



Program Information Document (PID)

Concept Stage | Date Prepared/Updated: 28-Jul-2022 | Report No: PIDC247170



BASIC INFORMATION

A. Basic Program Data

Country Jordan	Project ID P176619	Parent Project ID (if any)	Program Name Jordan Water Sector Efficiency Program For Results
Region MIDDLE EAST AND NORTH AFRICA	Estimated Appraisal Date 10-Oct-2022	Estimated Board Date 15-Dec-2022	Does this operation have an IPF component? No
Financing Instrument Program-for-Results Financing	Borrower(s) Ministry of Planning and International Cooperation, Hashemite Kingdom of Jordan	Implementing Agency Ministry of Water and Irrigation, Hashemite Kingdom of Jordan	Practice Area (Lead) Water

Proposed Program Development Objective(s)

The initial program development objective (PDO) is to improve the efficiency of water services in Jordan

COST & FINANCING

SUMMARY (USD Millions)

Government program Cost	0.00
Total Operation Cost	0.00
Total Program Cost	0.00
Total Financing	0.00
Financing Gap	0.00

FINANCING (USD Millions)

Concept Review Decision

The review did authorize the preparation to continue



B. Introduction and Context

Context

- Jordan is one of the most water-scarce countries in the world, which poses severe limits on agriculture and water supply to its cities.** With only 97 cubic meter per capita per year, the available water is well below the absolute water scarcity threshold of 500 cubic meter per capita per year. Over 92 percent of the land in Jordan is classified as semi-arid or arid and receives less than 200 mm of rainfall per year.
- Jordan has seen its population grow through a combination of organic growth and refugee influxes—reducing the amount of water per person available as an economic input.** Between 2011 to 2015, an estimated 1.3 million Syrian refugees fled to Jordan, an influx equivalent to 20 percent of Jordan’s pre-crisis population. The rapid increase in population has placed tremendous pressures on public services and infrastructure throughout the country, in particular electricity and water services. The combination of demand- and supply-side shocks led to a sharp rise in sector debt, impacting the sustainability of basic services delivery and the country’s fiscal position. As Jordan’s population has grown and become increasingly urbanized (91 percent in 2019), around half of Jordan’s available water is used for municipal water supply (including non-residential uses) and the other half is allocated to agriculture (compared with a global average of 70 percent of water for agriculture). Water scarcity severely constrains agricultural output in the country.
- Climate change and population growth will further reduce water resources availability per capita by 30 percent by 2040 at the same time that these factors will drive growth in demand for water.** Across the Middle East and in Jordan, many of the effects of climate change on the water cycle are already observed and are expected to worsen in the future. The detrimental effects of climate change will reduce the overall water availability by 30 percent by 2040. The National Water Strategy 2016-2025 estimated that water demand would exceed available water resources by more than 26 percent by 2025.
- GOJ has been proactive both in the analysis of water scarcity challenges and in attempts to formulate a response through the evolution of the national water program during the recent decades.** Since the 1960s, the Ministry of Water and Irrigation (MWI) with the support of Central Government and from international technical and financial partners has pursued measures to forecast and respond to water scarcity in Jordan over the past decades including: (i) the development of water master plans and national strategies; (ii) reallocation from agriculture to domestic water supply; (iii) wastewater reuse in agriculture; (iv) improvements to water productivity in agriculture, and; (v) a program of PPPs to augment bulk water availability.
- Jordan’s water scarcity challenges and climate adaptation needs have already stimulated prioritization in water allocations and a focus on water conservation measures and innovation.** The water reallocation policy gives priority to domestic needs, followed by the sectors that provide the highest feasible economic return per cubic meter of water used. Water conservation is a strategic priority in both the agriculture and domestic sectors. Agricultural water productivity has improved steadily in Jordan through a combination of water-saving technologies and regulatory provisions. Conservation in the domestic sector is also prioritized in the National Water Strategy, as non-revenue water (NRW is the difference between the amount of water put into the distribution system and the amount of water billed to consumers for technical or commercial reasons) accounts for approximately 50 percent of municipal water in Jordan.
- Urgent efficiency measures and reforms are needed to bring the water sector back into sustainable operations and to serve as a foundation and leverage new large-scale supply-side investments, including the Aqaba-Amman Conveyance Project.** There are potential efficiency savings in, for example: (i) reducing NRW; (ii) improving energy



efficiency and through more efficient energy purchase (e.g., time of day pricing); (iii) improving the management of the utilities, and; (v) reallocating agricultural water to domestic supply through substitution with treated wastewater where applicable. On the revenue side there is a need to minimize unauthorized consumption and metering inaccuracies and to improve collection. Addressing both cost and revenue-side factors will help improve the financial sustainability of the participating water utilities and other water service providers.

Relationship to CAS/CPF

The Program concept is in line with the WBG strategic engagement as reflected in the second pillar of the Country Partnership Framework (CPF), which aims at improving the quality and equity of service delivery to the Jordanian population and the refugees, including through private sector solutions.

8. **The GOJ has placed a clear priority on reform of the water sector, stressing the need to improve basic services to citizens, with a view to improving the population’s living conditions.** The GOJ has prioritized achieving financial sustainability of the water supply and sanitation services as one of the critical paths to Jordan’s overall water security that underpins growth and job creation.

9. **The Program also aligns well with national policies and strategies aimed at reducing GHG emissions and adaptation to climate change.** Among these are:

- Jordan’s Nationally Determined Contribution (NDC), which highlights priority adaptation measures, such as maximizing treated wastewater re-use in agriculture, ensuring plans for groundwater protection and management, reducing water losses in distribution pipes, introducing water metering and water saving technologies, among others.
- MWI’s 2015 Energy Efficiency and Renewable Energy Policy for the Jordanian Water Sector (as referenced in Jordan’s 1st NDC), setting a target of 15 percent reduction in energy consumption of billed water by 2025.
- The 2025 National Vision and Strategy (referenced in the NDC) setting a target of 11 percent renewable energy share in the total energy mix in 2025.

C. Program Development Objective(s) (PDO) and PDO Level Results Indicators

Program Development Objective(s)

10. The initial program development objective (PDO) is to improve the efficiency of water services in Jordan.

PDO Level Results Indicators

11. The proposed PforR would support possible results in (i) non-revenue water reduction; (ii) energy efficiency; (iii) agricultural water management; and (iv) strengthening systems to improve operational performance.

D. Program Description

PforR Program Boundary

12. This PforR would support the Government’s proposed strategy to promote water efficiency and NRW reduction to be further detailed during project preparation.

**E. Initial Environmental and Social Screening**

13. The environmental risks of the proposed Program are expected to be Substantial and the social risks of the Program are expected to be Moderate. As preparation progresses, the Bank will continue to evaluate the risks arising from the Program design and will agree measures to mitigate these risks and strengthen client capacity to comply with Jordan's environmental and social policy requirements.

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