



Philippines: Angat Water Transmission Improvement Project (Additional Financing)

Project Name	Angat Water Transmission Improvement Project (Additional Financing)	
Project Number	46362-004	
Country	Philippines	
Project Status	Proposed	
Project Type / Modality of Assistance	Loan	
Source of Funding / Amount	Loan: Angat Water Transmission Improvement Project (Additional Financing)	
	Ordinary capital resources	US\$ 126.00 million
Strategic Agendas	Environmentally sustainable growth Inclusive economic growth	
Drivers of Change	Governance and capacity development Private sector development	
Sector / Subsector	Water and other urban infrastructure and services - Urban water supply	
Gender Equity and Mainstreaming	Some gender elements	
Description	The project will expand the scope of the ongoing project to include the construction of a new aqueduct (AQ7). The AQ7 that will be financed under the proposed additional financing will provide operational flexibilities to the Angat downstream water transmission system and enable MWSS to rehabilitate the existing aqueducts without disrupting water supply. The proposed additional financing will also include new capacity development activities to (i) strengthen gender and development programs implemented under the ongoing project; (ii) train MWSS staff on operation and maintenance (O&M) of the tunnels and aqueducts; and (iii) expand the awareness programs on water conservation, hygiene promotion, and health-related risks.	
Project Rationale and Linkage to Country/Regional Strategy	Several existing aqueducts (overall, there are six aqueducts) in the Angat downstream water transmission system are in a poor condition. Aqueducts 1 and 2 (AQ1 and AQ2) have deteriorated significantly and lose about 20% of their water carrying capacity due to leakages, which is expected to increase with continued use. Structural assessments suggest that fittings of AQ1 and AQ2 are unserviceable. Seismic assessments suggest that AQ3, AQ4, and the downstream part of AQ5 are weak and are not earthquake-resilient. Under the current condition, the Angat downstream water transmission system is expected to experience operational interruption and/or total stoppage when leaks are being rectified. Rectification is expected every five years and their repairs are estimated to take about 60 days, resulting in water supply disruptions. Considering their condition, AQ1 and AQ2 will be decommissioned. After completion of AQ7, MWSS will rehabilitate the following aqueducts during the specified periods: AQ4 (2025-2027), AQ3 (2028-2030), and part of AQ5 (2031-2032). Once rehabilitation of the aqueducts is complete, the risk of every five-year system breakdown would be eliminated. Consequently, AQ7 is a water security measure for Metro Manila. Additionally, AQ7 will also increase the Angat downstream transmission system capacity to match the capacity of the Angat upstream water transmission system (reinstated after the construction of T4), to meet future water demands.	
Impact	Universal access to safe, adequate and sustainable water supply by 2025. (Philippine Water Supply Sector Roadmap 2nd Edition)	
Outcome	Adequate and reliable amount of water supplied in Metro Manila.	
Outputs	New tunnel constructed New aqueduct constructed Original project Capacity building support provided Overall project MWSS capacity strengthened	
Geographical Location		
Safeguard Categories		
Environment		B
Involuntary Resettlement		B
Indigenous Peoples		C
Summary of Environmental and Social Aspects		
Environmental Aspects	The project is not expected to cause irreversible adverse environmental impacts. An initial environmental evaluation (IEE) report was prepared in conformity of ADB's Safeguard Policy Statement (2009). Most of the environmental impacts are expected during construction which will entail the removal of trees and vegetation, modification of terrain, potential siltation of nearby waterways, noise and dust, increased site traffic, and increased risks to occupational health and safety. These impacts will be limited within the designated 25 m wide construction area. Measures to mitigate the impacts are included in the environmental management plan (EMP).	
Involuntary Resettlement	No land acquisition will be required but 11 informal structures located inside the delineated 25 m width staging and construction work area within the existing 60 m MWSS right-of-way. These structures will be demolished prior to the construction. A resettlement plan (RP) was prepared in conformity of ADB's Safeguard Policy Statement (2009).	
Indigenous Peoples	No indigenous peoples and ancestral domain areas will be affected. No further action is required.	
Stakeholder Communication, Participation, and Consultation		

During Project Design	Aside from the socio-economic survey, a stakeholders' analysis was undertaken to identify key parties with interest in the project such as local government units, business sector and microenterprises, civil society organizations, nongovernmental organizations, community-based organizations, and affected residents, especially women and vulnerable groups such as the poor and elderly. The analysis focuses on the different stakeholders' interests, their perception of the project, current resources which may be used to support the project, and their mandates. Solutions to perceived problems were also discussed.
During Project Implementation	MWSS will disseminate project information from design through implementation to all stakeholders and ensure a regular flow of project activity and timeline information to and from project beneficiaries and project affected persons. MWSS will create a conduit for two-way flow of information between government and other stakeholders; The project will increase public awareness of the project risks for men and women including STDs/HIV/AIDS, communicable diseases, gambling, drugs and alcohol consumption. The MWSS PMO will establish website as the primary portal for dissemination of project related information.

Business Opportunities	
Consulting Services	A project implementation consultant to support MWSS in the overall management and construction supervision will be recruited. The cost estimate of the PIC contract is \$5 million and about 275 persons-months of consultant inputs will be required. The request for expression on interest was published on 11 October 2019 (https://selfservice.adb.org/OA_HTML/adb/xxcrs/jsp/ADBCsrnFwd.jsp?sel=155411)
Procurement	A design and build contract will be applied for the construction of AQ7. The invitation of bids was published on 15 October 2019. (https://www.adb.org/sites/default/files/tenders/phi46362-bigte-novaliches-final-ifb.pdf)

Responsible ADB Officer	Siti Hasanah
Responsible ADB Department	Southeast Asia Department
Responsible ADB Division	Urban Development and Water Division, SERD
Executing Agencies	<u>Metropolitan Waterworks and Sewerage System</u> 4th Floor, Administration Bldg., MWSS Complex, Katipunan Road, Balara Quezon City 1105, Philippines

Timetable	
Concept Clearance	-
Fact Finding	05 Sep 2018 to 14 Sep 2018
MRM	16 Oct 2019
Approval	-
Last Review Mission	-
Last PDS Update	28 Oct 2019

Project Page	https://www.adb.org/projects/46362-004/main
Request for Information	http://www.adb.org/forms/request-information-form?subject=46362-004
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