Technical Cooperation Project for Capacity Development in Public-Private-Partnership (PPP) Project Formulation

Project Completion Report

December 2017

Japan International Cooperation Agency (JICA)

Deloitte Tohmatsu Financial Advisory LLC.

Castalia Limited.

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Abbreviations/Acronyms

ADB	Asian Development Bank
ASEAN	Association of South East Asian Nations
ASec	Assistant Secretary
ALI	Ayala Land, Inc.
BOT	Build-Operate-Transfer
BPO	Business Process Outsourcing
BT	Build-Transfer
ВТО	Build-Transfer-Operate
BTOM	Build-Transfer-Operate-and-Maintain
CAPEX	Capital Expenditure
CCEC	Citra Central Expressway Corporation
CCGT	Combined Cycle Gas Turbine
CDC	Coastal Development Corporation
СЕР3Н	Center for Excellence in Public-Private Partnerships in Health
DBOT	Design-Build- Operate-and-Transfer
DED	Detailed Engineering Designs
DO	Department Order
DOE	Department of Energy
DOF	Department of Finance
DOH	Department of Health
DOJ	Department of Justice
DOTC	Department of Transportation and Communications
DOTr	Department of Transportation
DPWH	Department of Public Works and Highways
DSCR	Debt Service Coverage Ratio
ESSD	Environmental and Social Safeguards Division
F/S	Feasibility Study
GAA	General Appropriations Act
GDP	Gross Domestic Product
GOCC	Government-Owned and Controlled Corporation
GOP	Government of the Philippines
GPRAM	General Preferred Risk Allocation Matrix
IA	Implementing Agency
IRR	Internal Rate of Return
JICA	Japan International Cooperation Agency
JICA PPP T/A	Project for Capacity Development of Public-Private Partnership Project Formulation in the Philippines
KPI	Key Performance Indicator
L/A	Loan Agreement
LRT	Light Rail Transit
LGU	Local Government Unit
MGHI	Mercado General Hospital, Inc.
MIGEDC	Metro Iloilo-Guimaras Economic Development Council
MOA	Memorandum of Agreement
MPCALA	Metro Pacific CALA Holdings

MRT	Metro Rail Transit System
MWh	Megawatt Hour
MPIC	Metro Pacific Investments Corporation
MPHHI	Metro Pacific Hospital Holdings, Inc.
MWSS	Metropolitan Waterworks and Sewerage System
MYOA	Multi-Year Obligational. Authority
NEDA	National Economic and Development Authority
NPV	Net Present Value
NSSMP	National Sewerage and Septage Management Program
ODA	Official Development Assistance
O&M	Operation and Maintenance
OPEX	Operating Expenditure
PDM	Project Design Matrix
PDMF	Project Development and Monitoring Facility
PhP	Philippine Peso
PIP	Public Investment Program
PNR	Philippine National Railway
POC	Proof of Concept
PPP	Public Private Partnership
PPPC	Public-Private Partnership Center of the Philippines
PPPH-PMU	Public-Private Partnership for Health- Program Management Unit
PPPS	PPP Service
PU	Performance Undertakings
ROW	Right-of-Way
SMC	San Miguel Corporation
UPMO-FCMC	Unified Project Management Office - Flood Control Management Cluster
USec	Undersecretary
VfM	Value for Money
VGF	Viability Gap Fund
WD	Water District

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Chapter1 Project Summary

1.1 Background of the Project

The lack of investment in infrastructure remains a critical problem in the Philippines despite the strong economic performance in the past years. Public infrastructure investment remained at 2.1% of GDP between 2000 and 2010, highlighting the country's underinvestment in infrastructure in comparison with other neighboring countries in Southeast Asia. The overall infrastructural gap in the country is seen as one of the factors limiting its international economic competitiveness.

In response to this, the administration of former Philippine President Benigno S. Aquino III, saw the use of Public-Private Partnerships (PPPs) as a means to spur economic growth through active cooperation with the private sector in implementing high-impact infrastructural projects. The former administration saw the importance of tapping private sector finance alongside the use of government funds and utilizing Official Development Assistance (ODA) from international development partners to advance public infrastructure development in the country. Aquino, who came into office in 2010, announced that the administration would increase infrastructure investment. According to the Public Investment Programme (2011-2016), the Government intends to raise its public infrastructure investment to 2.7% of GDP in 2016 and its target was raised to 5.0% in 2013. To initiate such an increase, the Aquino administration advocated implementing Public Private Partnerships (PPP), which would provide alternative source of financing for large-scale public infrastructure projects given government budget limitations.

In line with this, the Japan International Cooperation Agency (JICA) funded the conduct of two research works in 2012 and 2013 on the PPP environment of the Philippines that provided policy recommendations to promote PPP. These researches pointed to the need to further augment the capacity of Implementing Agencies (IAs) in developing, evaluating, appraising and implementing PPP projects. With the Public-Private Partnership Center of the Philippines (PPPC) at the helm of facilitating and supporting PPP projects in the Philippines, JICA agreed to support a technical cooperation project that sought to enable selected implementing agencies to raise their capabilities to develop and carry out PPPs in their respective sectors. To formalize this inter agency endeavor, a Memodandum of Agreement (MOA) was signed by the PPP Center and JICA in 18th of June 2014 to formalize the project entitled "Technical Cooperation Project for Capacity Development of Public-Private Partnership Project Formulation in the Philippines (JICA PPP T/A).

The JICA PPP T/A was initiated in November 2014 with four IAs selected to participate as partner agencies where a series of capacity development initiatives would be carried out in line with their respective capacity development needs and sectoral contexts. These IAs include the Department of Health (DOH), Department of Public Works and Highways (DPWH), Department of Transportation

(DOTr)1 and the local government of Iloilo City. Activities for the Department of Energy (DOE) as one of the targeted agencies for the PPP capacity development in its initial phase was not continued as a result of the change in scope of the project in 2015.

In the initial stages of the JICA PPP T/A, the strategic implementation structure was to identify potential PPP initiaitives drawn from sector master plans. However, after reevaluating the scope and structure of the JICA PPP T/A in early 2015, JICA with the concurrence of the PPP Center decided to change the scope of the project wherein specific projects will no longer be carried out. Instead, the JICA PPP T/A focused on building the capacities of IAs in PPP project formulation and evaluation. The change in scope essentially resulted in the adjustment of the implementation strategy for the JICA PPP/ TA from a specific project-oriented approach to a more organizational development based initiative.

IAs were examined to identify capacity gaps and IA-specific approaches were configured and carried out through a variety of methods which include implementing modular training activities; strategic project identification and prioritizing; and developing of reference materials.

The JICA PPP T/A was also formulated as a supplemental technical cooperation of the Loan Agreement for the Development Policy Support Program-Investment Climate; a project JICA co-financed with the Asian Development Bank, which started in 2012 worth ¥7.775 billion.

1.2 Outline of the Project

The following are the goal, purpose and outputs for the JICA PPP T/A.

Overall Goal

An improved PPP project formulation process will contribute to the infrastructure development that is necessary for accelerating the economic development of the Philippines.

Project Purpose

Capacity of the GOP will be improved to formulate PPP projects.

Outputs

- The capacity of the GOP for selecting PPP projects will be enhanced.
- The capacity of IAs for selecting PPP projects will be enhanced.
- · Policy discussion for developing financing and funding system for PPP are encouraged.

¹ This agency used to be named the Department of Transportation and Communications (DOTC) until 2016.

1.3 Project Activities

The targeted IAs were identified after a series of consultations with the PPPC and candidate implementing agencies. After initial discussions and consultations with the PPP Center, agencies such as the Department of Energy (DOE), Department of Health (DOH), Department of Public Works and Highways (DPWH) and the Department of Transportation (DOTr) were selected ². However, considering the change in scope in 2015, stakeholders agreed to the cancellation of activities for DOE. Instead, to showcase the participation of local government units (LGUs), the city government of Iloilo was selected as new target IA.

- Project Site: Philippines
- Counterpart organization(C/P): Public-Private Partnership Center of the Philippines (PPPC)
- IAs: DOH, DPWH, DOTr and LGU (Iloilo City)
- Related Agencies: DOF, NEDA and other related agencies which belong to economic organizations
- Project duration: November 2014 December 2017

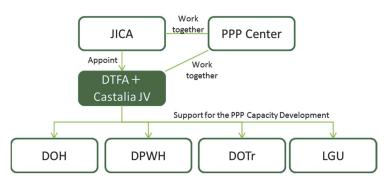
Chapter2 Project Implementation Structure and Schedule

2.1 Project Implementation Structure

The project implementation structure involved the PPPC as the direct cooperating partner for the project, and the four IAs which served as subject agencies for the capacity building activity. Project teams and focal persons from the PPPC and the IAs were identified and were in direct coordination with Expert Team composed of Deloitte Tohmatsu Financial Advisory LLC (DTFA) and Castalia Limited. Details of the implementation structure for the project is shown as Figure 2-1 below.

² In the initial consultations, the Department of Justice (DOJ) was also identified as a potential partner. This was however cancelled as the said agency was not able to signify its interest in participating in the initiative.

Figure 2-1 Project Implemantation Structure



One of the intents of the JICA PPP T/A was to identify potential PPP initiatives drawn from sectoral master plans of the respective IAs. However, after re-evaluating the scope and structure of the JICA PPP T/A in early 2015, a change in project scope was done to focus more on building capacitites of IAs in carrying out PPP-related tasks in line with the respective levels of institutional competency in PPP project development, formulation and management of each selected IAs.

2.2 Delivery Schedule

The JICA PPP T/A started in November 2014. Due to change in project scope, the Expert Team resumed its activities in October 2015. Representatives from the PPPC, JICA, and the Expert Team convened to reconfigure the strategic approach in implementing the project. Soon after agreeing on the general parameters of the revised strategic approach in carrying out the project, the Expert Team submitted the concept note to the respective IAs to lay out the proposed set of activities to be carried out; the revised timelines for the activities; the expected benefits of the activities to be carried out. The concept notes were unanimously concurred by the respective IAs.

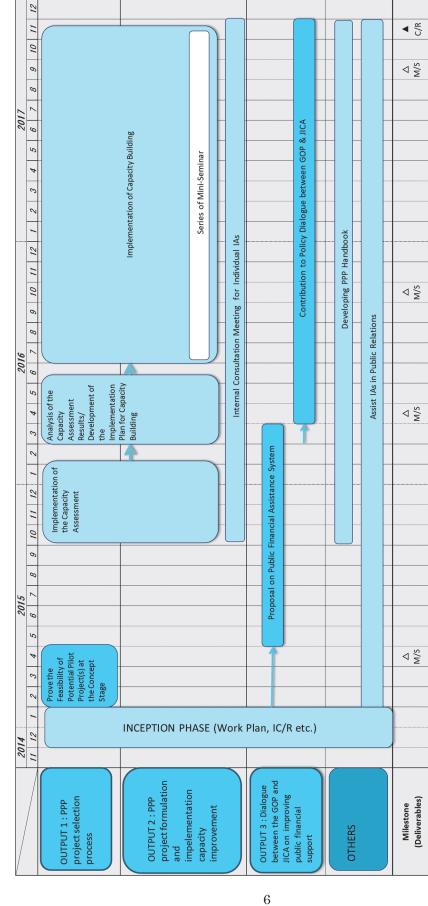
The Expert Team then implemented a series of capacity assessment of the four IAs to understand their institutional capacities in formulating, processing and implementing PPP projects from October 2015 until March 2016. Results of the analysis of the IAs were formally presented in a convening meeting on 29 March 2016 hosted by the PPPC and attended by the four IAs, and JICA. Based on the results of the assessment of the respective IAs, the Expert Team suggested the overall direction of the PPP capacity development program as well as possible approaches for capacity development for the IAs. The results of the assessment and the proposed capacity development approaches to be carried out for the four IAs were concurred by the stakeholders.

While the implementation of activities for the JICA PPP T/A were slowed down due to the presidential elections and political activities in May 2016, the Expert Team continued its activities for

DPWH and LGU (Iloilo City). The Expert Team held educational programs, formulated tools for enabling IAs to evaluate PPP feasibility and managing contracts. On the other hand, the Expert Team had to place activities on hold for for DOH and DOTr given the organizational reconfigurations and policy revisions that were being undertaken in these agencies. Activities for DOH and DOTr was resumed in the last quarter of 2016 with the expert team developing capacity development tools for project identification and a contract management guide for the respective IAs.

Although most of activities were completed at the end of October 2017, activities for DOH continued until the end of November given the renewed pace of PPP related activities of DOH and the planned activities of the recently formed PPP Unit for Health. Refinements were also done to the supplemental manual for DPWH to support their sewerage and septage subsidy program that may utilize PPPs. While comprehensive drafts have been produced as early as October, DPWH along with PPPC requested in mid November to produce a more succinct version of this document as a reference for LGUs. By 27th of November 2017, the final wrap up meeting was held to discuss the results of the activities carried out for the project as well as ways forward and possible future actions for further enhancing the capacity of the IAs in terms of PPP project development, processing and implementation.

Table 2-1 Delivery Schedule (After the change of scope)



C/R: Completion Report M/S: Monitoring Sheet

Chapter3 Result of the Project

3.1 Achievement of the project

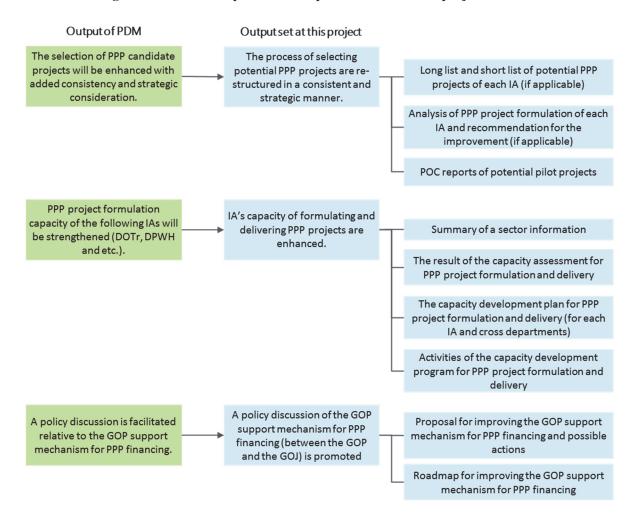
The JICA PPP T/A initiative was carried out in line with the Project Development Matrix (PDM) to achieve the envisaged goal. On the other hand, JICA and the Expert Team agreed that the core components of the existing PDM be retained as this will still achieve the goal and purposes of the project. Furthermore, major alterations would drastically change the structure of the PDM. Below is a summary of the Status of the PDM at the end of the project:

Table 3-1 PDM of the Project

Tonio	Table 3-1 PDM of the Project				
Topic	Summary	Objectivery Verifiable Indicators	Status at the end of Project		
Overall goal	An improved PPP project forumulation process will contribute to infrastructure development necessary for economic development of the Philippines.	For next 3 years after the completion of the project, 1. The number of both PPP projects being put to bidding and contract of those which successfully awarded will increase in comparison to the previous 3 years. 2. The share of investment in infrastructure against GDP rises.	Although it is impossible to examine the number of PPP projects for next 3 years, the GOP intends to increase the budget for the infrastructure development.		
Purpose of the project	Capacity of the GOP will be improved to formulate PPP projects.	 For next 3 years after the completion of the project, 1. More PPP projects are put to bid per year than the previous 3 years. 2. The average number of bidders per PPP project bidded out increases than the previous 3 years. 	It is impossible to examine the number of biddings and bidders for next 3 years.		
Outputs	The selection of PPP candidate projects will be enhanced with added consistency and strategic consideration. PPP project formulation capacity of the following IAs will be strengthened. DOTC (Current DOTr) DPWH DOE DOJ DOJ DOH	Use of masterplans is institutionalized in the process of PPP project forumulation. For the following 3 years after the completion of the project, more PPP projects are put to bid per year per the IA than the previous 3 years.	Although the use of masterplan was not institutionalized, the Expert Team recommended IAs to identify projects based on masterplans. PPP capacity development program was provided to DOTr, DPWH, DOH and LGU (Iloilo). It is impossible to examine the number of bidding for next 3 years.		

A policy discussion	Establishment		and/or	Fund for	contingency
is facilitated relative	improvement	of	new	liabilities	are set at the
to the GOP support	implementation	guidelines	as to	national	government
mechanism for PPP	the GOP financia	ng support.		level.	
financing.					

Figure 3-1 Relationship between output of PDM and this project



3.2 Activity Results of Each Output

The details of activities of each output are as follows:

(1) Output 1: The process of selecting potential PPP projects are re-structured in a consistent and strategic manner.

Output 1 was largely achieved. The result of Output 1 indicators are outlined as follows:

#	Indicators	Result
1-1	Long list and short list of potential PPP projects of each IA (if applicable)	Partly achieved Please refer to 3.2 (2) for details.
1-2	Analysis of PPP project formulation of each IA and recommendation for the improvement (if applicable)	Activities were not delivered due to the change in scope of the project
1-3	Proof of Concept (POC) reports of potential pilot projects	Achieved Please refer to 3.2 (2) for details.

1-1 Long list and short list of potential PPP projects of each IA (if applicable)

1-2 Analysis of PPP project formulation of each IA and recommendation for the improvement (if applicable)

The JICA PPP T/A activities related to PPP project formulation for specific projects were considered beyond the scope of the activities. As such, activities such as long listing and short listing of potential PPP projects for each IA (Output 1-1) and the conduct of an analysis of PPP project formulation of each IA (Output 1-2) were not carried out.

It was understood that developing capacities properly and methodically identify and select viable PPP projects projects is of primal imporantance for IAs. In line with this, relevant reference materials were developed for the DOH and the City Government of Iloilo. To assist the DOH in proper scoping of PPP interventions in hospital operations, a reference material entitled: "Guidebook for Hospital Project Screening and PPP Project Scoping" was developed. On the other hand, to assist Iloilo City to align their PPP interventions to their overall local development strategy, a reference material called "A Framework for Delivering PPPs as Part of Infrastructure Strategy" was developed. These materials were developed to serve as references for IAs to methodically identify prospective PPP projects and broadly identify the components and structures that can be bundled into a proposed PPP intervention.

1-3 POC reports of potential pilot projects

Before the change in project scope, three POCs were examined; Ortigas LRT Project, Sucat Power Plant Project, and the Metropolitan Naga Water District Septage Treatment Facility and Related Structures Project. Summary of specific POC are as follows:

Table 3-2 Summary of Selected Projects' POC Prior to Change in Scope

Ortigas LRT Project	miniary of Selected Frojects Toe Frior to Change in Scope		
Project Summary	11 km. elevated alignment from the SM Mall at Taytay to 200 m before		
	EDSA		
	ROW along Tatay Diversion Road and Ortigas Avenue and Connection		
	via walkway to MRT3.		
	Number of daily passengers during weekdays in year 1 (2021) is		
	estimated to be about 107,000 and about 345,000 in year 30 (2050).		
Total Project Cost	PhP 18,647 million (for the infrastcuture developed through BT)		
	PhP 20,792 million (for the infrastructure developed through BTOM)		
PPP modality for the	BT: ROW, guideway and stations, and associated civil works		
evaluation	BTOM: signalling, train depot, rolling stock and O&M		
Potential of PPP	VfM can be achieved by PPP		
	After the comparison between "Separate procurement of BT and		
	BTOM" and "Dual procurement structure of BT and BTOM," the study		
	concluded that the latter could achieve better NPV. This is because		
	removing the upfront costs of the guideway and stations from the BTOM		
	will decrease risks for the concessionaire.		
Concerns	As the revenue from rail and no-rail cannot recover the cost of O&M,		
	public financial support is necessary.		

Sucat Power Plant Project		
Project Summary	Sucat is an area located just south of Metro Manila. The project is to	
	install new facilities of an old fossil fuelled power station as it could not	
	meet emission requirements. The facility is planned to be retroffited as a	
	natural gas power plant.	
	A modern high efficiency 400MW Combined Cycle Gas Turbine	
	(CCGT) could be built on the site—needs gas transport and gas supply	
	Key points are its contribution to the viability of Batman1 pipeline in	
	terms of commercial and economic viability.	
Total Project Cost	Pipeline : US\$ 2.2 million/km	
	Power plant: US\$ 25 million /Megawatt Hour (MWh) including O&M	
PPP modality for the	As direct government investment in power generation is prohibited	
evaluation	under the law ³ , it is impossible to deliver a project through PPP.	
	Therefore, the study was implemented to show the viability of	
	combining sale of power plant and construction of new pipeline by	
	private companies.	
Potential of PPP	Commercial viability of the project is high due to its proximity to Metro	

The overarching law referred to is Republic Act 9316 or the Electric Power Industry Reform Act (otherwise known as EPIRA)

	Manila and the low rate of gas transmission cost to power generation cost. However, the project should be developed involving the construction of a new natural gas pipeline.	
Concerns	Due to its proximity to Metro Manila, potential of site development is high and alternative use aside from power generation is possible. Therefore, the sale of the site is not an ideal option at the point of developing the proof of concept for this project.	

Metropolitan Naga Water District Septage Treatment Facility and Related Structures Project				
Project Summary	Development and O&M of Septage Treatment Facility in the			
	Metropolitan Naga Water District.			
	NSSMP grant in which 40% ⁴ of total project cost would be subsidized is			
	considered.			
Total Project Cost	PhP 149 million			
PPP modality for the	The initial construction cost and O&M cost after the completion of			
evaluation	facilities will be recovered from Environmental fee.			
Prospects and	From the perspective of investors, the project might not make profit for			
concerns	its investment.			

As part of the JICA PPP T/A, basic evaluation of PPP viability of selected projects such as Sewerage and Septage Infrastructure Redevelopment Project in Baguio City involving DPWH as well as the Water and Wastewater Treatment Plant in Iloilo City were also undertaken.

In the case of Baguio City, the proposed initiative was to upgrade and expand its existing sewerage infrastructure. The facility was constructed with through a grant from JICA and has been in operation since the 1980's. Given the aging infrastructure and the continuous growth of the population in their locality, Baguio City needed substantial investments to accommodate the growing demand for wastewater and sewerage treatment in the locality.

On the other hand, DPWH and other national agencies have been promoting the National Sewerage and Septage Management Program (NSSMP) to local government units. The purpose of the NSSMP is to improve water quality and protect public health in the Philippines by 2020. NSSMP is grounded on the Philippine Clean Water Act (2004) and its accompanying IRR. The NSSMP placed DPWH in charge of managing a support mechanism for local governments to establish their necessary sewerage and septage systems by way of national government subsidy for LGUs. Therefore, as part of the capacity development program, the Expert Team, together with the PPPC, Baguio City and DPWH assisted Baguio City local government in evaluating the viability of the proposed intervention as a PPP that will apply for NSSMP subsidy.

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⁴ NSSMP subsidy rate is planned to increase to 50% of the total project cost.

As for the activities for Iloilo City, a water and wastewater treatment project was identified with the use of the project selection criteria and PPP scoping tool developed by the Expert Team called "A Framework for Delivering PPPs as Part of Infrastructure Strategy." As the planned project has yet to proceed to the design phase, the Expert Team set broad infrastructure specifications which can accommodate the current demand, estimated Capital Expenditures (CAPEX) and Operational Expenditures (OPEX) and an assumed viable project delivery structure. The POC for the said project focused mainly on economic and financial viability of the project.

Table 3-3 Summary of POC Used as Case Studies in the Capacity Development Program Activities

Sewerage infrastructure redevelopment project in Baguio City			
Project Summary	Expansion and update of the existing waste water treatment plant and		
	sewer pipelines, and the development of new infrastructure to		
	accommodate increased demand		
	Scenario 1: Update and expansion of the existing wastewater treatment		
	plant and replacement and extension of sewer pipe.		
	Scenario 2: Construction of small-scale waste water treatment plant and		
	related facilities.		
Total Project Cost	Scenario 1: PhP 1,300 million		
	Scenario 2: PhP 500 million		
PPP modality for the	BTO (NSSMP grant and the adoption of an availability based payment		
evaluation	scheme is considered)		
Potential of PPP	Both scenarios can achieve VfM. However, scenario 2 may not be		
	attractive to potential investors due to small project scale.		
Concerns	The study focused on infrastructure projects which should be developed		
	within the medium term. To attract private investors, Baguio City needs		
	to show its intenion to package the project as a PPP		
	The project which includes both drinking water provision and waste		
	water treatment is expected to have better commercial viability.		
	Therefore, partnership between LGU and WD will be key to improve the		
	project efficiency through PPP.		

Water and Sanitation Infrastrcuture Development Project in Iloilo City				
Project Summary	Development of water supply system including: raw water reservoir, a			
	water treatment plant, and distribution networks.			
	Development of wastewater treatment system including: sludge			
	collection and transmission, and wastewater treatment plant.			
Total Project Cost	PhP 7,474 million			
PPP modality for the	DBOT			
evaluation				

Potential of PPP	Without VGF case, IRR is about 4%, NPV is below zero and DSCR is		
	less than 1. Therefore, there is no PPP viability from a financial		
	perspective.		
	To make the project viable, 35% of VGF to total project cost is needed.		
Concerns	Location of the water treatment plant and wastewater treatment plant		
	should be examined.		
	Quality and quantity of raw water from the floodway should be		
	examined.		
	Re-examination of cost estimation is needed.		
	Determine the possibility for VGF payment.		

By working with IAs for developing the POCs, IAs learned that not all all the public projects could be delivered through PPPs. Even if PPP is the best option, IAs in some instances are required to provide financial contribution to make projects viable and bankable.

(2) Output 2: IA's capacity of formulating and delivering PPP projects are enhanced.

In terms of enhancing the capacity of IAs in formulating and delivering PPPs, the following results were achieved:

#	Indicators	Result
2-1	Summary of sector information	Achieved Please refer to 3.2(3)(5) for details.
		110000 10101 to 3.2(3)(3) 101 details.
2-2	The result of the capacity assessment for	Achieved
	PPP projet formulation and delivery	Please refer to 3.2(3) for details.
2-3	The capacity development plan for PPP	Achieved
	project formulation and delivery (for each	Please refer to 3.2(3) for details.
	IA)	
	It includes the department order draft,	
	mandate, organizational structure of PPP	
	Units based on the result of the capacity	
	assessment.	
2-4	The capacity development plan for PPP	Achieved
	project formulation and delivery (across	Please refer to 3.2(3) for details.
	departments)	
2-5	Activities of the capacity development	Achieved
	program for PPP project forumulation	Please refer to 3.2(3) for details.
	and delivery	

2-1 Sector Outline

Sector outlines of targeted IAs except LGU (Iloilo City) have been developed. The information below shows the analysis done on each sector as included in the Philippine PPP Handbook which mentioned the overall trends of toll road, rail, water and health sectors.

In the conduct of the project, several trends and observations have been observed in the overall governance of PPPs in the Philippines, especially in the latter part of project implementation. Such trends are based on official pronouncements by high-level government officials as well as recent decisions and policies of implementing agencies.

■ Trimmng down of pipelined projects

In the latter part of the Aquino administration, the PPP project pipeline included 51 different projects (as of January 2016). However, 1.5 years after the Duterte administration, itw as observed that the project pipeline has been trimmed down significantly. As of November 2017, only 22 projects were at different stages of project implementation, mostly under project development. A significant number of transport projects were taken out of the pipeline, most notably the 5 regional airport projects.

Opennes to unsolicited proposals

The current administration has been vocal in being more open to unsolicited proposals. This is in realization that government does not have monopoly over possible high impact projects for the contry. During the firest few months of the Duterte administration, the NLEX-SLEX Connector Road, an unsolicited project that has long been under the PPP pipeline was eventually approved for implementation. Also, two major unsolicited infrastructure projects have come into the pipeline that are currently under evaluation by the Philippine government- The Manila Bay Integrated Flood Control, Coastal Defense and Expressway as well as the East-West Rail Project, both of which were laid out and conceptualized by private sector proponents.

■ Focus on rural and "non-big ticket" projects

The current government has also been vocal in pursuing PPP projects out of the countryside and projects with smaller capial costs (below 300 million Php). Pronouncements from the Duterte administration anticipates 80% of infrastructure projects would be situated outside Metro Manila. Such openness for smaller, non-Manila focused projects is evidenced by the number of projects that are situated outside Manila or have major components outside the Phlippine Capital (47% of projects in the Philippine PPP pipeline)

Projects featuring hybrid implementation structures

The government has likewise been vocal about exploring a more hybrid approach to project delivery where construction of major infrastructure projects would be done via ODA or through government allocations (GAA) while on the other hand, operation and maintenance would be carried out through PPP. It was indicated that the government's intent is to ensure user fees are kept low while enruing infusion of private sector operation and maintenance efficiency.

On May 2017, NEDA approved a DOTr manifestation that it intends to shift implementation from

of several airport and rail projects from pure PPP projects into a hybrid PPP. Projects such as the New Bohol Airport Development and Operations/Mainenance Project and the Philippine National Railways Commuter System O&M have been eventually restructured into hybrid PPPs.

These being said, PPPs would remain as a major component of the country's infrastructure development strategy.

A) DOH

■ Historial change of capital outlay

Capital outlay (actual) of DOH has risen from PHP 8,712 million in 2012 to PHP 23,120 million in 2016. Most notable was the rate of increase from 2015 to 2016.

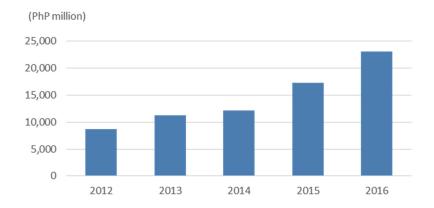


Figure 3-2 History of Capital Outlay of DOH

Source: DBM

■Projects

The projects approved by NEDA Board under the Duterte administration to date are shown at Table 3-4.

Table 3-4 Projects approved by NEDA Board under the Duterte administration (DOH)

Project	Summary	Mode	
Modernization of Gov. Celestino Gallares Memorial Hospital Project	 Expansion of hospital to 500-bed medical center. Site development, warehouse building, medical equipment, IT systems. 	GAA (To be confirmed)	
-Eastern Visayas	· Expansion of hospital to 500-bed capacity	GAA (To be confirmed)	

Regional Medical Center		medical center	
Modernization Project	•	New IT System and New Hospital with Medical Equipment	

It is expected that through the implementation of the Philippine Health Agenda 2016-2022⁵, several other new projects would be laid down by the DOH to help attain its multiple goals of providing financial risk protection, improved health outcome and a more responsive healthcare system. Relevant infrastructure and equipment would be imperative in implementing actual projects to be carried out by the DOH for providing better healthcare to treat communicable and non-communicable diseases as well as diseases related to rapid urbanization and industrialization. Furthermore, as the efficiency of service delivery networks are inherently linked to functional medical equipment and infrastructure, more projects are expected to come into the national development pipeline for health. Private sector efficiency may be tapped for this purpose through PPPs.

■ Main PPP investors/operators

While private sector involvement in government health facilities are mainly in the form of termed equipment lease, supply and service contracts, the health sector is not short of potential investors and operators that may find interest in venturing into PPPs. Among the major entities that are active in the health sector include the Metro Pacific Hospital Holdings, Inc. (MPHHI) which is under the Metro Pacific Investments Corporation (MPIC), QualiMed Health Network (a health network owned and operated by the partnership of Mercado General Hospital, Inc (MGHI) and Ayala Land, Inc. (ALI), Mount Grace Hospital Ventures, Inc. and the Medical City Network.

B) DPWH

■ Historial change of capital outlay

The capital outlay of DPWH has tripled to PhP 405,269 million in 2016 from PhP 132,195 million in 2012. Most notable was the rate of increase from 2015 to 2016.

⁵ The Philippine Health Agenda is the country's health sector roadmap driven by attaining the globally recognized health related Sustainable Development Goals. It is geared towards attaining universal health insurance, improving the service delivery networks, and providing quality healthcare services covering all life stages and the triple burden of disease.

(PhP million)
500,000
400,000
200,000
100,000
0
2012
2013
2014
2015
2016

Figure 3-3 History of Capital Outlay of DPWH

Source: DBM

■ Projects (Planned or Delivered)

Examples of projects in the road and water sector that have been planned or delivered by DPWH are shown at Table 3-5 List of Projects in Road and Water Sector. PPP modality is adopted in toll road projects.

Table 3-5 List of Projects in Road and Water Sector

Project	Summary	Status	Mode
Daang Hari-SLEX Link Road	New 4-kilometer 4-lane toll road	In Operation	PPP
NAIA Expressway Phase II	4-lane, 7.75 km elevated expressway and 2.22 km at-grade feeder road	In Operation	PPP
Metro Manila Skyway Stage 3	14.82 km. 6-lane elevated toll road	Ongoing (Construction Phase)	PPP
Cavite-Laguna (CALAX) Expressway	4-lane, 44.63 km closed-system toll expressway	Ongoing (Construction Phase)	PPP
Manila Bay Integrated Flood Control, Coastal Defense and Expressway Project	The project is an unsolicited proposal by the Coastal Development Consortium (CDC). It proposes to adopt Build-Gradual Transfer (BGT) for the City Flood Control and Coastal Defense components, and Build-Operate-Transfer (BOT) for the expressway component.	Ongoing (under review)	PPP (Unsolicited)

In a second of the second of t	Don't condition in the state of	0	CAA
Improvement/ Widening of	Road condition improvement projects	Ongoing	GAA
General Luis (Quezon City	in the 8.89-kilometer General Luis-		
to Valenzuela City) Project	Kaybiga-Polo-Novaliches Road		
Plaridel Bypass Toll Road	Upgrading the existing Plaridel Bypass	In operation	GAA/ODA
Project	Road by expanding the 2-lane		
	carriageway national road to a 4-lane		
	toll expressway		
Road Improvement and	The Project includes:	Ongoing	ODA
Institutional Development	· improvement/ reconstruction of		
Project	11 road sections (10 contract		
	packages) along nine national		
	roads with a total length of about		
	339.804 km		
	Detailed Engineering Designs		
	(DED) for road improvement of		
	14 road sections		
	· Institutional Capacity		
	Development in support of		
	DPWH's mandate and		
	development objectives		
Priority Bridges under the	Construction of a new bridge of a 4-lane	Ongoing	ODA (Grant)
Pasig River, Marikina	deck of approximately 725 lineal		
River and Manggahan	meters		
Flood			
Bridges Construction			
Project (Binondo-			
Intramuros and Estrella-			
Pantaleon Bridges)			
Arterial Road Bypass	Construction of arterial road bypass of	Ongoing	ODA
Project Phase II	24.61 km		
Metro Manila Flood	The project includes:	Ongoing	ODA
Management Project		(Negotiations)	
(MMFMP), Phase I	remainment of 50 pumping	(1.050.11110115)	
(1711711 1711), 1 11050 1	stations through replacement of		
	pumps and construction of 20 new		
	pumping stations in Manila		
	Pasay , Pasig , Mandaluyong ,		
	San Juan Caloocan		
	Valenzuela, Quezon City		
	· Participatory housing and		
	resettlement		
NLEX-SLEX Connector	Construction and operation and	Ongoing	PPP
Road	maintenance (O&M) of an 8 km. 4-lane		
	elevated expressway over the		
	Philippine National Railway (PNR)		
	right of way.		
	115111 01 way.		

Source: Pipeline of PPP Projects (as of 17 November 2017), the ICC/NEDA Board Approved Projects, and the Public-Private Partnership Projects Approved by the Investment Coordination Committee and Confirmed by the NEDA Board (NB) June 2010-Jun 2017.

■ Main PPP investors/operators

Ayala Corporation, Metro Pacific Investments Corporation (MPIC), San Miguel Corporation (SMC) and other local companies have constantly expressed their willingness to join PPP projects in the sector. As there have been many toll road PPP projects in Metro Manila and nearby areas, it is expected that an increasing number of private companies will show interest in the market. On the other hand, foreign private companies are reluctant to step into the PPP projects of such sector due to the dominant presense of the large companies in the market. It is assumed that the comprehensive development approach along with the land development of surrounding area, an approach taken by the said domestic companies has been creating barriers to entry for the foreign private companies.

Table 3-6 PPP Investors/Operators in Toll Road Sector

	D :	
Invertos/operators	Project	
Ayala Corporation	Daang Hari-SLEX Link Road	
Vertex	NAIA Expressway Project Phase II	
Citra Central Expressway	Metro Manila Skyway Stage 3	
Corporation (CCEC)		
Metro Pacific CALA Hodlings	Cavite-Laguna Expressway	
(MPCALA)		
Coastal Development Consortium	Manila Bay Integrated Flood Control Coastal Defense and	
(CDC)	Expressway Project	
Metro Pacific Investments	NLEX-SLEX Connector Road	
Corporation		

C) DOTr

■ Historial change of capital outlay

The capital outlay for DOTr (formerly DOTC) has dramatically increased to PhP 28,865 million in 2016 from PhP 3,591 million in 2012.

(PhP million)

35,000

30,000

25,000

10,000

5,000

2012

2013

2014

2015

2016

Figure 3-4 History of Capital Outlay of DOTr

Source: DBM

■ Projects (Planned or Delivered)

In the rail sector, while PPP modality was evaluated for a number of projects, a substantial number of these have been subjected to re-evaluation, or have been withdrawn from the PPP Pipeline. In the airport sector, the development of passenger terminals and airport facilities projects, PPP tends to be adopted. However, it is important to note that based on the manifestation of the DOTr to implement several projects as hybrid PPPs⁶, several airport projects initially identified for PPP implementation were taken out of the PPP pipeline.

Table 3-7 List of Projects in Rail Sector

Project	Summary	Sattus	Mode
Manila-Clark	New commuter line and airport express railway	Ongoing	ODA/GAA
Railway	between Malolos and Clark Green City (CGC)	(Studies)	
	through Clark International Aiport (CRK) of a total of		
	69.5 km		
	Phase I – Malolos to Clark International Airport		
	(50.5 kms)		
	Phase II – Clark International Airport to Clark		
	Green City (19 kms)		
LRT Line 6	New 19-kilometer light rail line along Aguinaldo	Ongoing	PPP
	Highway from Niyog, Bacoor to Dasmariñas City in	(under	
	Cavite.	review)	

_

⁶ Hybrid PPP projects as defined in pronouncements of the government entails having projects designed and constructed through government funds or official development assistance, while having the operation and maintenance of such asset through a PPP.

South Line of the North-South Railway Project	The project includes: Commuter Line from Manila to Calamba City in Laguna (56km)	Ongoing (under review)	GAA/ODA
	Long-Haul Linefrom Manila to Legazpi City in the Bicol Region (478 km main line)		
	Long-Haul Line Expansion is considered		
LRT Line 2 Operations and Maintenance	Operation and maintenance of existing LRT 2 line and 4-kilometer East Extension.	Ongoing (under review)	PPP
LRT Line 1 Cavite Extension and Operation and Maintenance	Construction of the Cavite Extension (11.7km) as well as the operation and maintenance of the integrated system upon completion of the project.	Ongoing	PPP
Automatic Fare Collection System	Installation of ticketing system with contactless-based smart card technology on LRT Line 1 and 2 and MRT Line 3, and operation and mainteinance of fare collection system.	Completed (in operation)	PPP
East-West Rail Project	A mostly elevated 9.4km railway line from Diliman, Quezon City to Lerma, Manila The project is an unsolicited proposal by East West Rail Transit Corporation and AlloyMTD.	Ongoing (evaluation of unsolicited project)	PPP (Unsolicited)
Metro Manila Subway	a 25.3km subway, which will run from Mindanao Avenue in Quezon City to FTI in Taguig then to NAIA.	Ongoing	ODA
Mindanao Railway	A 102.28km commuter railway from Tagum City in Davao del Norte to Digos City in Davao del Sur.	Ongoing (Approved by NEDA)	GAA/ODA
Common Station / Unified Grand Central Station (North Extension Project)	Common station will connect the LRT Line 1 North Extension, MRT 3, and MRT 7. Total concourse area of 13,700 square meters.	Ongoing (Approved by NEDA)	GAA
MRT Line 7	The project includes the construction and O&M of the 23 km elevated railway line from San Jose Del Monte, Bulacan to MRT 3 North Avenue in Quezon City and the 22 km asphalt road.	Ongoing (Construction Stage)	PPP (Build- Gradual Transfer- Operate and Maintain)

Table 3-8 List of Projects in Airport Sector

Project	Summary	Status	Mode
Mactan-Cebu	Construction of a new passenger terminal with a	70.99%	PPP
International	capacity of about 8 million passengers per year,	complete as of	
Airport	and the O&M of old and new facilities.	September	
		2017	

Bicol	The project includes:	Ongoing	GAA
International	· Construction of new domestic terminal	0.1.80.11.8	
Airport	• Extension of runway from 2.1 to 2.5 km		
1	Redesign of navigation aids, security		
	equipment and airport rescue and		
	firefighting vehicles		
Ninoy Aquino	Improvement of assets for air traffic and land side	Ongoing	PPP
International	management and passenger services.	(NEDA Board	
Airport Project		approval	
		expired 14	
		March 2017)	
New Bohol	Construction of a new international airport to	Ongoing	ODA/GAA
Panglao Airport	accommodate the increasing number of		
	passengers in the island of Panglao in the Province		
	of Bohol.		
New Bohol	O&M of the new airport is under construction.	Planned	PPP
Panglao O&M			
Clark	Construction of new passenger terminal. The total	Ongoing	GAA/ PPP
International	floor space of the terminal after the expansion will	(Procurement)	
Airport Expansion	be 82,600 m ² .		
Project			
Clark Airport	O&M of Clark airport	Ongoing	PPP
Operations and		(under	
Maintenance		procurement)	
Laguindingan	Development of infrastructure and facilities, and	Pending	PPP
Airport O&M	the installation of all required equipment, and		
	O&M of Laguindingan Airport.		
Night Landing	Establishment of night landing capabilities for 28	Ongoing	GAA
Capabilities for	regional airports such as Naga, Dumaguete,		
Regional Airports	Dipolog, Cotabato, Tuguegarao, Cauayan,		
	Pagadian and Ozamiz to accommodate flights		
	after sunset.		
Iloilo, Bacolod,	Provision of additional facilities and other	Ongoing	PPP
and Davao Airport	necessary improvements to enhance safety,		
Development,	security, access, and operational efficiency,		
Operations and	excluding Air Navigation Control, Air Navigation		
Maintenance	Services and their associated services.		
Project			

Source: Pipeline of PPP Projects (as of 17 November 2017), the ICC/NEDA Board Approved Projects, and the Public-Private Partnership Projects Approved by the Investment Coordination Committee and Confirmed by the NEDA Board (NB) June 2010-Jun 2017.

■ Main PPP investors/operators

Aside from local conglomerates such as Ayala, MPIC and SMC, foreign investors such as

Macquarie Infrastructure Holdings have shown keen interest in participating in the country's PPP market.

Table 3-9 Private Investors/Operators in Rail and Airport Sector

Companies	Projects	
Light Rail Manila Corporation (a consortium of Ayala	Extension and Operation and Maintenance	
Corporation, Metro Pacific Light Rail Corporation	of the LRT Line 1 Project	
and Macquarie Infrastructure Holdings)		
San Miguel Corporation	MRT Line 7 project	
GMR Infrastructure and Megawide Consortium	Cebu-Mactan International Airport Project	

D) Potentials and challenges of PPP in the Philippines

The Build-Build initiative of the government will definitely provide a strong momentum for more infrastructure projects as it set to invest in around PhP 8 Trillion for crucial infrastructure development initiatives. On the other hand, the approval of NEDA to segregate projects to have engineering and construction for GAA/ ODA funding and O&M components as PPP for several transport sector projects⁷ essentially shifted the implementation mode of the capital requirements of transport sector projects from being private financed to that of government or ODA funded. Operation and maintenance of constructed projects would remain areas for PPP financing. It is important to note though that "hybrid PPP" structuring would be carried out on a case-to-case basis, meaning not all projects deemed viable for PPPs would bestructured as hybrids. In this case, other projects with relatively smaller project costs and infrastructural investments are still expected to be delivered through PPP from the construction stage onewards.

As for the rail sector, the construction phase of the projects tends to be delivered as GAA/ ODA funded ones. On the other hand, sewerage projects whose scale is relatively smaller than rail can be delivered through PPP from the construction stage. Moreover, the national grant system of NSSMP provides prospects to help LGUs and private companies to implement PPP infrastructure projects in the water and sanitation sector. At present though, there has yet to be a project to be approved for NSSMP subsidy support.

For the toll road sector, private sector stakeholders have maintained interest in PPP projects. Due to heavy traffic volume in Mega Manila, PPP projects that include both construction and O&M can remain viable ventures. On the other hand, toll road PPP projects outside Manila might need to be "hybridized" due to their unpredicted commercialities.

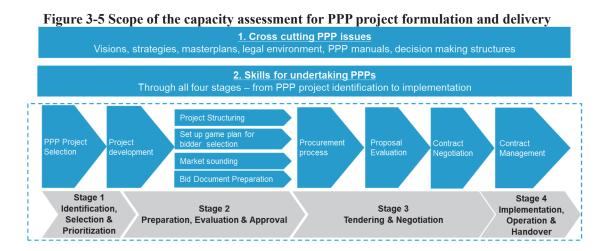
As for the health sector, there has been no PPP projects that went on to be delivered under the BOT

⁷ This decision was made on May 17 2017 upon manifestation of DOTr to have several airports implemented under this arrangement.

Law (only the Modernization of the Philippine Orthopedic Center was successfully awarded, only to be eventually terminated by government). However, it is important to note that provision, maintenance and management of medical equipment can be delivered through PPP. Therefore, it is expected that DOH gradually adopt PPP based on lessons learned and other "quasi-PPP" modalities adopted by specific hospitals that are not within the current PPP framework but involve direct partnerships with the private sector.

2-2 The result of the capacity assessment for PPP projet forumulation and delivery

The capacity assessment for PPP project formulation and delivery started in October 2015.



The Expert Team submitted a concept note for the implementation of the capacity assessment of each partner IA (Please refer to Technical Assistance Deliverables A-1). These concept notes provided the IAs with information such as the purpose of the assessment, the expected outcomes and implementation schedule. After receiving the feedback from IAs on the concept notes, the Expert Team developed the assessment tools. With the assessment tools finalized the Expert Team assigned the experts for each IA to administer the PPP capacity assessments program for the respective IAs.

The questionnaires used for the assessment cover the two broad subject areas; "Cross cutting PPP issues" and "Skills for undertaking PPP". Each subject area was broken down into elements. The Expert Team evaluated the current capacity of each IA whether these satisfy the criteria of items or not. A 4-scale scoring system was developed that had the following corresponding ratings: "4 (Best Practice)", "3 (Reasonable capacity, but not best practice), "2 (Minimal capacity), and "1 (No capacity). The average scores of small elements are taken as the capacity of IAs.

JICA Expert Team to PPP Center and IAs to PPP Center to identify submit the Concept send feedbacks on the and assign liaison(s) Note to PPP Center Concept Note to JICA within IAs for JICA and IAs experts experts JICA Expert Team to IAs to submit the JICA Expert Team to submit submit information information requested interview/workshop request to IAs by JICA experts plans to IAs PPP Center and IAs to JICA Expert Team to send feedbacks on the JICA Expert Team to submit the draft draft Capacity conduct interviews report on Capacity Assessment report to /workshops with IAs Assessment JICA Experts as necessary JICA Expert Team to submit final Capacity Assessment Report to PPP Center and IAs

Figure 3-6 Process of the capacity for PPP project formulation and delivery

Table 3-10 Assessment Elements

C L		Table 3-10 Assessment Elements	
Subject		Assessment Elements	
Skills fo	or	■ Identification, Selection & Prioritization	
undertaking PPP		· Consistency of the project to the policy of the implementing agency	
		· Commitments from related entities	
		· Cost-benefit analysis	
		· Demand forecast	
		· Commercial feasibility	
		· VfM calculations (preliminary stage)	
		· Market sounding (preliminary stage)	
		· Project Study team (within PPP unit)	
		■ Preparation, Evaluation & Approval	
		· Project governance	
		· Project Preparation Funding	
		· Demand forecast (in detail)	
		· Funding recourse (income source) of private sector operator	
		· Commercial feasibility	
		· VfM calculations (reiterated)	
		· Market sounding (Re-listed)	
		· Stakeholders handling	
		· Analysis of legal requirement	

- · Considerations for the various contract options
- Regulations surrounding usage fees and incentives for private sector entrance
- · Risk Allocation and Mitigation
- · KPI (Quality Regulation)
- · Circumstances that warrant public interventions (Intervention Option)
- · Dispute Resolution Mechanism

■ Tendering & Negotiation

- Marketing the PPP
- Establishment of the Evaluation Team
- · Request for Qualifications
- · Request for Proposal
- · Communications with bidders
- · Evaluating Bids
- · Negotiation Process

■ Implementation, Operation & Handover

- Establishment of monitoring entity
- Implementation of monitoring
- · Response to contingencies and disputes
- Contract expiry

Overall

- · Decision making mechanism within the implementing agency
- · Employment of external experts
- Securing accountability and transparency

Cross cutting PPP issues

- Visions and strategies
- Medium/long term plans on infrastructure construction and refurbishments
- · Project evaluations
- · Master plans for specific infrastructure projects
- PPP promotions
- · Understanding of PPP attributes
- · Legal environment towards private sector participation
- Assigning responsibilities and decision making processes within public sector in PPP implantation
- · Incentives towards introduction of PPPs
- PPP Units
- PPP Unit members
- · PPP manuals and guidelines
- · Trainings

1. Basic Understanding of PPP 1. Basic Understanding of PPP 1. Basic Understanding of PPP ement(s) 1.7 Legal environments towards private sector participation Laws, regulations, rules etc., to enable private sector participations have been instituted for the segments where private sector participations are expected. Republic Act No. 7718 (BOT Law) Revised IRR of BOT Law hat we collect Republic Act No. 9184 (Government Procurement Reform Act) Revised JV Guidelines ection in charge lements in detail Score /4 dentification of The government of the Philppines defines the roles of private he role of private sectors in Republic Acts etc. DPWH has a clear understanding of ectors in public 4 constitutional and legal restrictions and possiblities for private ervices in Laws. sector to participate in PPP projects, and they can ask for advice egulations and or help to PPP Center and legal advisors in PPPS when required. :onsistency DPWH adheres to the laws, regulation and rules for private sector egulation and participation, and they have legal advisors to have consistency ules, and actual among them. PP process n DPWH through the PPP center and external advisors utilize the of risk-allocation GPRAM to clearly identify risk allocation for PPP projects. ind compensation 4 Compensation in terms of project termination and contigent n Laws, regulation liabilities are clearly indicated in the concession agreements. ind rules Iverage Score / 4 4

Figure 3-7 Example of Assessment Sheets

The capacity assessment activities were implemented from the late 2015 to the beginning of 2016. The results of the assessment were reported by the Expert Team at the convening meeting held in March 2016.

Overview of Assessment Results				
Standard	Identification, Selection & Prioritization	Low		
process of PPP	• The only implemented hospital PPP project was facilitated by the DOH PPP agency, CEP3H, which is mainly made up of external experts. Afterwards, CEP3H was dissolved. Thus, the institutional knowledge was not passed on properly to the remaining DOH staff. On the other hand, the Expert Team confirmed the movement of the DOH to launch a new PPP implementing and facilitating body.			
	Preparation, Evaluation & Approval	Low		
	Refer to the comments above			
	Tendering & Negotiation Low			
	• DOH runs its procurement management unit. This unit is seen to have great potential to build tendering and degotiations capability on PPP projects on health.			
	Implementation, Operation & Handover	Low		
	• It is unable to evaluate the said capability since there is no track record of PPP projects procured under the BOT law.			
	Overall	-		
	 DOH is required to review and improve the PPP initiative that heavily depends on the external experts and it is likely that DOH does not have sufficient decision- making process and implementation capability. 			
	 On the other hand, it is observed that DOH has procured and operated sever PPP-like projects that are not bound under the BOT law. 			
Basic unde	erstanding of PPP			
	cilitation platform is not organized in the DOH since CEP3H, s, was dissolved.	formed by mainly exteral		
· Organi	· Organic PPP personnel have not acquired basic understanding of PPP.			

On the other hand, it is likely that basic understanding is obtainable for DOH staff since DOH maintains each legal, technical and procurement management functions in their organizations and there are individual personnel with some degree of fundamental knowledge that can be

further developed to handle PPP activities.

PHOLIO 2014)					
Standard	i				
process of PPP	 The previous PPP implementing body, CEP3H con- experts with distinct specialities, thus it is observed technical capability to manage identification, selection 	that the organization had			
	 On the other hand, the organization had issues in constakeholders in the process of project development, establishers worked on the MPOC project 				
	Preparation, Evaluation & Approval	Mid			
	 CEP3H consisted mainly of external experts, thus organization had technical capability to manage pre approval process. On the other hand, the or coordinating and managing stakeholders in the process and approval, especially with budget negotiation and d 	eparation, evaluation and rganization had issue in of preparation, evaluation			
Tendering & Negotiation Mid		Mid			
	 The bidding process was properly implemented under hand, the involvement of organic DOH staff was line enough at the DOH. 				
	Implementation, Operation & Handover	-			
Unable to evaluate since the only PPP project was terminated.		minated.			
	Overall -				
	 CEP3H is considered to have technical capability an PPPs. On the other hand, it is observed that the organ communication and coordination capabilities with oth department. As such, familiarity of the proposed PPP the level of the CEP3H. 	ization lacked the internal er stakeholders across the			
Basic unde	Basic understanding of PPP Mid				
	• CEP3H experts were highly specialized in their fields with advanced knowledge and were able to facilitate the project identification and evaluation processes smoothly.				
	 On the other hand, it seems that know-how and expertise of CEP3H members were not properly transmitted to organic DOH staff. 				

DPWH

	Overview of Assessment Results		
Standard	Identification, Selection & Prioritization	High	
process of PPP	• DPWH has a unit called the PPP Service, an in-house unit which handles PPP project formulation, evaluation, procurement, and monitoring, and the unit functioned properly. It is made up of organic personnel.		
	• In the toll road sector, DPWH selected feasible PPP projects based on its masterplan developed in cooperation with JICA and other donor agencies.		
	Preparation, Evaluation & Approval	High	
	 The PPP Service conducts project evaluation and ap accordiance set by the PPPC. 	plication appropriately in	
	 The PPP procedures from the preparation of the project ICC application and approval were well maintained in 	•	
	 On the other hand, the communication on unsolicited pand private sectors is deemed unsufficient. 	proposals between DPWH	
	Tendering & Negotiation	High	
	 DPWH established the Special Bids and Awards Concommittee selected private entities to take on PPP projection evaluation criteria. 		
	Implementation, Operation & Handover	High	
	 DPWH has a unit called PPP Service, an in-house unit formulation, evaluation, procurement support, and functions properly. 		
	 With the initiatives of PPP Service, a monitoring team, with PPPC's Policy Formulation, Evaluation and external independent consultants, implemented monitoring 	Monitoring Service and	
	Overall	High	
	 While the DPWH accumulated and shared transaction experiences in the toll road sector effectively, DPWH would experience challengess in applying practical knowledge for wider sectors as its familiarity is limited to the toll road sector. 		
Basic unde	erstanding of PPP	Mid	
	ng term vision in the infrastructure plans is consistent with s. DPWH understood the importance of VfM as an important		
in com	 The PPP Service recognized that its capacity in financial and legal fields is relatively weaker in comparison to their robust capacities in terms of technical/ engineering aspects 		
• DPWH follows the BOT Law for the PPP project formulation, and it also has its own screening criteria based on understanding of the characteristics of infrastructure.			

Overview of Assessment Results

On the other hand, as knowledge in DPWH was limited to the toll road sector, DPWH could not apply practical knowledge they obtained for other sectors or infrastructures in focus.

DOTr

DOIT	DO'lr			
Overview of Assessment Results				
Standard	Identification, Selection & Prioritization	Low		
process of PPP	• DOTr does not have a functional PPP unit and each section implements PPP projects intermittently. Thus, it is observed that there is no existing institutional recall mechanism in DOTr.			
	 There is no evidence of conducting required proced analysis stipulated in the PPP manual. 	lures such as cost benefit		
	Preparation, Evaluation & Approval	Mid		
	 DOTr has secured PDMF support for the development PPP projects. It is observed that DOTr provided prope consultants when conducting demand forecast analysis 	r and sufficient datasets to		
	 On the other hand, it is likely that DOTr does not suffice public consultation, risk allocation analysis, accountable 	•		
	Tendering & Negotiation	Mid to High		
	 It is observed that the DOTr has sufficient experiences in tendering and negotiation for PPP projects. 			
	Implementation, Operation & Handover Low			
	 In precedent cases, it is identified that PPP implem formed before implementation phase. In the mid-2015 team was urgently formedup to take part in contract monitoring for this specific case, yet the unit members with the other functions within DOTr. 	5, the PPP implementation management and project		
	• There are no standardized manual and directions.			
	 There is no sufficient cross-sectional communication knowledge and capability for DOTr as a whole. 	n to enhance institutional		
	 The transaction advisor only supports PPP projects un observed that there is no appropriate and smooth advisor to the DOTr or eventual consultants that work phase. 	transfer from transaction		
	Overall	Low		
	 DOTr has a considerable number of PPP projects. Ye not efficiently and properly managed, resulting to prob project. There is no functional PPP unit and thus no retained. 	plems in later stages of the		
Basic unde	Basic understanding of PPP Low			
 Project is not identified based on the masterplan. DOTr faces legal issues in several instances after the project commencement and is forced to consume considerable time to tackle these issues. 				

LGU (Iloilo)

Overview of Assessment Results		
Standard	Identification, Selection & Prioritization	
process	Preparation, Evaluation & Approval	
of PPP	Tendering & Negotiation	-
	Implementation, Operation & Handover	
	Overall	
	• LGU has limited understanding of the definition and advantages & disadvantages of PPP because they have no experiences on PPP. However, they have formulated JV projects which are not based on the BOT law.	
Basic understanding of PPP Low		
· LGU has limited understanding of the definition, and advantages & disadvantages of PPP		

because they have no experiences on PPP. They have formulated JV projects which are not based on the BOT law, however, it is necessary to develop their capacity in order to deal with the scale and complexity of PPP projects.

2-2 Capacity Development Plan for PPP project formulation and delivery

Based on the result of the capacity assessment for PPP project formulation and delivery, the Expert Team formulated a capacity development plan. Representatives from IAs, the PPPC, JICA and other related organizations attended a convening meeting in March 2016 and agreed upon the direction of capacity development programs for each IA. The direction of the capacity development program is follows:

A) DOH

As observed, there were several administrative and organizational transitions in the DOH that resulted to suspension of activities and transition of PPP implementing unit CEP3H which was eventually dissolved, leading to low scores overall. Thus, the Expert Team decided to implement the capacity development program to the DOH, focusing to enhance its fundamental PPP knowledge and skillsets as follows:

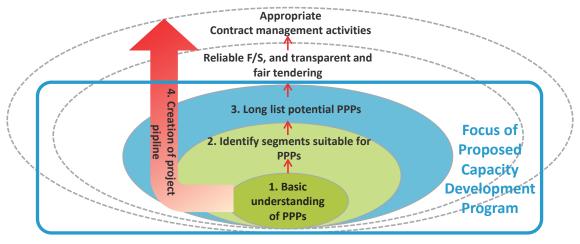
Program 1 To understand the basic knowledge of PPP

Program 2 To identify the PPP suitable area in the Philippine health sector

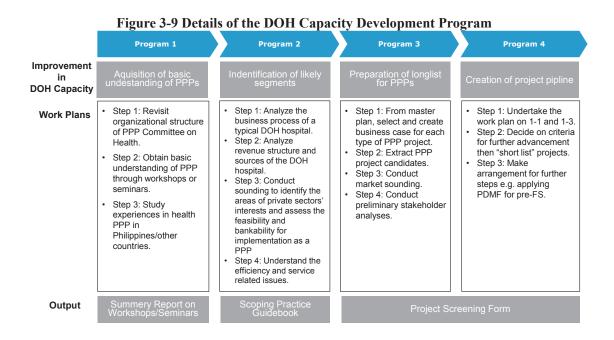
Program 3 To support preparing and drafting project longlist

Program 4 To support preparing and drafting project pipeline

Figure 3-8 Concept Image of DOH Capacity Development Program



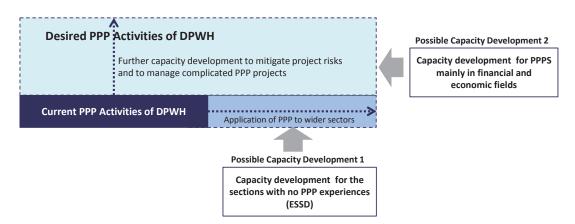
Below is the detail of the capacity development workplan that was agreed between the Expert Team and Public -Private Partnership for Health-Program Management Unit (PPP Unit).



B) DPWH

The Capacity Development program for DPWH involved building capabilities to look into PPP projects in sectors beyond toll roads such as wastewater and sewerage sector. The Expert Team has capacitated DPWH officials to handle more complex PPP projects based on their accumulated experiences and knowledge acquired from previous transactions and other capacity building activities that their personnel previously participated in.

Figure 1 Concept Image of DPWH Capacity Development Program



The Expert Team selected two offices from DPWH – the Environmental and Social Safeguards Division (ESSD) and the Public Private Partnership Service (PPPS), as focal units for the Capacity Development program. The planned capacity building program focused on further strengthening the capacities of the above mentioned units in PPP project development, preparation, and Project implementation. The ESSD was identified as a direct cooperating unit as it is tasked to oversee all NSSMP-related activities and serves as its technical secretariat. On the other hand, the PPPS was selected by virtue of being the mandated unit in charge of PPPs in the DPWH.

ESSD

In order for ESSD to promote the concept of PPPs to LGUs intenting to seek support for their sewerage and septage projects and helping them identify the most ideal project implementation, the capacity building program for DPWH consisted of following elements.

- ① Identify potential PPP projects (Practical Study Program)
- 2 Provide educational opportunities with both ESSD and LGUs
- ③ Formulate Manual/Guideline and Template (on request-basis)

PPPS

The Expert Team developed a program to strengthen the capacities of DPWH to analyze financial and economic issues identified in the process of PPP project formulation.

- ① Implement internal consulting facility to examine financial and legal issues identified during project development and implementation stages
- ② Hold educational programs for improving financial and legal capacity of DPWH personnel
- ③ Prepare Manual/Guideline and Template for advanced financial and legal analysis (on request

basis)

In identifying potential PPP projects for ESSD, the Expert Team selected projects that are suitable for PPP business case development from the target cities of NSSMP, a program in which the ESSD serves as the technical secretariat. The Expert Team delivered a basic PPP financial evaluation module as output for this activity. The Expert Team provided lectures to both the ESSD and PPPS. Further, based on the discussions among the Expert Team, ESSD and PPPS, a guideline for adopting PPP to NSSMP projects as the Manual/Guidline was prepared.

C) DOTr

One of the practical challenges within the DOTr was the limited amount of interface between the unit involved in project development and the unit working on project operations. Those tasked with monitoring projects from the start of construction to actual operations had to contend with volumes of documents that had to be well understood for proper compliance monitoring of both the private proponent and the DOTr. In line with this, the Expert Team proposed a capacity development approach intended to enhance understanding of comprehensive contract management and streamline the institutional structure within the DOTr to ensure proper transfer of tasks and responsibilities across the project cycle.

High-level tasks involved in PPP implementation

Establish implementation team

Establish implementation team

Establish implementation team

Establish implementation delivery of obligation

Examples of required complex tasks to the implementation team

• Enforcing the abatement regime for availability payment PPPs

• Negotiating contract amendments

• Resolving disputes etc.

Key structures that enable an IA to undertake a proactive approach to project implementation

A capacitated PPP Unit within DOTC

X A project implementation manual

Figure 3-10 Concept of DOTr Capacity Development Program

■ Organizational Streamlining to Facilitate PPP Projects

The Expert Team suggested that DOTr develop a more strategic organizational structure that covers what used to be PPP initiatives per working section (rail, land, transport maritime, air). The proposed PPP Unit in charge of PPPs in the agency covers all sections and would work alongside personnel and experts per sector for relevant projects. Below are the work plans to launch the comprehensive PPP unit:

Table 3-11 Expected Achievements Attainable through New PPP Unit

- · Incentivize to design project structure that generages VfM
- · Efficiency in project development and implementation
- · Transfer of expert skillsets to PPP projects
- · Communication and coordination among implementing PPP projects
- · Capability to coordinate various project components
- · Capability to leverage accumulated institutional knowledge to new PPP projects
- · Capability to recognize and elaborate strategic issues
- · Attraction to retain PPP experienced staff

■ Draft PPP Contract Management Guideline

The PPP Contract Management Guideline was developed to assist DOTr in properly managing PPP contracts. It provides important guide questions and diagrams to assist the units managing contract compliance.

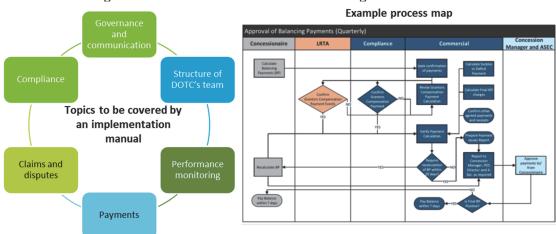


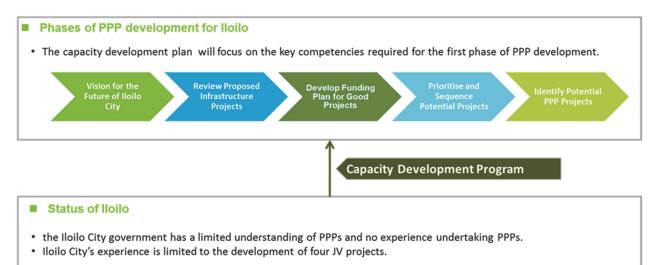
Figure 3-11 Overview of PPP Contract Management Guideline

D) LGU (Iloilo City)

The result of the evalution revealed that Iloilo City has limited knowledge of PPP, and they have no experience in selecting, developing and implementing PPP projects. Accordingly, the Expert Team focused on the initial phase of formulating PPP projects as an approach of this technical assistance. The intervention aimed at developing capacity in selecting projects that are closely aligned with the future development vision of Iloilo City and verifying the procedure in evaluating feasibility of PPP

projects with stakeholders in the IA.

Figure 3-12 Concept of Capacity Development Program for Iloilo City



Main assistance measures are as follows:

■ Assistance on development of infrastructure plan for Iloilo City

Assist in the selection and prioritization of projects in its mid- & long-term infrastructure plans which will contribute to development of Iloilo City.

■ Review of infrastructure development plan

Review the infrastructure development plan to which PPP can apply, such as water and sewerage, transport, urban development, and special economic zone etc., and make infrastructure development list, referring to the conditions of Pre F/S.

■ Analysis of income and expenditure plan for a good project

Analysis if plan meets the standards required in Pre F/S and is able to recover investment cost.

■ Prioritization of infrastructure projects

Prioritize projects, judging if the project shows better potential commerciality than other projects.

■ Selection of potential prospective projects

Support application process to PDMF for the projects selected in above process.

2-2 Result of the capacity development activities for PPP project formulation and delivery

The result of the capacity development activities for PPP project formulation and delivery are as follows.

A) DOH

To improve basic understanding of PPP as well as fundamental capabilities for DOH personnel, the Expert Team categorized the employees into 4 groups as follows and implemented training programs respectively;

- Working level staff of the DOH PPP Unit
- Members of PPP Committee on Health, Undersecretaries and Assistant Secretaries
- Directors and Management members from DOH hospitals
- DOH employees who can be potentially engaged in PPP projects

Below are the training programs implemented for each group:

Training Program Designed for the PPP Unit Members

Since the first quarter of 2017, the task of facilitating PPPs within the DOH was delegated to a newly established body, the Public-Private Partnership for Health-Program Management Unit (PPPH-PMU, the Department's PPP Unit). The creation of this unit was done through the issuance of Department order No 2017-0117.

The main objectives of the training sessions conducted for DOH are as follows;

- To acquire basic knowledge and concepts on PPPs
- To learn project preparation, development and operation processes of PPP projects
- To acquire fundamental skillsets to implement PPP

The training program was implemented based on the attached syllabus (see Achievement of Technical Cooperation; C-1).

The Expert Team provided 8 training sessions from March 2017 to July 2017. Each session was designed to provide lectures or presentations by Expert Team on different topics for 3-4 hours. To incentivize attendance and concentration of members, the Expert Team assigned attendees into separate activity groups to encourage group discussion and presentation.

The Expert Team also designed the lectures to provide practical know-how that are applicable and transferrable in the context of Philippine health sector. The lectures also included relevant cases of

health sector PPPs from other countries such as Japan and the United Kingdom.

Below is the agenda of each training sessions;

Table 3-12 Agendas of Training Programs for the PPP Unit Members

#	Agendas	Attendees
1	Introduction on PPP: What is PPP and what we can expect from it	7
2	PPPs in health sector	7
3.1	Procedures of Project Identification, Prioritization and Preparation, Financial	3
	Perspective of Public Point of View, and Financial Perspective of	
	Private Point of View	
3.2	Risk analysis of PPP projects	3
4	Unsolicited proposals: examining, handling and evaluating	3
5	Case Study	7
5.1	Managing PPPs	7
6	Guidebook for Hospital Project Screening and PPP Project Scoping	4

Training programs were likewise carried out for the members of PPP Committee on Health, Undersecretaries and Assistant Secretaries, Directors and Management members from DOH hospitals and DOH personnel who are most likely to be engaged in PPP projects. The training programs were designed based on the following objectives:

- To understand basic knowledge about PPP
- To understand possible PPP scheme that are applicable and feasible in the Philippine health sector To achieve the above objectives, the Expert Team participated as resource group in these workshops hosted by the DOH:

Table 3-13 DOH hosted Workshops that were implemented or planned by the JICA

#	Event	Date	Participantes	Location
1	National Staff	20 th and 21 st October	More than 100 participants	Dumaguete
	Meeting	2016 (20 minute	including DOH Secretary,	
		presentation provided	Undersecretaries, Assistant	
		by the Expert Team on	Secretaries, Hospital	
		21 st)	directors and management	
2	Workshop in	5^{th} , 6^{th} and 7^{th}	120 paticipants from DOH	Tagaytay
	Tagaytay	December 2016 (13	hospital management, 30	
		hour presentation	participants from DOH and	
		provided by the JICA	local government hospitals	
		Expert Team in three		
		days)		

3	Public-Private	21 st , 22 nd and 23 rd	More than 100 participants	Makati
	Partnership for	November 2017 (4	from DOH Secretary,	
	Universal	hour presentation by	Undersecretaries, Assistant	
	Health Care:	the Expert Team in	Secretaries and directors	
	A Forum and	four days)	from DOH hospitals	
	Workshop on			
	Public-Private			
	Partnership for			
	Health			

National Staff Meeting

The National Staff Meeting is a DOH hosted event involving DOH Management, hospital directors and other high-level officials. It is chaired by the Secretary of Health and is meant to discuss key issues and directions of the DOH.

As part of the capacity development program, the Expert Team provided a PPP lecture entitled Possible Areas for Contribution towards Attaining Philippine Health Agenda on 21st October 2016. The presentation introduced applicable PPP schemes in the context of Philippine Health Agenda 2017-2022. The presentation also showed Japan's experience in using PPPs as a means to improve hospital management efficiency in its hospitals.

Tagaytay Workshop

The Tagaytay Workshop was hosted by the DOH for three days with the participation of 150 attendees of which 120 participants were from DOH Central Office retained hospitals and 30 participants from local level hospitals. Participant were initially not entirely familiar with the concept of PPPs. As such, the Expert Team provided lectures focusing on the fundamental aspects of PPPs. Additionally, based on the outcomes of DOH hospital visits, presentations showing applicable and feasible PPP schemes in the Philippine in the lectures were provided. Furthermore, the Expert Team presented several Japanese case cases that show how PPPs can lead to improvements in hospital management efficiency and better operations and conducted group discussions.

Below is the outline of the lectures:

Table 3-14 Outline of Lectures at Tagaytay Workshop

Module	Subjects	Lecturer
1	General Principles of PPP	JICA Expert
2	The Philippine PPP Program	PPPC
3	Project Identification and Preparation	JICA Expert
4	Financial Analysis	JICA Expert
5	Project Transaction and Management	JICA Expert

6	Risk Analysis	JICA Expert
Other	Group Exercise Exercise 1: Value for Money Exercise 2: Output Specification and Availability Payment	
	Some Outcomes in Japan of the Improved Hospital Operations and Services through PPPs	JICA Expert

A Forum and Workshop on Public-Private Partnership for Health

The workshop on PPP for health was hosted by the DOH PPP Unit from November 21st to 23rd with 300 participants including the Secretary of the DOH. The workshop was jointly presented by DOH, ADB, World Bank, NEDA, PPPC and the Expert Team, aiming to understand the concept and merits of PPP to the managements of the DOH hospitals who are not familiar with PPP.

The Expert Team presented an overview of contract management for PPP projects in health as well as scoping tools for project screening and scoping. The following is the outline of the presentations provided by the Expert Team:

Table 3-15 Symmary of the presentation by the Expert Team

Date	Subjects	Lecturer
November	Managing PPPs: Contract Management for PPP Projects in	JICA Expert
23	Health	
	PPP for Health Project Screening and Scoping Tool	
	Case Study 1: Health PPP Projects - Studies of the	
	Philippines and Japan	
Case Study 2: Continuation, Health PPP Projects – Studies		
	of the Philippines and Japan	
	Developing PPP for Health Concept Proposals	

Guidebook for Hospital Project Screening and PPP Project Scoping

As part of the capacity development program, the Expert Team created a guidebook to capacitate each DOH hospital in identifying scope of PPP projects without external assistance. (details of this guidebook are included in "Guidebook for Hospital Project Screening and PPP Project Scoping").

In the process of creating the guidebook, the Expert Team conducted following activities:

First, the Expert Team interviewed several DOH hospitals to comprehensively understand and analyze the hospital management process, financial structure, and commercially viable areas where private sector can be involved. The following is the interview schedule;

Table 3-16 DOH Hospital Inverview Schedule

	Hospital	Date
1	Vicente Sotto Memorial Medical Center	15 th November 2016
2	Southern Philippines Medical Center	17 th November 2016
3	East Avenue Medical Center	18 th November 2016

In addition, the Expert Team arranged additional interviews with hospitals and private companies to grasp the interest of potential invetsors and operators. The overview of above activities was shared to the DOH and is included in this report as "2-3 Provision of Training Sessions to the Implementing Agencies".

■ Guidebook for Hospital Project Screening and PPP Project Scoping

The Expert Team drafted a Guidebook for Hospital Project Screening and PPP Project Scoping for the DOH. The guidebook aimed at capacitating the DOH in identifying possible PPP projects with the use of the Project Screening tool.

The Expert Team explained the methodology of the guidebook to the DOH staff though a lecture session. In the lecture, the simulation practice was done by providing actual financial and management data of Vicente Sotto Memorial Medical Center which served as a sample case.

B) DPWH

The Expert Team conducted the following Capacity Development program for ESSD and PPPS, the two target offices for the capacity building activities.

ESSD

OProvide educational opportunities with both ESSD and LGUs

The Expert Team implemented a modular training program composed of eight sessions from July 2016 to April 2017. The curriculum was intended mainly for ESSD and PPPS personnel. The program contents constitute not only comprehensive and fundamental knowledge on PPPs, but also pragmatic case exercises and information on conducting Financial and Legal Analysis for PPP projects.

The main objectives of the program are listed below.

- To equip participants with the fundamental knowledge and operational concepts on Public-Private Partnerships;
- To familiarize participants on the different roles the public and private sector can play in PPPs for roads, sewerage and septage sectors;

- Understand the contextual realities of the roads, sewerage and septage sector, locally and internationally and how PPPs can be used as viable tools to carry out infrastructure initiatives of the government;
- To capacitate participants in identifying, prioritizing and selecting PPPs for roads, sewerage and septage initiatives in the Philippines; and
- To familiarize participants on how to properly deal with unsolicited proposals tendered by private proponents

The curriculum that was developed is described in the matrix below. Lectures were made up of 4-hour sessions and one field trip to an actual sewerage site.

Table 3-17 Summary of DPWH Canacity Development Program

	Table 3-17 Summary of DPWH Capacity Development Program			
#	Topic	Contents		
1	Introduction on PPP:	To discuss the PPP concept in general, including the pros and cons of		
	What is PPP and what	PPPs		
	we can expect from it	To discuss PPPs in the Philippine context including the process,		
		policies and legal framework for PPPs in the Philippines		
		To highlight examples of successful PPP projects in the Philippines		
		and around the world		
		To understand mistakes and failed PPP initiatives and understand the		
		risks and limitations of PPPs		
2	PPPs in water and	To understand the business structure of water and sanitation in the		
	sanitation sector	Philippine context		
	(Watsan)	To identify the roles of public and private entities for water and		
	PPPs in a road sector	sanitation in the Philippines		
		Discuss the challenges for improving service quality of water and		
		sanitation sector		
		To conduct simulation exercises to identify possible PPP modalities,		
		including bundling and unbundling projects		
		To understand the business structure of the road PPPs in the		
		Philippine context		
		To identify the roles of public and private entities for the road PPPs in		
		the Philippines		
		To conduct simulation exercises to identify possible PPP modalities		
3	Understanding of	To understand required information and data for initial selection and		
	needs of LGUs/WDs	identification of potential projects and their respective rationale		
		To familiarize participants on how to identify potential PPP projects in		
		Sewerage and septic, and road projects		
		To enable participants to operationalize the different criteria and apply		
		methods such as VfM, cost-benefit and GPRAM		
		Discuss the process of approvals and evaluation of projects before		
		actual procurement.		

#	Topic	Contents
4	Selection and	To understand the criteria of non-state actors
	identification of	To understand key concepts in ensuring PPP project viability and
	potential PPPs (1)	bankability such as viability gap funding, use of availability payment
4.5	Selection and	and government guarantees
	identification of	To conduct a simulation to harmonize state and non-state interest for
	potential PPPs (2)	PPP projects: Cases will be prepared in both sewerage and septage,
		and road PPPs
5	PPP viability and	To conduct field works in Baguio City to better understand specific
	bankability from "the	needs of LGUs and WDs
	other side of the table"	To better understand the challenges in improving service quality in the
	—Field Trip to Baguio	water and sanitation sector
	City	
6	Unsolicited proposals:	To understand the nature of unsolicited proposals and how these
	examining, handling	differ from solicited proposals
	and evaluating	To understand the dynamics of handling, managing and evaluating
		through the unsolicited mode
		To understand the parameters of properly and objectively evaluating
	D C 1 1 '	proposals in both sewerage and septage, and road sector
7	Process of developing	To understand in a more detailed manner the process of PPPs in the
	PPPs beyond basic	Philippines from project development to financial closure
	studies	To better understand the interplay between different stakeholder and
		agencies, especially the role of the PPPC in the process
		To conduct an open interview session with officials from the PPPC to
		better understand the dynamics of PPP project development through financial close
		Understand how to prepare project evaluation forms for NEDA
		approval of projects
		Understand how to prepare draft documents such as contracts, bid
		advertisements and minimum performance standards and
		specifications
8	Managing PPPs	To better understand the roles and responsibilities of IAs and other
	-6-6	stakeholders in monitoring during construction and coordinating/
		overseeing during implementation in both sewerage and septic, and
		road PPPs
		To better understand how to prepare mock monitoring and evaluation
		plans
	<u> </u>	Frence

In addition to the main target officials of ESSD and PPPS, two officials from the Unified Project Management Office-Flood Control Management Cluster (UPMO-FCMC) also participated in the program in response to the request from DPWH.

Table 3-18 List of DPWH Participants

#	Name	Department	Designation
1	Ana Louella B. Biasaga	PPP Service	Engr.

#	Name	Department	Designation
2	Precious Mirra M. Lavina	PPP Service	Engr.
3	Glennrich M. Tadeo	PPP Service	Engr.
4	Mark Sandrew P. Manipol	PPP Service	Engr.
5	Wilson Angelo L. Oraza	PPP Service	Engr.
6	Carlos P. Zamora	ESSD Planning Service	Engr. IV
7	Eduardo C. Chua	ESSD Planning Service	Engr. III
8	Alexander-Generoso Castro	ESSD Planning Service	Engr. II
9	Cheryl G. Livara	ESSD Planning Service	Sr.Environmental Specialist
10	Melba V. Sasoy	ESSD Planning Service	Environmental Specialist
11	Michael T. Alpasan	UPMO-FCMC	Engineer IV
12	Dindo E. Taberna	UPMO-FCMC	Planning Officer II

The Expert Team conducted a primarily lecture & presentation type training for DPWH. To motivate the participants and maintain high motivation to participate in the activities, the participants were grouped into three teams composed of four-members each. Lecturers mixed activities with the lectures and included exercises, quizzes, group discussions and reporting sessions. Moreover, the lecturers introduced several actual cases from the Philippine, Japan and the rest of the world to familiarize them with real life situations in the water and sanitation sector.

Also, the program included a field trip to Baguio City to observe actual operations of wastewater treatment facilities, since ESSD has the responsibility of promoting the implementation of wastewater and sewerage projects. LGU officials from Baguio City provided presentations for the DPWH participants in the field trip, the lecture participants then provided presentations to LGU officials applying what they had learned from the previous lectures conducted by the Expert Team.

Apart from the Capacity Development program for DPWH personnel, the Expert Team took the opportunity to also provide PPP lectures with officials from the Local Government of Baguio City. The lectures covered mainly fundamental information to familiarize LGU officials on fundamental concepts on PPPs for two days in accordance with the request from DPWH for the Expert Team to encourage Baguio City Officials to better understand the characteristics of PPPs and how these can be viable means for them to have their infrastructure needs implemented.

To customize the program to fit the needs and levels of familiarities of participants, the Expert Team sent out questionnaires and asked the training participants to fill these accordingly. Due to the long period of activities, the Expert Team incorporated several post-tests to gauge the knowledge retention of the participants and to instill the most important information that they should keep in mind.

The Expert Team set requirements of attendance rate for the lectures conducted. To complete the training exercises, participants should have a 66.7% of attendance rate apart from submitting all exercise requirements and write-ups. If these are met, participants were provided certificates that serve

as proof that they have taken part in the training modules and have satisfied all requirements of the course. The program feedback from the participants are included below.

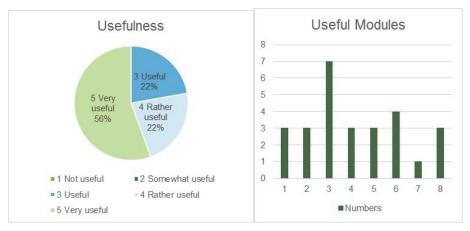


Figure 3-13 Feedback from the Program Participants

In general, the participants in the onset had considerable learning capacities and were seen to be highly motivated to learn. The participants essentially participated in all major portions of the training exercise. Based on the comments from the participants, what they considered the most vital were the topics pertaining to VfM analysis, as well as Economic and Financial Analysis.

OFormulation of Manual / Guideline

Based on the discussions with ESSD and PPPS. The need to have references on the practical application of the National Sewerage and Septage Program (NSSMP) facility is an essential aspect in both promoting the NSSMP program as well as to have viable PPPs for local government level sewerage and septage. The limited level of fundamental PPP knowledge of LGU officials is seen as one of the main hindrances in promoting PPPs in the water and sanitation sector. In line with this, the ESSD and PPPS requested the Expert Team to create a guide or manual in late 2017 to inform local government units on how to develop prospective sewerage and/or septage PPPs that seek NSSMP subsidy support. Accordingly, the Expert Team prepared "A Guideline for Adopting PPP to NSSMP projects".

PPPS

OImplementing internal consulting to assist DPWH in conducting financial and legal analysis was also made available by the Expert Team. Internal consulting support was made available for questions that apply in examining for project development, project preparation and project implementation stages.

With information received on the legal and financial analysis challenges the PPPS encounters in actual situations, the Expert Team categorized these in two: First type are queries that can be solved

by incorporating these in the training programs being prepared by the Expert team. The second typeof queries are those that can be better addressed through individual consultation, based on the discussion. If the query raised is due to limited knowledge or understanding of vital PPP concepts, these are incorporated in the lectures prepared by the Expert Team while providing rules and case studies in the Philippines, Japan and other countries. Alternately, in case of queries needing individual expert advisory, practical points and strategies are shared directly to the relevant PPPS personnel.

Table 3-19 List of Consultation Issues and Responses

#	Name	Training / Internal Consultation
1	Project selection, planning, approval, procurement, award and implementation	Training (#7)
2	Socioeconomic cost benefit analysis for selecting and evaluating infrastructure projects	Training (#4 & #4.5)
3	Opportunity seeking skills to identify potential infrastructure projects that will yield the highest socioeconomic benefits	Training (#4 & #4.5)
4	Risk analysis and mitigation measures to protect projects from adverse factors and events	Training (#2 & #3)
5	Project programming skills to help ensure that projects are implemented in an operationally efficient and timely manner	N/A (Out of Coverage)
6	Building upon past knowledge and experience to improve future project selection, planning, approval, procurement, award and implementation (case studies)	Training (# 4.5)
7	Communication and negotiation skills to effectively convey the Department's ideas and objectives to stakeholders pursuing the project	N/A (Covered by PPPC)
8	Familiarity with PPP policies, regulations, legal and institutional framework to verify legal assumptions and project structure	Training (# 7)
9	PPP contract management	Training (# 8)
10	Commercial/Financial Analysis of PPP projects	Training (#3, # 4, and # 4.5)
11	Value for Money (VfM) Analysis of PPP projects	Training (#3)
12	Economic Analysis of PPP projects	Training (#4 & #4.5)
13	Procedures/Process flow of transfer of the Operation and Maintenance of PPP facilities to the Government at the end of concession period	Internal Consultation
14	Analysis procedure on the annual impact assessment of PPP facilities' outcome in terms of economic, financial and road traffic information	Training (#8)
15	Crash course in Construction Management, specifically on roads, expressways and toll facilities	N/A (Out of Coverage)
16	Crash course in Materials Engineering, specifically on roads, expressways and toll facilities	N/A (Out of Coverage)

#	Name	Training / Internal Consultation
17	Technological innovations from other countries on tollways,	Internal
1 /	freeways and high speed roads	Consultation
18	Possible alternatives in Toll Regulatory Board not adopting the	Internal
10	prescribed period of toll adjustment stated in PPP contracts	Consultation
19	Crash course in Road Safety, including familiarization of materials	N/A (Out of
19	and its standards and specifications	Coverage)
20	Report analysis and evaluation (Feasibility Study and Business Case Study)	Training (#5)

OHold educational programs for improving financial and legal capacity

The PPP capacity of PPPS was originally assessed high in terms of project implementation as it has concluded several PPP transactions for projects successfully. On the other hand, several individuals in the PPPS noted having limited understanding of the fundamentals of PPPs. Given this, the Expert Team made sure that some of the most important concepts in PPPs are incorporated in the training programs provided for DPWH.

The training modules were designed to have specific focus on financial and legal aspects of PPPs. There were modules designed that covered financial analysis and fundamental information in conducting legal checks for contract management The details of the contents are described in a document "Provide educational opportunities with both ESSD and LGUs" for ESSD.

OPrepare Manual(s)/Guideline(s) and Template(s) for advanced financial and legal analysis (on request basis)

The Expert Team prepared a guideline to support local government units interested in submitting PPP projects for sewerage and septage that would tap NSSMP subsidies. See. "Formulation of Manual / Guideline" written in the previous sections of this document.

C) DOTr

■ Imprvement of Institutional Structure to facilitate PPP Projects

In an interview with DOTr officials in 29th April 2016, the Expert Team proposed an action plan to enhance the institutional structure of DOTr in terms of handling PPP projects. In the discussions, DOTr requested for a comprehensive document that discusses the background, rationale, previous research and evidence that support the proposed institutional enhancement of DOTr for PPPs. Thus, the Expert Team drafted a document entitledt "DOTC: Proposed Organizational Structure for the PPP Unit"

i. Basic Concept of Institutional Function

The Expert Team proposed to establish a PPP Unit that is either project-based or process based in nature.

After analyzing the cases of existing PPP units of the other agencies or other countries, the Expert Team proposed that there are two possible models applicable to the DOTr. The following is the details of functions for the two models:

Table 3-20 Comparison of Project Model and Process Model

Criteria	Project Model	Process Model
Basic functions	Project model is a team established based on a project development and preparation for each project. Generally, project model is applicable to an agency procuring complex and large-scale projects.	Process model focuses on the enhancement of functions and capabilities of unit members in the team. The unit is often categorized into two teams, namely project development and project procurement. Generally, process model fits to an agency procuring rather simple and small scale projects.
Merit	Project specific knowlege is accumulated in the unit and shared among unit members. Additionally, unit members are capacitated to control the project through the entire process from project preparation to procurement.	Unit personnel are specialized in a specific function, leading the unit to be more professional. Additionally, if targeted projects are rather simple and resemble to one another, the process will be streamlined and shortened.
Demerit	A demerit is that all unit members need to be knowledeable about all PPP processes. Capacitating unit personnel is expected to take substantial amount of time. Additionally, it is difficult to leverage the acquired skillsets into other projects and processes cannuot be standardized.	When transitioning the project phase and needs to handing over from one team to another, new personnel need to learn the project's history and background in detail. Additionally, since team members need to learn considerably huge information, project knowledge and insights may be lessened as a result of transition of project stewardship.

Considering the characteristics of DOTr PPP projects, the processes and outcomes are sometimes complex. Additionally, when conducting interviews with the DOTr employees, it was reported that a major cause of retaining institutional knowledge is the frequent transfer or workers from one unit in the DOTr to the other, or in other cases, resignation from DOTr. Thus, the Expert Team considered the

PPP preparation and procurement for DOTr to be made efficient by employing a project model that will be more streamlined and efficient for DOTr.

On the other hand, it was also understood that the entire process requires highly complex and specific knowledge and would need external advisory support such as legal, financial and engineering professionals.

It is observed that the current institutional structure is rather close to the Process Model, where an Assistant Secretary is appointed in the project development phase while procurement activities will be supervised by an Undersecretary.

ii. Organizational Structure

For the specific organizational structure, the Expert Team proposed to add an additional Undersecretary position whose functions is grounded on strategic planning and coordinating transportation related infrastructure projects in line with the masterplan for transportation. The following details the proposed organizational structure:

Table 3-21 Proposed Organizational Structure

Position	Function						
■Undersecretary							
Strategic Planning	Prepare the overall transportation masterplan at national and local level, prioritize the potential projects and collaborate with other						
	Undersecretaries in terms of budgeting activities						
Procurement	Consistently oversee DOTr projects including PPP projects.						
Legal	Take over the legal functions related to projects						
Admin and Technical	Supervise all administrative and human resources functions. In addition,						
Services	the role of the Undersecretary is expected to oversee the performance of						
	technical service teams that advise to all DOTr projects.						
Roads and Rail	Supervise the monitoring and standards of roads and railways.						
	Additionally, the role is expected to cover procurement of non-PPP						
	projects.						
Maritime and Aviation	Supervise the monitoring and standards of aviation and maritime sectors.						
	Addtionally, the role is expected to cover procurements of non-PPP						
	projects.						
■ Assistant Secretary							
PPP	Oversee all PPP projects from project development to project monitoring.						
	Based on the masterplan envisaged by the strategic planning						
	Undersecretary, the Assistant Secretary is expected to examine						
	applicability of PPP on specific projects. If the project is determined to be						

implemented as a non-PPP, then the project is taken over by r	
	Undersecretaries supervising roads and rail, or maritime and aviation.
Government Projects	Advise and support sectoral Undersecretaries supervising roads and rail,
	or maritime and aviation on the tranditional non-PPP projects.

■ Contract Management Manual

Based on the assessment of DOTr, the Expert Team recognized the limitations in the capabilities of the DOTr in terms of project screening and project implementation. Main reason for the technical incapabilities is the limited cooperation from external experts, specifically after financial closure of the project. In line with this, the Expert Team created a manual to raise the contract management capacity of DOTr.

The manual does not intend to go through details of specific contract clauses, but instead focuses on the key elements that DOTr should take note of in terms of contract management. Preparing contract management plans should be done for each specific project by financial, legal and technical advisors.

Table 3-22 Contents of Contract Management Manual

Topics	Summary		
Developing a Contract	Develop a manual that explains how DOTr can fulfil its obligations		
Management Strategy	and assume its own duties in terms of follow-up and monitoring		
	Develop an operational management strategy		
	Develop organizational structures		
Establishing Contract	Appoint a PPP contract manager		
Management Structures	Coordinate with PPP contract manager to appoint PPP contract		
	management team		
	Establish roles of sector regulators, attached agencies, PPPC, and		
	DOF/Treasury		
	Establish internal communications strategy between DOTr and the		
	private party		
	Establish public communications strategy		
Knowledge and Information	Procure and Implement Appropriate Knowledge and Information		
Management Technology	Management Technology		
Relationship Management	Develop a management structure with three tiers: strategic level,		
	business level, and operational level		
	Identify an independent reviewer and develop a plan to assess the		
	relationship between the private party and DOTr		
	Develop protocols for handling staff changes in DOTr and in the		
	private party		
Monitoring and Managing	Identify risks to the project		
PPP Delivery and Risk	Identify information required to monitor risks and develop risk		
	monitoring procedures		
	Establish performance management systems to monitor KPIs		
	Establish risk mitigation strategies and escalation procedures for		

	managing risks and KPI breaches		
	Develop and maintain a financial model that can track the project's		
	performance and model impact of changes		
	Develop adequate budgetary and human resources plan for		
	monitoring and managing risk		
Contingency Planning	Develop business continuity plan for temporarily or permanently		
	taking control of the project		
	Develop disaster recovery plan		
Managing Change	Identify parties involved in assessing proposed changes to the		
	project		
	Develop change management plan for assessing and implementing		
	proposed changes		
	Develop change implementation plan for large, expected changes		
Dispute Resolution	Develop dispute resolution protocols and processes		
	Designate resources for arbitration, adjudication, or mediation as		
	required by the contract		
Managing Contract Expiry	Develop plan for determining future asset and service requirements		
and Asset Handover	Develop strategy for future service delivery		
Ex-Post Evaluation	Define institutional arrangements for ex-post evaluation		
	Define analytical framework for ex-post evaluation		

■PPP Implementation Manual

In addition to the above proposal to improve organization structure and PPP Contract Management Manual, the Expert Team created a PPP Implementation Manual that are applicable to PPP projects procured by multiple implementing agencies.

This manual intends to cover the specific need of DOTr which often procures PPP projects along with attached Government Owned and Controlled Corporations (GOCCs) as "Co-Grantors".

In order to implement PPP projects with multiple implementing agencies, following points should be considered:

- Clear divisions of responsibilities and functions for each co-granting agency (DOTr and the concerned attached GOCC)
- · Open communication channels among implementing agencies or private proponents
- · Commonality of objectives, incentives and responsibilities among implementing agencies
- Insulate decisions by IAs from political influence

To create the manual, the Expert Team analyzed 3 PPP cases that were procured by different sets of implementing agencies: the Mactan-Cebu International Airport, Davao Sasa Port and LRT-1 (O&M).

The analysis of these cases confirmed that reponsibilites were well allocated among implementing agencies and projects complied with relevant laws and regulations such as BOT law. On the other hand, there are some flaws especially in communication and coordination among implementing agencies that project information was often not shared in a timely manner to DOTr by the co-granting agency. Additionally, it is observed that the project was delayed since the DOTr could not make a decision based on limited project information.

Identifying issues and comparing with international cases, the Expert Team envisaged solutions as follows.

- If possible, there should be only one implementing agency and not multiple implementing agencies handling a project.
- If multiple implenting agencies are required, then sufficient consensus should be formed between these agencies.
 - Prompt and sufficient communication among implementing agencies
 - Projects should be initiated based on clear political decisions.
 - Qualified DOTr employees should be seconded to partner agency to improve coordination.
- If project has not been well functioning even with sufficient communication and consensus, the
 responsibilities and functions should be clearly designated and delineated among implementing
 agencies.
 - > If the partner agency does not fulfill its responsibilities, DOTr should impose penalties.
 - > DOTr should be fully aware that it is a co-granting agency, not a support or oversight agency for the project.

D) LGU (Iloilo City)

The Expert Team developed a Project Prioritization Tool and PPP Viability Tool in order to build LGUs' capacity of selecting PPP projects. Setting Iloilo City as a sample LGU, the Expert Team applied the tool to Iloilo City, and proceeded to facilitate the selection of prospective PPP projects from its existing development plan in cooperation with its government officials. A training workshop was also held so that the government officials can use the tool. Through this process, a project for construction/rehabilitation of water supply and sanitation system was eventually selected. The PPPC considered Iloilo City as a model case for the utilization of the development tool to other LGUs.

Characteristic of the tool is that it is able to prioritize the projects from related information only even if detailed information such as Pre-F/S etc is not available. In addition, the tool can be customized according to specific requirements for assessment of users.

These sets of assistance started from confirming the direction LGUs aims for, and proceeded with making the long list of prospective projects, analyzing the financing plan among other items and making a short list. These shortlisted projects would then be assessed in terms of potential PPP viability.

PROCESS Prioritize Develop a Do an initial Understand Sequence funding LGU dev't infrastructure **PPP** viability projects direction requirements plan assessment Project prioritization tool PPP viability tool Potential Long List of Short List of Infrastructure Sequenced requirements Long List **Projects PPPs Good Projects**

Figure 3-14 PPP Project Selection Process

OUTPUTS

■ Assistance on Determining the Infrastructure Development Direction for Iloilo City

Infrastructure projects in Iloilo City were formulated based on multiple plans such as: 2013-2019 Comprehensive Development Plan for Iloilo City; Philippine Development Plan 2011-2016; Western Visayas Medium Term Development Plan 2011-2016; and the Metro Iloilo-Guimaras Economic Development CouncilMIGEDC Road Map 2015. Iloilo City's involvement in these projects range from the national, regional and sectoral levels. Each plan included numerous infrastructure projects which makes prioritizing projects necessary. From these development plans, a long list of infrastructure projects considered beneficial to the achievement of the regional vison has been made based on conditions such as priority development sectors, key growth drivers, and required infrastructure.

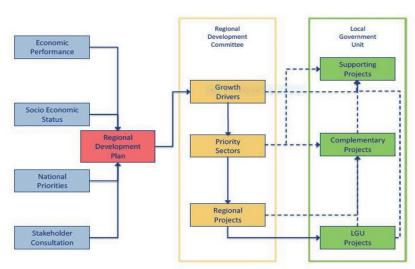
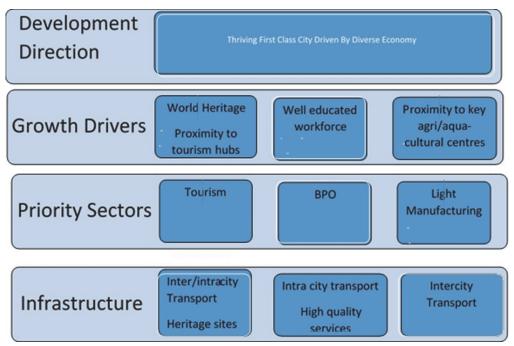


Figure 3-15 Flow of Developing a Long List of Projects from Development Plan

Figure 3-16 Iloilo City's Comparative Advantages & Infrastructure Requirements



Based on above factors, a long list of projects was identified as follows:

Figure 3-17 Iloilo City's Long List of Infrastructure Requirements



■ Review of infrastructure development plan

The LGU PPP Project Prioritization Tool developed in this project has been applied to the long list

made in above steps. This is an MS-Excel based tool and automatically scores projects depending on the selection of "Yes", "No", or "Uncertain" response to each criterion. This tool aims to help prioritize projects based on the scoring results.

The criteria for each project is divided into two parts:

① Initial Feasibility

Economic, Technical, Financial, Legal, Environmental, Social

② Complexity & Readiness

Ready to go? Is the project big & complex? Does it require a complicated coordination process?

Project Name/Title: 11-May-2016 Technical Feasibility Is the initial assessment indicating that the project Provide reference and include feasibility study Yes is technically feasible? Can the project be implemented with any List example projects technology that has been available and proven Yes feasible in projects of similar size? Are there local construction or engineering firms 0 No List relevant firms The project can be implemented with expertise with the proposed technology? technically, using known and proven Are projects with similar technology currently technologies and engineering methods. List similar projects operating in the Philippines or the region? Can the technology be competitively sourced (or is Uncertain Provide reference and/or explanation U it exclusively licensed by one provider)? Is there any additional evidence that the project Provide explaination may be technically feasible?

Figure 3-18 Screen Image of Initial Feasibility

Figure 3-19 Sample Output



Each project will be evaluated on a scale of one to one hundred. The evaluation result of projects in the long list is as follows:

Table 3-23 Score of Iloilo City's Long List of Projects

No	Projects	Technical	Legal	Environmental	Social	Economic	Financial	Complexity	Readiness	Total
	3.17	Feasibility	Feasibility	Feasibility	Feasibility	Feasibility	Feasibility	1		
		**								
1	Iloilo-Caticlan Highway	8.33	10	6.67	5	2.5	5	8	3.33	48.83
2	Iloilo-Caticlan Railway	5	10	6.67	3.33	2.5	3.33	8	3.33	42.16
	Sewerage and septage management									
3	project	8.33	10	10	10	6.67	6.67	10	6.67	68.34
	Wastewater Treatment Plant for public									
4	markets	8.33	10	10	10	6.67	10	10	6.67	71.67
5	Improvement of Barangay Roads	8.33	10	10	10	7.5	5	10	6.67	67.5
	Street lighting and lights at plazas and									
6	markets	8.33	10	10	10	6.67	5	10	6.67	66.67
7	Heritage conservation - Fort San Pedro	8.33	10	10	8.33	3.33	10	10	6.67	66.66
	Citywide flood control and drainage									
8	maintenance project	8.33	10	10	10	6.67	4	10	6.67	65.67
	1000									
9	Water supply and sanitation system	8.33	10	10	7.5	6.67	8	10	5	65.5
10	River from Zamoras street to Lapuz	8.33	10	10	8	6.67	5	10	6.67	64.67
	Pedestrian safety and protection project									
11	along Calle Real	8.33	10	10	8.33	6.67	3.33	10	6.67	63.33

■ Analysis of the sequence of infrastructure development

The Expert Team checked the infrastructure development plan and confirmed that there is no

obvious linkages between the projects, therefore, the reordering of priorities was not required. Interlinkages in projects affect prioritization For instance, land development projecs located in areas not close to the city center would have limited viability if necessary road construction or improvement project is done first.

■ Possibility of funding to good projects

The Expert Team specified annual expenses and revenues necessary for project implementation, and confirmed that the investment amount can be recovered. The possible sources of funds include: user fees, other revenues, ODA grants, subsidies from the national government, and real property and business taxes. At the same time, the current borrowing capacity based on the LGU's credit rating was also considered. From these considerations, the limit of budget which can be allocated to projects was confirmed.

■ Specification of potential PPP projects

The PPP Viability Tool is designed to score projects by selecting "Yes", "No", or "Uncertain" for the three elements: 1. Feasibility for PPP; 2. Project Suitability for PPP; and 3. Private Sector Interest.

As a result, three projects have been identified as the most desirable projects, and they have been integrated into one following the request from the Iloilo City Government.

Results of processing Iloilo City's prospective projects were presented in a training workshop on 20 January 2016 where Iloilo City Government officials and PPPC staff were invited.

Table 3-24 Result of Screening of Potential Infrastructure Projects

No	Projects	PPP Feasibility	Project Suitability for PPP	Private Sector Interest	Total
1	Water supply and sanitation system	10	10	6.67	26.67
2	Wastewater Treatment Plant for public markets	10	7.5	6.67	24.17
3	Sewerage and septage management project	10	7.5	6.67	24.17
4	Street lighting and lights at plazas and markets	10	10	3.33	23.33
	Construction of a bridge cross Iloilo River from				
5	Zamoras street to Lapuz	10	10	0	20
6	Heritage conservation - Fort San Pedro	10	7.5	0	17.5
7	Improvement of Barangay Roads	10	5	0	15
8	Pedestrian safety and protection project along Calle Real	10	5	0	15
9	Citywide flood control and drainage maintenance project	10	0	3.33	13.33

Output 3: A policy discussion of the GOP support mechanism for PPP financing (between the GOP and the GOJ) is promoted

The result of Output 3 indicators are as follows. Output 3 was partly achieved.

#	Indicators	Result
3-1	Proposal for improving the GOP support mechanism for PPP financing and possible actions	
3-2	Roadmap for improving the GOP support mechanism for PPP financing	Not achieved The proposal was not used for the policy disucussion between the GOP and GOJ. Therefore, the roadmap was not formulated.

Proposal on the necessity and materialization of the Public Finance Assistance System improvement and establishment

Roadmap to comprehensively improve the Public Finance Assistance System

An underlying element in the development of financial assistance system on PPP is the discussion on the revision of BOT law, which made some headway in the initial stages of this project. In line with the revision of the law, research works were conducted in order to propose the system that will contribute to project bankability, which is a core element in promoting PPP projects. The result of this analysis is summarized in the report "Financial Architecture to Support Public-Private Partnerships in the Philippines". In the report, the PPP "financial architecture" refers to measures to overcome these gaps in the financial system that affect bankability of PPPs. On the other hand, it is important to recognize that a sound financial architecture is a precondition to achieve VfM and make the project bankable.

The report listed the key problems faced by the Philippine PPP program such as:

- "only seven projects achieved financial close since the establishment of the PPPC from 2010 till 2015"
- "only a small number of domestic conglomerates participate in infrastructure PPP projects"
- "projects required associated real estate development to make them commercially viable", "some projects have been delayed in litigation and accusations of corruption"
- "many of the PPPC's list of 40 PPP projects under development are unbankable (or fail to achieve VfM due to significant financial risks imposed on the government".

Ther report concludes with a discussion of the structure of PPP, funding situations in the Philippines and discussion of some issues on financial architecture and proposed improvement measures.

■PPP Structuring

The report discussed and analyzed several factors that lead to a desirable structure for PPPs. Below

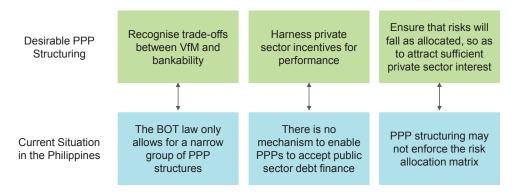
are the three main points raised in the report:

- Recognise trade-offs between VfM and bankability
- Harness private sector incentives for performance
- Ensure that risks allocation is optimal to attract sufficient private sector interest.

The analysis provided a summary description of the overall PPP situation in the Philippines:

- The BOT law only allows for a narrow group of PPP structures
- There is no mechanism to enable PPPs to accept public sector debt finance
- PPP structuring may not enforce the risk allocation matrix

Figure 3-20 Comparison between Desirable PPP Structuring and Current Situation in the Philippines



■PPP Funding

Several points were raised in terms of the ideal PPP funding (fees collected from government or users) structure in the Philippines:

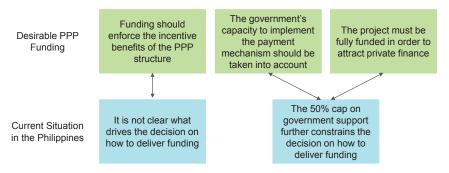
- Funding should enforce the incentive benefits of the PPP structure
- The government's capacity to implement the payment mechanism should be taken into account
- The project must be fully funded in order to attract private finance

On the other hand, below have been revealed as the actual scenario in terms of funding PPPs in the Philippines:

• It is not clear what drives the decision on how to deliver funding

 The 50% cap on government support further constrains the decision on how to deliver funding

Figure 3-21 Comparison between Desirable PPP Funding and Current Situation in the Philippines



■PPP Financial Architecture

After analyzing PPP structuring and funding, the current situation of PPP Financial Architecture in the Philippines was analyzed. As a result, it was revealed that while Philippine banks are generally very liquid and with room for additional lending in areas like infrastructure, these private banks need to obtain know-how on the long-term financing with tenors beyond 15 years. Hence, private companies can finance only the amount they will be able to repay short-term debt before the end of the concession, or refinance short-term debt. Also due to currency risks etc., only a small number of domestic conglomerates can finance projects in the long-term.

In addition, it is often suggested that investors are not willing to finance PPPs in the Philippines because they are not confident that IAs will fulfil their obligations (both direct and contingent) under the PPP contract. Such anxieties seem to arise from three main issues:

- The current budgetary system does not allow IAs to secure multi-year budgets
- There is no guarantee that IAs will actually budget or allocate funding sufficient to fulfil their obligations
- There is no guarantee that the Congress will approve such funding, even if IAs request it.

The government has two currently available tools to improve investor's confidence in the government's willingness to meets its obligations under the contract, and those are Performance undertakings (PU) and Multi-year Obligational Authority (MYOA)⁸. However, it is highly possible

⁸ At present, the MYOA is called a Letter of Commitment (LOC). This letter is requested by IAs from the Department of Budget and Management and provided for as proof that the DBM will endeavor to secure stipulated funds for the PPP project for a multiple number of years.

that those are not enough to convince the private sector once the risk becomes evident.

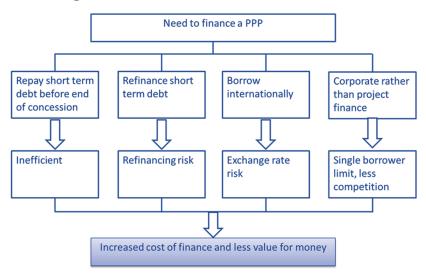


Figure 3-22 Issues on PPP Financial Architecture

■ Proposed Changes on Financial Architecture

Proposed changes extracted from "3" have been sorted out from the viewpoints of "risk guarantees", "fund for contingent liabilities", "Finance by government or ODA loan".

Table 3-25 Proposed Changes on Financial Architecture

Proposed Changes	Summary
Risk guarantees	Formulate guarantee system for risks private entities cannot take (currency rate, interest-rate fluctuation) Aim for facilitation of financing and cost reduction by guarantees for refinance and currency rates The government improves the management of contingent liabilities
	Improve bankability of risk guarantees by establishing the fund for it
Fund for contingent liabilities	Secure strong financial ground with the establishment of the fund (supplying equity through the government or ODA, immediate finance by ODA etc.) Create rules for IA moral hazard and collection of guarantee fee Balance the scales of the fund for contingent liabilities and PPP projects
Finance by government or ODA loan	Long-term lending facility Set up as a GOCC Investment through Government or ODA Establish independent financial ground

Similar institutions with above functions include PT Sarana Multi
Infrastruktur (SMI) in Indonesia and India Infrastructure Finance
Company (IIF) in India

The Expert Team drafted the report summarizing above, and made a presentation and exchanged opinions at JICA Manila Office in October 2015. After that, the report was used as a tool for dialogue not as a proposal to the Government of the Philippines.

(4) Outpur 4 Others

Following is the result of activities for output 4. Output 4 was achieved.

#	Indicators	Result
4-1	Philippines PPP Handbook	Achieved Please refer to 3.2(5) for details.

4-1 Philippine PPP Handbook

Many investors point out that the overall PPP market, and legal and institutional system is hard to understand compared with other PPP potenatial markets. Therefore, the Expert Team prepared the "Philippine PPP Handbook" to enable potential investors to understand business opportunities and the conditions before taking part in the PPP market in the Philippines. The handbook includes sector information such as road, water and rail and was provided in English and Japanese.

The draft handbook was shared among stakeholders by the end of 2016. However, as the Expert Team had to wait for feedback from stakeholders, the handbook was finalized in November 2017.

The outline of the Philippines PPP Handbook is as follows:

Table 3-26 Outline of the Philippines PPP Handbook

- 1. Overview of PPP Market in the Philippines
 - 1.1 PPP as Investment Opportunities
 - 1.2 Outline of PPP Procedures
 - 1.3 Key Features in the PPP Infrastructure Market in the Philippines
 - 1.4 Financial Environment surrounding PPP
 - 1.5 General investment environment in the Philippines
- 2. Useful information for the private sector on participating PPP projects, and its latest developments
 - 2.1 Government Support
 - 2.2 Government Guarantee
 - 2.2.1 Guarantee for Direct Liability
 - 2.2.2 Guarantee for Contingent Liability
 - 2.3 Letter of Commitment (LOC)
 - 2.4 Unsolicited Proposal
 - 2.5 Alternative Dispute Resolution
 - 2.6 PPP Modalities
 - 2.7 PPP Related Government Agencies
 - 2.8 Bidding Procedures
 - 2.9 Procedures for Unsolicited Proposals
 - 3. Overview of Sectors in PPP
 - 3.1 Toll Road Sector
 - 3.2 Railway Sector and Mass Transport
 - 3.3 Water and Sewerage Sector
 - 3.4 Health Sector
 - 4. Joint Ventures with Philippine Government Agencies
 - 4.1 Partnering with Philippine Government through Joint Ventures
 - 4.2 Modes of Implementing Joint Ventures

Chapter4 Effect of the project and remaining challenges

One of the achievements of this project is that Expert Team was able to persuade IAs to develop their respective capacities for developing PPP projects. For example, in the case of LGU (Iloilo city), the staff of Iloilo City government managed to create a long list of projects which could be examined for possible delivery as PPPs. The project identification and PPP scoping tool created by the Expert Team was able to assist the LGU in understanding the elements and criteria for PPP viability. The tool mentioned above can be applied to other LGUs and, therefore, it is expected that the PPPC use this tool to promote PPPs at the sub-national level. Moreover, the Expert Team developed the NSSMP PPP application guideline which can be used to encourage LGUs to consider PPP potentials in the water and sanitation sector. The recent pronouncement that the Philippine government will also consider small and medium scale PPP projects will incentivize LGUs to adopt PPP for their infrastructure development. As a result, it is expected that the tools provided by the Expert Team will be utilized in many ways.

As for DOH, capacities were developed in better understanding the nature of PPPs and how this applies to the health sector. The fundamental capacities of the PPPH-PMU was established through the project. Furthermore, the PPH-PMU obtained a deeper level of appreciation on how PPPs can be better applied to the health sector; a sector characterized for having a mainly social service oriented range of programs and prjects. At the early stage of the capacity development program, the participants mainly understood PPPs as synonymous to privatization based on user fees which is an aspect that does not run in line with the social mandate of DOH. However, through the various types of programs such as workshops and exercises, the DOH was able to gradually recognize the different types of PPPs, most of which may apply to their respective infrastructure and equipment requirements. As a result, the participants learned that they need to clarify the potential PPP scope particularly in DOH hospital operations.

On the other hand, as for the activities of DOTr, due to intermittent changes in personnel in charge of the project, the Expert Team had limited opportunities to conduct enough opportunities for holding PPP capacity development activities except for the conduct of workshops on how to use the contract management book. It is expected that DOTr will utilize the tool provided by the Expert Team and gradually solve the challenges in managing and monitoring contractual compliance for the projects they have awarded.

During the conduct of activities by the Expert Team, the PPP policy of the Philippine government also underwent strategic adjustments and priority areas. In order to adapt to the policy shifts and further advancing PPPs in the country, the following activities should be considered:

4.1 Support for developing PPP models considering the nature of specific sector

As the specific PPP project formulation was omitted from the projects range of interventions, the Expert Team focused mainly on the creation of capacity–building opportunities such as workshops, exercises and field trips, and tools for supporting IAs to develop and deliver PPPs. Consequently, the PPP capacity for understanding the nature of PPP and criteria for adopting PPP was developed in all the targetd IAs.

Based on the achievement of the project, the support for developing specific projects will be needed. In other words, the development of efficient system for "pre-PDMF" support for IAs for selecting potential PPP projects and its practice is recommended.

4.2 Capacity development of the PPP Center

PPP policy shift to small and medium types of projects by the Government of the Philippines resulted in increasing potential of developing PPP by LGUs. In general, LGU needs substantial support from the PPPC for developing and delivering PPP compared with NGA. In that sense, expectations from the PPPC will be higher and it would need to develop its own capacity for supporting PPP. Through the activities of the project, the Expert Team provided tools for supporting PPP activities. The PPPC may utilize these as templates or customize them in assisting LGUs or in other capacity building activities. One key aspect of the tools developed by the Expert Team was that these closely align with the PPPC's Strategy for supporting LGUs in their PPP endeavors. This makes the tools and capacity building strategies developed for the JICA PPP T/A viable foundational materials for the further training and informational activities of the PPP Center for provinces, cities and municipalities

4.3 Creation of showcase of "Hybrid PPP"

As mentioned previously, the GOP has indicated its intent to promote "Hybrid PPP" in most of their projects (particularly in the transport sector); while the construction of the large scale infrastructure projects are delivered as GAA/ODA projects, PPP can be considered at the operations and maintenance phase. On the other hand, was also pointed out that the continuity of the design, construction and operational phase is one advantage of the current PPP model. Therefore, it is unpredictable how "Hybrid PPPs" can benefit stakeholders, most especially the private sector. Therefore, it is useful to identify the project type to which "Hybrid PPP" can be applied and criteria for adopting it. It is desirable to showcase "Hybrid PPP" projects so that stakeholders will have a better understanding of their merits.

4.4 Support for enhancing the creditworthiness of IAs for delivering PPP

When IAs adopt availability payment, potential investors evaluate the creditworthiness of IAs. When payment ability of IAs is a concern, interest from potential investors may diminish especially when proponent of PPP projects are LGUs. While the central government may establish a guarantee system, it is important to support LGU's capacity development for retaining sustainable public finance for a long term.

