup>12</sup>. Institutionally, the declaration is made by the Office of the President based on the recommendation by the National Disaster Risk Reduction and Management Council (NDRRMC). However, the final decision on the issuance of declaring state of natural calamity remains to be the President's prerogative to proceed with it. Therefore, in order to give the trigger flexibility, there is a necessity to develop an alternative or supplemental parameter for a trigger to respond to the disaster quickly. According to the DRRM law, the Local DRRM Council (LDRRMC) can also declare a state of calamity with their own authority. However, the alternative or supplemental parameter for a trigger should be carefully examined and acceptable to the borrowing countries, as a declaration of national calamity is a matter that relates to the sovereignty of the countries.

The third issue is how to improve the scheme more attractive to the borrowers. The IDB has two types of contingent loan to provide liquidity in case of a natural disaster: (i) the Contingent Credit Facility for Natural Disaster Emergencies (CCF), and (ii) the Contingent Credit Line for Natural Disasters (CCL). CCF is categorized as an investment loan, and its disbursements are determined by predefined parametric triggers based on the magnitude of the event and the affected population. CCF was already provided to seven countries<sup>13</sup> from 2009 to 2015, but no disbursements were made so far. Meanwhile, CCL structures the Policy Matrix and drawdown is made based on the country-specific trigger conditions defined at the time of loan agreement, but the trigger does not need to be parametric, and the borrowing country is not strictly required to declare an state of emergency. In comparison with CCF, CCL is a similar scheme to PDSL and CAT-DDO. However, since its establishment in 2009, the CCL has not been used. According to IDB's study, its high standby fee<sup>14</sup> is the main reason for the lack of demand. According to the IDB's study on contingent instruments in comparison with the similar scheme of IDB, IMF, World Bank and ADB, it states that "the insurance-type nature of contingent

---

<sup>12</sup> In order to issue the State of National Calamity, at least two out of the following five criteria must be fulfilled: (i) at least thirty percent (30%) of the population are affected and are in need of emergency assistance or those whose dwelling units have been destroyed; (ii) a great number of the means of livelihood such as bancas, fishing boats, vehicles and the like are destroyed; (iii) major roads and bridges are destroyed or impassable for at least week thus disrupting the flow of transport and commerce; (iv) widespread destruction of fishponds, crops, poultry and livestock, and other agricultural products; and (v) disruption of life-lines such as electricity, potable water system, transport system, communication system and other related systems which cannot be restored within one (1) week.

<sup>13</sup> Dominican Republic, Honduras, Ecuador, Panama, Costa Rica, Peru, and Nicaragua.

<sup>14</sup> The standby fee for CCL is determined based on the prevailing variable ordinary capital (OC) lending spread. It was 1.15% per year in 2016 (source: IDB 2016).

instruments implies that demand can be expected to be very sensitive to the premium compared to the countries' perceived risk and expected losses". The result of IDB's study implies that the lending terms and conditions are important factors to motivate the borrowers to use the loan.

### 3.1.3 Consistency with Japan's ODA Policy

The Japan's Country Assistance Policy for the Republic of the Philippines (April 2012) had three priority areas, which included, "Overcoming Vulnerability and Stabilizing bases for Human Life and Production Activity". Regarding this priority area, it was mentioned that assistance will be provided for the improvement of both infrastructure and capacity building initiatives to address issues related to natural disasters and environment. JICA Country Analysis Paper for the Philippines (March 2012) analyzed the priority issues of the country including disaster risk reduction and management as a response to vulnerability.

Therefore, the project objectives were consistent with the Japan's Country Assistance Policy and JICA Country Analysis Paper for the Philippines at ex-ante evaluation.

### 3.1.4 Appropriateness of the Project Plan and Approach

#### (1) Appropriateness of logics of the Policy Matrix

This program loan identified three action areas in the Policy Matrix: (i) the capacity strengthening of DRRM, (ii) the development of Integrated Water Resources Management (IWRM), and (iii) development of the Information Management on DRRM.

Regarding (i) the capacity strengthening of DRRM (the first action area), at the time of appraisal, the comprehensive policy framework for DRRM was in place at the national level after establishment of NDRRMF in 2011 and NDRRMP in 2012. However, the RDRRMP was not available at the regional level. Also, there was no standardized disaster response plan for related government organizations at the national level. Furthermore, in order to respond to the financial needs for recovery of disaster, the National Calamity Fund (NCF) for the national level disasters and the Local Calamity Fund (LCF) for the local level disasters were already established. The LCF was further upgraded to Local DRRM Fund (LDDMF) eligible to finance to the disaster prevention and reduction purposes. However, the understanding of effective utilization of LDDMF by LGUs was not sufficient. In relation to the capacity strengthening of DRRM, JICA was conducting two projects such as the Disaster Risk Reduction and Management (DRRM) Capacity Enhancement Project (2012-2015) (technical cooperation) and the dispatch of a JICA expert on Disaster Risk Management (2012-2014).

Under such circumstance, the Policy Matrix identified three expected actions linked to the capacity strengthening of DRRM: (a) majority of RDRRMP are developed, (b) NDRP is developed, and (c) a guideline on the use of local DRRM fund is issued. Then, it set "National/Local Governments have increased capacity to manage the impacts on natural

disasters” as expected outcomes by 2016.

Regarding (ii) the development of IWRM (the second action area), at the time of appraisal, the Philippine government had initiated to prepare a mechanism of IWRM and the Integrated River Basin Management (IRBM) at major river basins for efficient water resource management including flood control, and JICA dispatched a JICA expert on Flood Control (2014-2017).

Under such circumstance, the Policy Matrix identified two expected actions linked to the development of IWRM; these were: (a) a structure for IWRM is drafted, and (b) the IWRM/IRBM Plan in selected major river basis is developed. Then, it set “Land use and investments at major river basins integrated” as expected outcomes by 2016.

Regarding (iii) the development of Information Management on DRRM (the third action area), at the time of appraisal, the Philippine government had initiated the Project for Nationwide Operational Assessment of Hazards (NOAH) in 2012 in order to realize accurate and integrated disaster prevention and reduction in the high disaster risk areas. Together with the Project NOAH, the Flood Forecasting and Warning System (FFWS) was planned to be developed by the Philippine Atmospheric, Geophysical and Astronomical Service Administration (PAGASA) and related agencies. In relation to the development of Information Management on DRRM, JICA planned to implement the Project for Strengthening Capacity of Integrated Data Management of Flood Forecasting and Warning (technical cooperation) in 2015 <sup>15</sup>. Then, it set “Capacity of the flood forecasting and early warning is strengthened” as expected outcomes by 2016.

As explained above, three action areas of the Policy Matrix together with their expected outcomes and targets of key outputs indicators were set, based on the needs of each action area as well as in consideration with related JICA’s projects.

In addition, the action areas of PDSL and CAT-DDO in the Policy Matrix supplement each other. CAT-DDO supported three policy areas in their policy matrix: (i) strengthening the institutional capacity for disaster risk management (DRM) efforts; (ii) mainstreaming DRM into development planning; and (iii) better managing the government’s fiscal exposure to natural hazard impacts. The policy matrices of PDSL and CAT-DDO are common in strengthening DRRM capacity of the country. On the one hand, CAT-DDO concentrated on the institutional building in the regions and LGUs, and their capacity building in the preparation of DRRM related policies and guidelines. On the other hand, PDSL supported the central and regional government agencies to prepare DRRM related policies and plans such as RDDMP, IWRM, and development of hard infrastructures such as FFWS.

---

<sup>15</sup> The Project for Strengthening Capacity of Integrated Data Management of Flood Forecasting and Warning was actually implemented from 2016 to 2019.

## (2) Appropriateness of the project design

In the project design, the loan can be drawn down up to four times within the agreed loan amount during the period between March 2014 and March 2017. The timing of disbursement is determined by a declaration of “State of National Calamity” by the Philippine government as a trigger. The disbursed loan money shall be incorporated into the general budget of the Philippine government and be utilized as a counterpart fund for import settlement.

In reality, the loan was drawn out three times (March 31, 2014, August 29, 2014, February 27, 2015) with total amount of 50,000 million yen. The trigger of above three disbursements was State of National Calamity for Typhoon Yolanda declared in November 11, 2013. Formally, the necessity of each disbursement was confirmed by JICA Philippines office through checking the evidences of import settlements (invoice, bill of lading, etc.) submitted by DOF. Each disbursement was made within eight business days after receiving the request from DOF.

Meanwhile, the timing and amount of each drawdown were determined by DOF with the advice of the Bureau of Treasury (BTR) from the viewpoint of appropriate debt and cash flow management because the loan was used for repayment of ODA loan. Looking at the actual flow of disbursed money, it was not directly linked to either annual nor supplemental budget preparation process for the post-disaster restoration projects and programs. However, logically it can be interpreted that the same amount of peso funds to be used to repay yen-denominated debts was saved in the national treasury and it was indirectly used for disaster reconstruction of Typhoon Yolanda.

Based on the above understanding, the project design is judged as appropriate.

This program loan has been highly relevant to the Philippines’ development plan and development needs, as well as Japan’s ODA policy. Also, the project plan and approach are appropriate. Therefore, its relevance is high.

## 3.2 Effectiveness and Impacts<sup>16</sup> (Rating: ③)

### 3.2.1 Effectiveness

#### 3.2.1.1 Support quick post disaster restoration

##### (1) Role of PDSL in financial management of the Philippines

The timing and amount of each drawdown of PDSL were determined by DOF with the advice of BTR. BTR has introduced a single account system<sup>17</sup> which unifies structure of government bank accounts and aims to consolidate and optimize the use of government cash resources. The

---

<sup>16</sup> Sub-rating for Effectiveness is to be put with consideration of Impacts.

<sup>17</sup> The Treasury Single Account (TSA) refers to a bank account with a set of linked accounts through which the Government through the Treasury transacts all its receipts and disbursements. It is an account maintained by the Treasury with the Central Bank to account for (i) all receipts arising from collection of taxes, duties, fees and charges, grants and donations, proceeds of loans/borrowings, dividends, and other miscellaneous receipts intended for special purpose/s, and (ii) servicing of loans/borrowings, expenses, contributions and other related expenditures.

significance of the single account system in cash flow management and debt management compared with the previous system is that having as single account for all peso-based transactions eliminates the need to utilize peso revenues to pay off foreign denominated obligations unlike what was previously practiced.

According to BTR, the drawdown funds from PDSL were utilized to settle maturing loan repayment obligations by the Philippine government in yen. This allowed government not to resort to buying foreign currency for these obligations to avoid foreign exchange risks and disturbing cash flow status. As many of loan agreements of Japanese ODA loans were signed at the end and middle part of Japanese fiscal year (i.e. February-March and August-September), their repayment starts during these periods. This is why the requests for drawdown were made in February, March and August<sup>18</sup>. DOF recognized these as the notable contributions by PDSL. Due to a flexibility of PDSL, DOF can in a way decide on the timing and amount of each drawdown of PDSL and was able to perform more pro-active debt management without disturbing foreign currency market and avoiding foreign exchange risks and affecting cash flow status of the Philippine government.

## (2) Promptness of disbursement

PDSL adopted the reimbursement scheme as a disbursement procedure. According to JICA's Brochure on Reimbursement Procedure for Japanese ODA Loans (August 2012), it stipulates that "Reimbursement will be made, in principle, within 15 business days from the date of receipt of the request for reimbursement", and the same condition was mentioned in the loan agreement of PDSL. For PDSL, each disbursement was made within eight business days after receiving the request from the Philippine government. For CAT-DDO, it took only two days to disburse the loan after receiving the request (Table 2).

Table 2: Speed of Disbursement (PDSL and CAT-DDO)

Project	Request from the Philippine government	Disbursement by donors	No. of business days
PDSL			
1st tranche	March 26, 2014	March 31, 2014	4
2nd tranche	August 20, 2014	August 29, 2014	8
3rd tranche	February 23, 2015	February 27, 2015	5
CAT-DDO			
1st tranche	December 27, 2011	December 29, 2011	3

Source: JICA and World Bank

Note: The date of receiving the request from borrower is accounted as Day 1 of 15 business days.

<sup>18</sup> BTR confirmed that the process and utilization of drawdown funds from CAT-DDO (World Bank) were same as PDSL.

Meanwhile, according to BTR, usually it takes only two days if BTR needs to prepare the same amount of disbursed money in yen denomination by themselves through the foreign currency market. For smaller amounts, only one day is needed. However, BTR addresses that if ODA loan is available like PDSL, they prefer to use the loan instead of arranging the same amount of Japanese yen by themselves even if the request for drawdown takes a little bit more time.

From the perspective of the period from the occurrence of a disaster to the disbursement of funds, PDSL is much shorter than the conventional emergency disaster reconstruction support projects of JICA. For example, JICA implemented Emergency Natural Disaster Rehabilitation Project in Sri Lanka (2011-2014) to rehabilitate flood damaged roads and irrigation facilities in the Central, North Central and Eastern Provinces caused by severe rainstorms hit the country during December 2010 and February 2011. Due to an urgency of assistance, JICA accelerated the project formulation and preparation process, the loan agreement of this project<sup>19</sup> was signed in September 2011, and the first disbursement of loan was made soon after the loan agreement became effective. It took approximately 10 months from the occurrence of a disaster in December 2010 to the first disbursement of loan for this project, which was a very short period of time compared with the usual case in JICA. Meanwhile, in case of PDSL, once the loan agreement is signed and it becomes effective, the disbursement is to be made soon after the declaration of national calamity.

### (3) Timeliness of disbursement

Regarding the timeliness of each disbursement in terms of direct budget support to the post-recovery projects and programs for Typhoon Yolanda, it is difficult to verify this, as the drawdown funds from PDSL were utilized to settle maturing ODA loan repayment obligations.

Regarding the timeliness of each disbursement in terms of stabilizing the financial situation of the Philippine government after disasters, PDSL played a vital role. As the Philippine economy improved upward after 2012, it was important for the Philippine government to maintain this trend even during the recovery period of Typhoon Yolanda. In this sense, the timing of disbursement of PDSL met the demand of the Philippine government to stabilize the financial market of the country (see 3.2.2.1 Intended Impacts, (1) Stabilization of the financial base of the Philippines).

### (4) Role of PDSL in supporting quick post disaster restoration

The Philippines government allocated total 121,199 million pesos (approximately JPY

---

<sup>19</sup> In this project, the subprojects were scattered in the target provinces and there were many of them; each payment amount was small and it was very likely that many payments would be made. Therefore, the Special Account Procedure applying Statement of Expenditure (SOE) method was employed in order to simplify the process of voucher submission and verification, and to make loan disbursement smoothly.



292,000 million<sup>20</sup>) for the rehabilitation and reconstruction projects and programs for Typhoon Yolanda during four years from 2013 to 2016 (Table 3).

Table 3: Summary of Government Allotment Releases for Typhoon Yolanda (2013-2016) and Disbursed Amount of PDSL

Unit: Pesos

	FY2013	FY2014	FY2015	FY2016	TOTAL
<b>A. Departments</b>	<b>15,371,041,891</b>	<b>25,724,424,151</b>	<b>19,347,411,517</b>	<b>3,332,268,875</b>	<b>63,775,146,434</b>
Agrarian Reform	100,000	-	-	-	100,000
Agriculture	1,728,720,000	1,045,569,785	58,620,000	1,647,194,040	4,480,103,825
Budget and Management	1,200,000	1,551,493			2,751,493
Education	1,110,290,000	3,859,346,388	751,932,518		5,721,568,906
State Universities and Collages		826,527,595	1,099,250,055		1,925,777,650
Energy	-	951,079	-		951,079
Env. and Natural Resources	176,558,358	-	1,000,000,000		1,176,558,358
Finance	-	2,000,000,000	-		2,000,000,000
Health	1,453,350,000	500,000,000	-		1,953,350,000
Interior and Local Government	2,012,180,000	2,467,732,486	737,938,480		5,217,850,966
National Defense			-	1,012,816	1,012,816
Justice	2,000,000	50,000,000	-		52,000,000
Labor and Employment	113,500,933	892,726,765	-		1,006,227,698
Public Works and Highways	737,000,000	2,370,492,863	1,591,646,938	591,029,121	5,290,168,922
Science and Technology	-	31,000,000	-		31,000,000
Social Welfare and Development	5,906,604,000	11,441,571,882	13,449,523,526	148,692,441	30,946,391,849
Tourism		-	-		-
Trade and Industry	-	17,881,500	-	928,913,539	946,795,039
Transportation	2,100,000,000	214,227,790	658,500,000	15,426,918	2,988,154,708
National Economic and Development Authority	29,538,600	-	-		29,538,600
OEO - Commission on Higher Education		4,844,525			4,844,525
<b>B. Special Purpose Funds</b>	<b>11,547,303,731</b>	<b>11,000,000,000</b>	<b>22,557,753,764</b>	<b>12,319,706,422</b>	<b>57,424,763,917</b>
<b>Budgetary Support to GOCCs</b>	<b>11,510,471,784</b>	<b>11,000,000,000</b>	<b>22,551,638,264</b>	<b>12,310,767,422</b>	<b>57,372,877,470</b>
National Housing Authority	2,620,638,000	11,000,000,000	20,969,018,000	9,787,177,422	44,376,833,422
Philippine Coconut Authority	2,868,690,000				2,868,690,000
National Food Authority	111,205,000				111,205,000
National Electrification Admin.	3,929,360,000		922,620,264	659,600,000	5,511,580,264
National Power Corporation	101,480,000				101,480,000
Transco	1,500,000,000				1,500,000,000
Local Water Utilities Admin.	334,098,784		660,000,000	1,362,547,000	2,356,645,784
National Irrigation Admin	45,000,000			501,443,000	546,443,000
<b>Allocation to LGUs</b>	<b>36,831,947</b>		<b>6,115,500.00</b>	<b>8,939,000.00</b>	<b>51,886,447</b>
<b>GRAND TOTAL</b>	<b>26,918,345,622</b>	<b>36,724,424,151</b>	<b>41,905,165,281</b>	<b>15,651,975,297</b>	<b>121,199,910,351</b>
<b>PDSL</b>	<b>-</b>	<b>10,467,459,531</b> (28.5%)	<b>9,398,028,816</b> (22.45%)	<b>-</b>	<b>19,865,488,347</b> (16.4%)

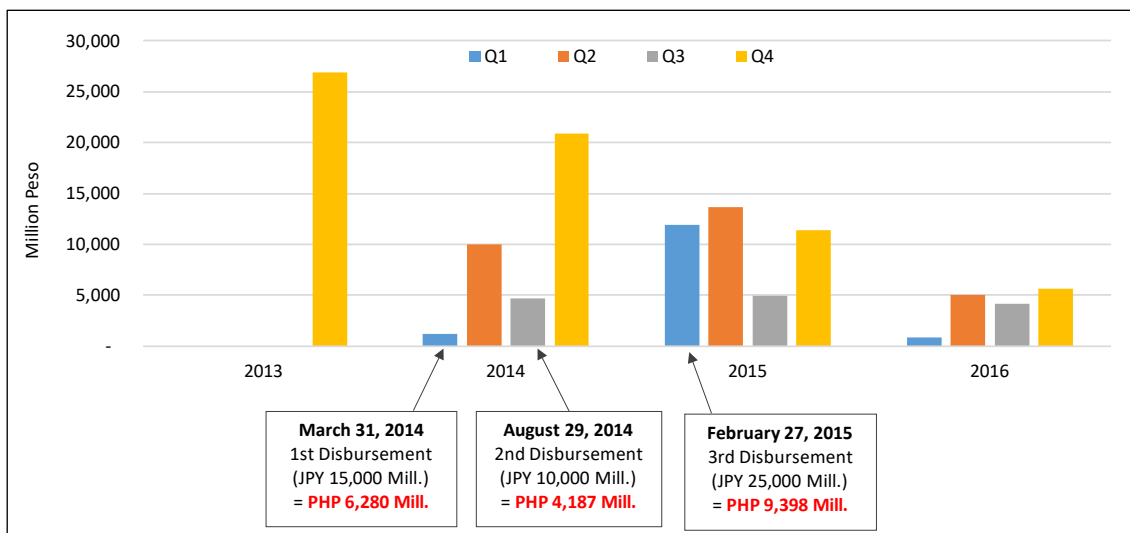
Source: Department of Budget Management (DBM).

Note 1: Total releases for 2013 and 2014 include internal adjustments made by the agencies to fund Yolanda activities amounting to 917,318,291 peso and 168,505,000 pesos respectively.

Note 2: The exchange rate used: PHP1=JPY2.39 (2014) and PHP1=JPY2.66 (2015) (source: The International Financial Statistics (IFS) 2017, IMF).

<sup>20</sup> The exchange rate used: PHP1 = JPY2.409 (average rate of 2013-2016) (source: The International Financial Statistics (IFS) 2017, IMF).

Figure 3 indicates a timing of each disbursement of PDSL and the government allotment releases for Typhoon Yolanda in 2013-2016 by quarterly-base. It is observed that the total amount of quarterly-based government expenditure increased in the second and fourth quarters of 2014 as well as the second quarter of 2015 after each disbursement.



Source: Department of Budget Management (DBM).

Figure 3: Quarterly Breakdown of Government Allotment Release for Typhoon Yolanda (2013-2016)

As mentioned earlier, the drawdown funds from PDSL may not have been directly channeled to the post disaster restoration projects and programs of Typhoon Yolanda. However, logically it can be interpreted that the same amount of peso funds used to repay yen-denominated debts was saved in the national treasury, and that this was indirectly used for disaster reconstruction of Typhoon Yolanda<sup>21</sup>. Table 3 indicates that if 50,000 million yen disbursed by PDSL was supposed to be indirectly channeled to the post disaster restoration projects and programs of Typhoon Yolanda, it was equivalent to 16.4% of total government allotment releases for Typhoon Yolanda during 2013 and 2016.

For a reference, a record of Calamity Fund and Quick Response Fund during the period from 2011 and 2016 is shown in Table 4. The funding to both Calamity Fund and Quick Response Fund increased every year except a case of Calamity Fund in FY2015.

<sup>21</sup> This understanding was endorsed by DOF and BTR.

Table 4: Calamity Fund and Quick Response Fund (2011-2016)

Unit: 1,000 Pesos

Particulars	FY 2011	FY 2012	FY2013	FY2014	FY2015	FY2016
<b>Calamity Fund</b>						
New General Appropriation (GAA)	7,080,697	7,791,776	12,167,481	27,964,397	14,064,532	43,988,838
Augmentation	1,000,000	-	-	2,600,000	-	-
Supplemental Appropriations	-	-	11,200,000	-	-	-
Less: Allotment Releases	7,028,630	3,045,201	7,441,535	30,157,132	8,965,319	18,006,045
Balance	1,052,067	4,746,575	15,925,946	407,265	5,099,213	25,982,793
<b>Quick Response Fund</b> <sup>(Note)</sup>						
New General Appropriation (GAA)	1,857,500	3,315,195	3,695,000	4,849,766	6,207,500	5,715,500
Augmentation	242,986	-	8,910,526	2,772,500	1,825,000	5,962,590
Supplemental Appropriations	-	-	662,500	662,500	-	-
Less: Allotment Releases	2,100,486	3,315,195	12,605,526	8,284,766	8,032,500	11,303,090
Balance	0	0	662,500	0	0	375,000

Source: Department of Budget Management (DBM)

Note: Quick Response Fund (QRF) is a built-in budgetary allocation that represents pre-disaster or standby funds for agencies in order to immediately assist areas stricken by catastrophes and crises. The following agencies have built-in QRFs to ensure immediate action during calamities: (i) Department of Public Works and Highways (DPWH), (ii) Department of National Defense (DND) – Office of the Secretary (OSEC)/ Office of the Civil Defense (OCD), (iii) Department of Education (DepEd), (iv) Department of Social Welfare and Development (DSWD), and (v) Department of Agriculture (DA).

### 3.2.1.2 Strengthen the country's capacity on disaster risk reduction and management

This program loan intended to strengthen the capacity of the Philippines on DRRM through implementing actions agreed in the Policy Matrix. The followings are the performance results of the Policy Matrix.

#### (1) Action Area: Strengthen the Capacity of Disaster Risk Reduction and Management

##### (a) Expected Action: Majority of Regional Risk Reduction and Management Plans (RDRRMP) are developed

All 17 Regional DRRM Plans were developed, issued and adopted by 2016.

##### (b) Expected Actions: NDRP is developed

The NDRP for Hydro-Meteorological Hazards was officially approved in 2014 through Memorandum Order No. 23, s.2014 dated 20 Oct. 2014. Also, the NDRP for Earthquakes and Tsunamis was drafted and has been subjected to series of simulation exercises/drills by the National Disaster Risk Reduction and Management Council (NDRRMC) at the time of ex-post evaluation.

(c) Expected Actions: Guideline on the use of local DRRM fund (LDRRMF) is issued

The Joint Memorandum Circular (JMC) No.2013-1 on “Allocation and Utilization of the LDRRMF” was issued on March 25, 2013 by the NDRRMC, Department of Budget and Management, and Department of Interior and Local Government as a guide to LGUs in the allocation and use of LDRRMF.

(d) Expected Outcome: National/Local Governments have increased capacity to manage the impacts on natural disasters

This expected outcome is achieved as its key output indicator “Number of RDRRMP developed” is 17 in 2016 and it fully achieved its target value of eight in 2016.

#### Contribution by related JICA projects

The development of 17 Regional DRRM Plans and the preparation of the NDRP was made possible through the Disaster Risk Reduction and Management Capacity Enhancement Project (DRRM-CEP) of JICA since DRRM-CEP assisted OCD to formulate RDRRMP for all 17 regions as well as to develop the NDRP as the official document for all government agencies to use in times of disaster. According to OCD, the capacity of OCD as regards DRRM has been improved, partly due to DRRM-CEP in terms of planning (policy development), response (database management), and preparedness (through the development of the Community-Based DRRM Training Course). The dispatch of a JICA DRRM Expert also helped OCD through technical advice and guidance.

(2) Action Area: Integrated Water Resources Management (IWRM)

(a) Expected Action: A structure for IWRM is drafted

The National Economic and Development Authority (NEDA) proposed to the government a development of the National Water Resource Management Committee (NWRMC) as a substitute for the existing National Water Resource Board (NWRB) in 2011. However, the discussion on this issue has been still pending at the time of ex-post evaluation.

(b) Expected Action: IWRM/IRBM Plan in selected major river basins is developed

The IWRM master plans for 18 major river basins and three principal river basins were developed and the master plans were endorsed to each regional development committee (RDC) except Pasig-Marikina-Laguna. The update of IWRM master plans for three major river basins (Pampanga, Pasig-Marikina-Laguna, Agusan) are on-going at the time of ex-post evaluation. The formulation and updating of IWRM master plan have been made by River Basin Control Office (RBCO), DENR since 2013.

(c) Expected Outcome: Land use and investments at major river basins is integrated

This expected outcome is achieved as its key output indicator “Number of IWRM/IRBM Plan developed in selected major river basins” is 18 in 2016 and it fully achieved its target value of six in 2016.

#### Contribution by related JICA projects

JICA’s development study “The study on IWRM for Poverty Alleviation and Economic Development in the Pampanga River Basin (2009-2011)” contributed to formulation of IWRM plan for Pampanga River Basin.

(3) Action Area: Information Management on DRRM

(a) Expected Action: At least four out of eight NOAH components are completed

The original ten NOAH components were completed in March 2016. Additional eight NOAH components were completed in December 2017 (Now NOAH has 18 components)<sup>22</sup>. The Project NOAH has been developed and expanded to the Climate Change Adaption-Disaster Risk Reduction Program (CCA-DRR) at the time of ex-post evaluation.

(b) Expected Action: FFWS is extended to other selected major river basins

The FFWS is operational in seven major river basins of Agno, Bicol, Cagayan, Pampanga, Pasig-Marikina-Laguna (Luzon), Cagayan de Oro and Tagum-Libuganon (Mindanao). Therefore, the number of FFWS in major river basins established during 2013-2016 was four. PAGASA has been implementing the projects to establish FFWS in the rest of 11 major river basins. According to PAGASA, the FFWS will be operational at the additional four river basins by the last quarter of 2018, these being river basins of Abra (Luzon), Buayan-Malungon, Davao and Tagoloan (Mindanao).

(c) Expected Outcome: Capacity of the flood forecasting and early warning is strengthened

This expected outcome is achieved as its key output indicator “Number of FFWS in major river basins established” is seven in 2016 and it fully achieved its target value of six in 2016.

#### Contribution by related JICA projects

JICA’s technical cooperation “Project for Strengthening Capacity of Integrated Data Management of Flood Forecasting and Warning” (2016-2019) contributed to strengthening of PAGASA’s capacity to utilize various data for operational FFWS integrally in Cagayan de Oro and Tagoloan river basins. Also, Japan’s Non-project grant aid (2012) supported to install

---

<sup>22</sup> According to the Philippine Council for Industry, Energy, and Emerging Technology Research and Development (PCIEERD), DOST, original number of NOAH component was 10, not 8.

weather monitoring equipment at Tagoloan and Buayan-Malungon river basins. Furthermore, Japan’s Non-project grant-aid “Rehabilitation of Equipment for the Project to Strengthen Flood Forecasting and Warning System in the Bicol River Basin” (2017-2019) is under implementation at the time of ex-post evaluation.

Table 5: Key Outputs Indicator for Expected Outcomes

Indicator	PLAN		ACTUAL	
	2012 (Baseline)	2016 (Target)	2016 (Target year)	2017 (At ex-post evaluation)
Number of RDRRMP developed	0	8	17	17
Number of IWRM/IRBM Plan developed in selected major river basins	3	6	18	18
Number of FFWS in major river basins established	3	6	7	7

Note: Three river basins in which FFWS were already established in the baseline year (2012) were Agno, Pampanga, and Pasig-Marikina-Laguna river basins in Luzon.

### 3.2.2 Impacts

#### 3.2.2.1 Intended Impacts

##### (1) Stabilization of the financial base of the Philippines

As stated in “3.2.1 Effectiveness”, the drawdown funds from PDSL were utilized to settle maturing ODA loan repayment obligations by the Philippine government. Because of this transaction, the Philippine government was able to avoid bearing foreign exchange risks and disturbing cash flow status without disturbing the foreign currency market, which resulted in more pro-active debt management by the government. This contributed to the stabilization of financial market of the country.

In the former administration (President Benigno Aquino administration), they adhered to a fiscal discipline and tightly-controlled government expenditure, and the general government net lending/borrowing, as a result, improved between 2012 and 2015. Meanwhile, the current administration takes a more aggressive stance in economic management policy by expanding public investments, and the status of general government net lending/borrowing has since gone down after 2016. However, the general government primary net lending/borrowing (i.e. primary balance) is stable between 2013 and 2017. The inflation rate increased from 2.9% in 2013 to 4.1% in 2014, but it declined to less than 2% in 2015 and 2016. The growth rates of export and import values were negative against the previous years in 2013 and 2015, but this negative effect on the macro-economy was limited as there was a constant growth of gross investment observed between 2012 and 2017 (Table 6).

There are some variations in debt service ratio between 2012 and 2017, but they are maintained at manageable level due to a stable GDP growth of around 6%. This may be

attributed to a good debt management in collaboration with the Central Bank of the Philippines (BSP) and BTR/DOF.

Regarding the government expenditure for rehabilitation and reconstruction of Typhoon Yolanda in 2013-2016, its amount increased from 2013 to 2015 as these three years needed a significant financial resource for rehabilitation and reconstruction activities. Considering that the drawdown of PDSL was made in 2014 and 2015, the timing of drawdown matched to the said critical period. It implies that the timely financial assistance from donors including PDSL during this period may have contributed to respond to the contingent financial needs, and it further helped the Philippine government to avoid creating a financial gap.

Table 6: Selected Economic Indicator of the Philippines

	2012	2013	2014	2015	2016	2017*
Real GDP (percent change)	6.7	7.1	6.2	5.9	6.4	6.7
Inflation, average consumption price (percent change)	3.1	2.9	4.1	1.4	1.7	3.1
Gross investment (percentage of GDP)	18.2	20.0	20.5	20.6	23.7	24.7
Broad money (M3) (percentage)	9.4	31.8	11.2	9.4	12.4	-
Export value (percent change)	21.2	-4.0	11.9	-13.1	-3.4	4.1
Import value (percent change)	11.3	-4.8	8.0	-3.2	4.0	6.0
General government total expenditure (billion Peso)	1,99.7	2,152.1	2,285.7	2,499.8	2,821.0	3,143.8
General government total expenditure (percentage of GDP)	18.9	18.6	18.09	18.7	19.4	19.0
Government expenditure for rehabilitation and reconstruction of Typhoon Yolanda (billion Peso)	-	26.9	36.7	41.9	15.6	N.A.
Government expenditure for rehabilitation and reconstruction of Typhoon Yolanda (percent of General government total expenditure)	-	1.2	1.6	1.6	0.5	-
General government net lending/borrowing (billion Peso)	-32.0	22.5	109.1	81.6	-53.7	-47.4
General government net lending/borrowing (percentage of GDP)	-0.30	-0.19	0.86	0.61	-0.37	-0.30
General government primary net lending/borrowing (billion Peso)	245.59	308.03	393.53	355.36	211.95	220.82
General government primary net lending/borrowing (percentage of GDP)	2.32	2.67	3.11	2.66	1.46	1.39
Debt service ratio	9.9	11.1	8.4	7.4	11.2	10.7

Source: IMF

Note: The data in 2017 is projection.

The Moody's credit rating of the Philippines has been upgraded to Baa3 (investment grade) in 2013 and has maintained this status until 2017<sup>23</sup>. It indicates a stability of the financial base of the Philippines during the post-disaster period after Typhoon Yolanda.

<sup>23</sup> Fitch Ratings Ltd., a British credit rating agency, upgraded the long-term rating of the Philippines from BB+ to BBB- in March 2013. Also Standard & Poor's, an American credit rating agency, upgraded the credit rating of the Philippines from BB+ to BBB- in May 2013.

Table 7: Moody’s Credit Rating of the Philippines

	Jul 2013	Oct. 2013	Dec. 2014	2015-2016	June 2017
Long Term Rating Scale	Ba1	Baa3	Baa2	Baa2	Baa2

Source: Moody’s web site.

(2) Avoiding negative effects on the economic and industrial activities of the Philippines

According to JETRO’s annual report<sup>24</sup>, although several natural disasters such as an earthquake in Bohol island in October 2013 and a Super Typhoon Yolanda in November 2013 hit the country in 2013, the size of economy of affected areas was relatively small against total GDP as these were not the economic centers of the country, and so the negative impacts on the national economy were limited.

In terms of Gross Value Added in Manufacturing between 2013-2017, there was a drop of a growth rate in 2015, but this has never been negative during the period and kept a constant growth around 6-8%. This is due to a good performance of service industry including the Business Processing Outsourcing (BPO), manufacturing industry such as electric instrument industry and automobile-related industry during this period.

Table 8: Gross Value Added in Manufacturing

	2012	2013	2014	2015	2016	2017
Gross Value Added in Manufacturing (current price) (billion pesos)	2,170	2,355	2,603	2,669	2,844	3,075
Gross Value Added in Manufacturing (percent change)	-	8.5	10.5	2.5	6.6	8.1

Source: Philippines Statistic Authority

In order to confirm the impact on avoiding negative effects on the economic and industrial activities of the Philippines, an interview with the Philippine Chamber of Commerce and Industries (PCCI) was made. However, they did not recognize this project impact. From the viewpoint of the small and medium-scale enterprises (SMEs), they addressed the necessity for development of risk transfer financial instruments such as catastrophe risk insurance and Business Continuity Plan (BCP) in collaboration with LGUs. For this reason, it was difficult to verify whether this program loan contributed to avoiding negative effects on the economic and industrial activities of the county.

(3) Reduction of human damage and loss due to the natural disasters

Through the Policy Matrix, FFWS was established at four major river basins of Bicol, Cagayan (Luzon), Cagayan de Oro and Tagum-Libuganon (Mindanao) by 2016. According to PAGASA, the human loss by the natural disaster at the river basins where FFWS was

<sup>24</sup> JETRO, “World Trade and Investment Report”, 2014 (*Sekai Boueki Toshi Houkoku* in Japanese).



established decreased. For example, more than 1,200 people died in Cagayan de Oro river basins including cities of Cagayan de Oro and Iligan in Mindanao during the Typhoon Sendong on December 16, 2011. When Typhoon Vinta hit Mindanao on December 21, 2017, fatality was zero. In this case, the City Disaster Risk Reduction Management Department of Cagayan de Oro placed the city on red alert in the morning of December 20 as the Cagayan River reached its critical level. The CDRRMD immediately called for an evacuation of the residents of Cagayan de Oro river basins. PAGASA points out that FFWS installed in Cagayan de Oro river basins worked effectively and helped to realize zero victims during the occurrence of the typhoon.

### 3.2.2.2 Other Positive and Negative Impacts

#### (1) Impacts on the Natural Environment

There was no negative impact on the natural environment by the implementation of this project.

#### (2) Resettlement and Land Acquisition

There was no land acquisition and resettlement of people associated with this program loan.

This program loan has achieved its objectives. Therefore, effectiveness and impacts of this program loan are high.

## 3.3 Sustainability (Rating: ③)

### 3.3.1 Institutional / Organizational Aspect of Operation and Maintenance

#### (1) National Disaster Risk Financial Instrument Strategy

DOF has been reviewing and updating the National Disaster Risk Financial Instrument (DRFI) Strategy continuously. As explained earlier, DOF has been working on development of risk transfer financial instruments such as joint catastrophe risk insurance program for LGUs, property catastrophe risk insurance pool for homeowners, a system of post-disaster cash transfers, etc. with collaboration with the related agencies and development partners. However, the contingent financing scheme such as PDSL and CAT-DDO is still recognized as an important DRFI, considering that the government fiscal scale and financial capacity as well as the risk transfer financial instruments are not fully developed in the country at the time of ex-post evaluation.

#### (2) DRMM organization and related policies

The Office of Civil Defense (OCD) is the responsible organization and a focal point for DRRM in the Philippines. An approval for changes in the organizational structure and staffing pattern

of OCD was made on March 22, 2016, which allowed OCD to increase authorized positions from 301 to 622. As of February 2018, OCD holds 571 staff (241 in head office and 330 in regional offices). After this approval, OCD was able to show strong leadership to carry out effective DRRM plans and programs not only at the national level but also at the regional level.

A sunset review of the Philippine Disaster Risk Reduction and Management Act (Republic Act No. 10121) was spearheaded by the OCD. At the time of ex-post evaluation, an Amendatory Bill to RA 10121 is being prepared for submission to the Philippine Congress. Also, the National Disaster Risk Reduction and Management Plan (NDRRMP) is being reviewed by OCD in order to align with the global development frameworks such as the Sendai Framework for Disaster Risk Reduction, the Sustainable Development Goals (SDGs), the World Humanitarian Summit (WHS), and Paris Agreement.

No major problems have been observed in the institutional aspect of the operation and maintenance system. Therefore, sustainability of this program loan effects is high.

### 3.4 Additionality by JICA

#### (1) Monitoring of Policy Actions

The monitoring meeting on the Policy Matrix was organized at DOF in three times: first meeting in August 5, 2014, second meeting in June 3, 2015 and third meeting in December 17, 2015. The participants of the meeting were DOF (chairperson), OCD, the River Basin Control Office under the Department of Environment and Natural Resources (DENR/RBCO), the Flood Control and Sabo Engineering Center under the Department of Public Works and Highways (DPWH/FCSEC), PAGASA, and the National Institute of Geological Sciences in the University of the Philippines (UP-NIGS) (a representative of the Project NOAH). In the monitoring meeting, the status of expected actions for each participating agency were discussed and shared with the participants.

Principally, the monitoring meeting was organized by the Philippine counterparts and the JICA Philippines office participated in the meeting and supported the monitoring activities.

#### (2) Synergistic effects between the technical cooperation projects and other cooperation schemes of JICA

As discussed in “3.1.4 Appropriateness of the Project Plan and Approach”, the Policy Matrix was designed in line with the on-going or planned JICA technical cooperation projects and dispatch of JICA experts relating to each action area during the project period from 2013 to 2016.

As the DRRM has been one of the priority areas of Japan’s ODA policy, JICA has supported the Philippines to strengthen its DRRM capacity through infrastructure development projects and master plan by deploying its available cooperation schemes such as the Japanese ODA loan, grant aid, technical cooperation, etc. since 1970s. In the case of the Flood Forecasting and Warning

System (FFWS) in the major river basins of the Philippines, for example, JICA implemented at least four Japanese ODA projects, three grant aid projects, and one technical cooperation project in the past.

According to PAGASA, there were synergistic effects of all the initiatives of JICA in flood control in the river basins. The OCD also recognized these synergistic effects between JICA's technical cooperation projects and Japanese ODA loan projects that contributed to increasing the DRRM capacity of the country.

## **4. Conclusion, Lessons Learned and Recommendations**

### 4.1 Conclusion

The objectives of this program loan are to support quick post disaster restoration, and to strengthen the country's capacity on disaster risk reduction and management by: (i) responding to temporary financial needs when large-scale disasters occur to support immediate recovery processes, and (ii) assisting the Government of the Philippines in the implementation of the policy actions, which will contribute to the said capacity building in collaboration with JICA's technical assistance, ongoing or being planned, thereby contributing to the sustainable economic growth of the country. This program loan has been highly relevant to the Philippines' development plan and development needs, as well as Japan's ODA policy. Also, the project plan and approach are appropriate. Therefore, its relevance is high. For effectiveness, this program loan played a positive role in the financial management of the Philippines, and all expected outcomes in the Policy Matrix were realized. As for impacts, this program loan contributed to stabilizing the financial base of the country during the post-disaster period as well as reducing human damages and loss due to the natural disaster in Mindanao. This program loan has achieved its objectives, therefore, effectiveness and impacts of this program loan are high. No major problems have been observed in the institutional aspect of the operation and maintenance system. Therefore, sustainability of the project effects is high.

### 4.2 Recommendations

#### 4.2.1 Recommendations to the Executing Agency

None

#### 4.2.2 Recommendations to JICA

None

### 4.3 Lessons Learned

#### For DOF

##### (1) DOF's role in promoting the commitment of related agencies to the Policy Matrix

In general, the difficulty of budget support loan is that related agencies of the Policy Matrix are not necessarily familiar with its mechanism, other than the oversight agencies. In order to successfully undertake the necessary actions agreed in the Policy Matrix by the related agencies as well as monitor the Policy Matrix effectively, it is important to promote the commitment of relevant agencies at the planning and implementation stages. In this sense, for a similar type of loans in the future, DOF is expected to play a leading role in promoting the commitment of related agencies to the Policy Matrix as well close coordination with them.

#### For JICA

##### (1) Favorable lending terms and conditions of contingent loan for post-disaster restoration

It was revealed that the lending terms and conditions of PDSL were more flexible and favorable to DOF in terms of cost burden of the Philippine government and number of tranche operation, and these factors attracted DOF to utilize PDSL. Also, it was found that according to the IDB's study, the lending terms and conditions were important factors to motivate the borrowers to use the loan.

In case PDSL is adopted to other countries, it is important to carefully set the lending terms and conditions attractive to the borrowers considering the available disaster risk financial instruments in the target countries as well as available similar types of assistance by other donors.

##### (2) Development of alternative and/or supplement triggers for contingent loan for post-disaster restoration

The experience of CAT-DDO2 suggests although there are criteria for declaration of national calamity, its final decision depends on the Office of President, and there may be other factors influencing this decision. If a similar type of loans is adopted in the future, it is worth discussing to develop alternative and/or supplemental triggers for a contingent loan or stand-by credit for a post disaster recovery such as a parametric trigger which are acceptable to both donor and partner countries.

##### (3) Contribution of JICA's on-going or being planned projects to actualization of the Policy Matrix

Three action areas of the Policy Matrix together with their expected outcomes and targets of key outputs indicators were set, based on the needs of each action area as well as in consideration with related JICA's projects which were on-going or being planned at the time of planning stage. That is, it was anticipated that the Policy Matrix would be actualized if the related JICA's projects

including the technical cooperation projects are implemented successfully along with the Post Disaster Stand-by Loan. Therefore, the design of the Policy Matrix in consideration with related JICA's projects was a key for successful achievement of the expected outcomes together with the efforts of related agencies of the Philippine government.

End

## Appendix: Policy Matrix of Post-Disaster Standby Loan

Action Area	Prior Actions (Progress as of end 2012)	Expected Actions (2013-2016)	Expected Outcomes by 2016	Key Outputs Indicators	Baseline (2012)	Target (2016)	Actual (2016)	Related Japanese technical cooperation projects
Strengthen the capacity of Disaster Risk Reduction and management (DRRM)  Agency: OCD	The National Disaster Risk Reduction and Management Plan (NDRRMP) has been issued in line with the National Disaster Risk Reduction and Management Framework (NDRRMF)	Majority of Regional Disaster Risk Reduction and Management Plan (RDRRMP) developed	National/Local Governments have increased capacity to manage the impacts on natural disasters	Number of RDRRMP developed	0	8	17	<ul style="list-style-type: none"> <li>Disaster Risk Reduction and Management (DRRM) Capacity Enhancement Project (2012-2015)</li> <li>Dispatch of JICA expert on Disaster Risk Management (2012-2014)</li> <li>Dispatch of JICA expert on Disaster Risk Reduction and Management (2015 up to present)</li> </ul>
	Drafting of National Disaster Response Plan (NDRP) initiated	NDRP developed						
	Drafting of guidance for Local DRRM Fund drafted	Guideline on the use of local DRRM fund issued						
Integrated Water Resources Management  Agency: DPWH, DENR	Drafting of IWRM/IRBM Plan in selected major river basin initiated	<ul style="list-style-type: none"> <li>A structure for IWRM drafted</li> <li>IWRM/IRBM Plan in selected major river basin developed</li> </ul>	Land use and investments at major river basins integrated	Number of IWRM/IRBM Plan developed in selected major river basis	3	6	18	<ul style="list-style-type: none"> <li>Dispatch of JICA expert on Flood Control (2014 up to present)</li> </ul>
Information Management on DRRM  Agency: DOST-PAGASA, ASTI	Nationwide Operational Assessment for Hazards (NOAH) launched	At least 4 out of 8 NOAH components completed	Capacity of the flood forecasting and early warning strengthen	Number of FFWS in major river basins established	3	6	7	<ul style="list-style-type: none"> <li>Project for Strengthening Capacity of Integrated Data Management of Flood Forecasting and Warning (2016-2019)</li> </ul>
	Flood Forecasting and early Warning System (FFWS) in 3 river basins upgraded	FFWS extended to other selected major river basins						
Other				(Reference) <sup>(Note)</sup> Total amount of annual damage and loss due to natural disasters, environmental hazards human induced and hydro meteorological events	PHP 19,272 million (2004-10 annual average)	Decrease (No target figures)	N.A.	

Source: Project Memorandum (March 19, 2014).

Note: The baseline of “total amount of annual damage and loss due to natural disasters, environmental hazards human induced and hydro meteorological events” is quoted from PDP 2011-2017, p218.