

**PROJECT INFORMATION DOCUMENT (PID)
CONCEPT STAGE**

Project Name	The Gaza Sustainable Water Supply Program (Preparation of Associated Works and Related Studies)
Region	Middle East and North Africa Region (Water Global Practice)
Country	West Bank and Gaza
Sector(s)	Water
Theme(s)	City-wide Infrastructure & Service Delivery and Water Resource Management
Lending Instrument	Grant
Project ID	P150494
Borrower(s)	Palestinian Authority
Implementing Agency	Palestinian Water Authority
Environmental Category	A
Date PID Prepared	04/14/2015
Estimated Date of Approval	05/31/2016
Initiation Note Review Decision	01/21/2015
Other Decision(s) (as needed)	

I. Introduction and Context

Country Context

The Palestinian Authority (PA) National Development Plan (NDP) for 2011-2013 builds on the Palestinian Reform and Development Plan of 2008-2010 and outlines the government policy agenda, macroeconomic and accountability framework. The PA is looking forward to future statehood and forging ahead with consolidating institutions which will spur investment and revive the private sector, at the same time of meeting the challenge of providing citizens with adequate service delivery, including water supply. The NDP has 23 sector strategies, which include governance, social development, economy, and infrastructure development.

According to the World Bank Assistance Strategy FY15-16 for the West Bank & Gaza (Report No. 89503-GZ, October 8, 2014, the Assistance Strategy), approximately 26 percent of the Palestinian population in the West Bank and Gaza (WB&G) lived under the basic needs-based poverty line. In Gaza, unemployment in 2014 was reported to be around 45 percent, with youth unemployment over 63%. In understanding the prospects for the sustainable delivery of affordable infrastructure services, these alarming figures play a key role.

The water situation in Gaza is poor in terms of both quantity and quality, where the Coastal Aquifer in the Gaza Strip receives an annual average recharge of 55 -60 MCM/y mainly from rainfall, while the annual extraction rates from the aquifer is about 200 MCM. This unsustainable high rate of

extraction has led to lowering the groundwater level and the gradual intrusion of seawater into the aquifer.

The Gaza Strip is, therefore, among the world's scarcest renewable water resource areas. As a result, average water consumption in 2014 was just 90 l/c/d, and is far below the per capita water resources available in other countries in the Middle East and in the world.

Sectoral and Institutional Context

Despite a relatively small geographical scope, the Palestinian water sector in the WB&G is fragmented. The policy, planning and regulatory roles belong to an inter-ministerial body, the Palestinian Water Authority (PWA). On the service side, water production and provision is carried out in the West Bank by the Water Department of the PWA, and municipal and private operators. Depending on the community, water distribution is managed in the West Bank by regional utilities, municipal departments in urban areas, or by Village Council water departments and Joint Service Councils in rural areas.

In Gaza, the Palestinian political split has impeded the consolidation of all the municipal water departments into the newly established water utility, i.e., the Coastal Municipalities Water Utility (CMWU). Currently, the CMWU is responsible for water and sanitation service provision in 23 of the 25 Gaza municipalities. Notably, Gaza City and Jabaliya, representing 30% of the total Gaza population, are not part of the CMWU.

The existing Gaza water supply system is composed of 160 domestic water wells, 1700 km of water networks, 21 water reservoirs, and 14 water lifting and booster station. The service coverage for piped water supply is estimated at 98%. In addition to the lack of bulk potable water resources and quality issues, another major obstacle is frequent power supply interruptions. Most of Gaza's water supply and wastewater treatment facilities are equipped with standby generators; however extended operation of the generators places an unsustainable financial burden on the utility for the supply of fuel, maintenance, and spare parts.

The challenging water supply situation in Gaza has been extensively studied and a good master plan has been prepared. (i.e., the CAMP II Study financed by USAID, January 2002). This earlier work included a non-revenue water program. Thus, there is a well-considered and technically based strategy, complemented by at least one study of alternatives. Broadly stated, the strategy is to: (a) recycle treated wastewater by injecting it to the aquifer to cover a portion of the irrigation demand (currently underway through the North Gaza Emergency Sewage Treatment Project, P074595); (b) to increase potable water imports from Israel; and (c) to fill the remaining gap by seawater desalination. In addition, the Project Implementation Consultant (PIC) for the desalination plant, financed by the European Union and implemented by the European Investment Bank, has in its TOR to determine the supply gaps by sector and to proposed how those deficits can be met. Results of that work will be then used by the Associated Works PIC described in Section III below.

Relationship to CAS/CPS/CPF

The Gaza Sustainable Water Supply Program (the Program) supports both strategic pillars of the Assistance Strategy. Under Pillar 1, Strengthen the Institutions of a Future State to Ensure Service Delivery to Citizens, engagement in the water and sanitation sector contributes to Outcome 1.3,

Improved Access to Services by the Poor and Marginalized. Under Pillar 2, Support Private Sector Led Growth that Increases Employment Opportunities, engagement in the sector contributes to Outcome 2.2, Infrastructure Improved to Attract Private Investment. The Program is also linked to the Gaza Emergency Response Water Supply & Sewerage Systems Improvement Project, the North Gaza Emergency Sewage Treatment Project and the Water Supply and Sewage System Improvement Project.

II. Proposed Development Objective

The proposed Development Objective is to assist the Palestinian Water Authority to make the Gaza Sustainable Water Supply Program possible through the production of key studies, tender documents and institutional strengthening.

Key Results

Development Financing Informed:

- At least 2 key studies to inform the Program’s sustainability are completed; and
- Studies and materials produced are used in a Donors’ Program Roundtable.

Client Capacity Increased:

- Tender documents produced for the Associated Works;
- Non-revenue water program revised and implemented; and
- Stakeholder consultation plan implemented.

III. Preliminary Description

Concept Description. This grant will finance the following activities under the Program. These activities are related to, but separate from, the planned desalination plant and are referred to as the “Associated Works”:

- A Project Implementation Consultant (PIC) to prepare tender documents, design a revised/updated non-revenue water reduction plan, and assist the PWA to tender and award a contract for construction of potable water networks, storage and pumping facilities in Gaza. This PIC could also optionally provide construction supervision;
- A consultant to prepare an independent Environmental and Social Assessment Study for the Associated Works described above;
- Key studies to better inform the Program, including a tariff study, a study to better understand the burden of infrastructure service bills on households in Gaza, and a stakeholder consultation plan;
- Stakeholder consultation meetings and related materials, the translation of materials and studies; and
- Measures to strengthen the technical capacity of the PWA and Coastal Municipalities Water Utility.

The World Bank is not intending to finance any goods or works under the Program

Key Risks and Issues. The Program has four key issues and accompanying risks which will have a direct impact on the Associated Works. These are:

- i. **The Size of the Potable Water Deficit.** Gaza has a potable water deficit of about 100 MCM per year, to be met in large part by a medium size desalination plant. Also important under the strategy is to significantly increasing water purchases from Mekorot, which can raise objections from Israeli citizens and especially in times of drought. Given the size of the deficit and, therefore, the inherent political visibility of the required proposed remedial actions, closing the water deficit will be very difficult to implement.
- ii. **Energy for the Water Supply System.** The envisaged new water network alone (not counting the desalination plant) will require about 10 MW of energy. Currently there is an existing power deficit of about 105 MW in Gaza. Energy to operate the water supply network could come from a combination of three possible sources: 1) a dedicated power plant with renewable energy options built at the site of, or close to, the associated desalination plant; 2) increased electricity imports from Israel; and/or 3) increased electricity imports from Egypt. All three options have been discussed for several years, with none of them emerging as the consensus choice. Resolving the energy issue will require continued substantial dialogue at the political level.
- iii. **Ability to Pay.** Unemployment in Gaza is about 30 percent (youth unemployment is over 45%) and more than 55,000 households receive support from the National Cash Transfer Program. Per capita income is estimated to be about \$3100/year and, assuming 6 persons per household, household income would be about \$1500/month. Thus, an important consideration will be to determine if households have the ability to pay for desalinated piped water. Making the issue more complex is the arrival of new facilities in Gaza for wastewater, and solid waste--all of which households must also pay for.
- iv. **Uncertainty of Working in Gaza.** Besides the energy issue described above, construction activities and the delivery of materials are uncertain, given that Israel indirectly controls the former and completely controls the latter. Other projects in Gaza have suffered from significant delays for this reason.

Implementing Agency Assessment

The Program will be implemented by the PWA and the CMWU. The CMWU is a semi-public entity, established by a ministerial decree, with its general assembly from Gaza Strip member municipalities. The shareholdings of member municipalities are proportional to their valuated water and sanitation assets. The utility has succeeded over the last several years to build its management capacity, with a unified billing system, financial management system, and GIS. The utility has a FM, procurement, and internal financial controller functions and submits its audited accounts to the Ministry of Finance. The utility is headquartered in Gaza City and has regional offices in Rafah, Khanyounis, and Deir el-Balah.

The existing Project Management Unit (PMU) at CMWU, which is currently handling the implementation of other World Bank and donor financed projects in Gaza, will assist the PWA to implement the Program. The PMU is fully staffed with a director, procurement, financial management, accountant, environmental, and other relevant technical staff. Key members of the PMU are experienced in implementing similar projects under the World Bank's procurement

guidelines, policies and procedures.

Additional institutional strengthening measures will be designed over the coming year, given that the PWA and CMWU are already being strengthened under existing World Bank supported water and wastewater projects. Lessons learned from these ongoing activities will be studied and incorporated into the new programs. Based on current observations, areas expected to be further strengthened include customer relations and customer service, financial planning, leveraging IT advances, and wastewater reuse policies, planning and implementation.

IV. Safeguard Policies that Might Apply

Safeguard Policies Triggered by the Project	Yes	No	TBD
Environmental Assessment OP/BP 4.01	X		
Natural Habitats OP/BP 4.04		X	
Forests OP/BP 4.36		X	
Pest Management OP 4.09		X	
Physical Cultural Resources OP/BP 4.11		X	
Indigenous Peoples OP/BP 4.10		X	
Involuntary Resettlement OP/BP 4.12			X
Safety of Dams OP/BP 4.37		X	
Projects on International Waterways OP/BP 7.50		X	
Projects in Disputed Areas OP/BP 7.60		X	

V. Financing (in USD Million)

Total Project Cost:	US\$2.5 Million	Total World Bank Financing:	US\$2.2 Million
Total Co-financing:	-0-	Financing Gap:	US\$0.3 Million
Financing Source			Amount (\$ Million)
World Bank			US\$2.2 million
tbd			US\$0.3 Million
Total			US\$2.5 Million

VI. Contact Points

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