

COUNTRY SHEET

JORDAN

OVERALL CONTEXT



- **Currency:** Jordanian Dinar (1 JOD = 1,19€)
- **Population:** 10 million (2020)
- **Including:** 1,4 million Syrian refugees, 2 million Palestinian refugees (2019)
- **Proportion of rural population:** 9% (2020)
- **HDI rank:** 95th out of 188 countries (2017)
- **GDP per capita:** 9 406 USD (2018)
- **Surface area:** 89 342 km²
- **Climate:** Arid / semi-arid – mostly composed of desert plateaux
- **Territorial organization:** 12 governorates: Irbid, Mafrâq, Aïljoun, Jerash, Balqa, Amman, Zarqa, Madaba, Karak, Tafileh, Ma'an and Aqaba
- **Political framework:** Constitutional Monarchy (King Abdallah II since 1999)

WATER AND SANITATION IN JORDAN

Water resources

Jordan is one of the four countries with highest water scarcity in the world, with an estimation of only 148 m³ renewable water resources per capita per year, and less than 100 mm of rainwater per year for 80% of the country.

Jordan has 3 types of water resources:

- Surface water – the two major rivers, the Jordan river and its main affluent, the Yarmouk river, are shared with Israel and Syria;
- Groundwater, whether renewable or not, largely overused;
- Recycled water (mainly treated wastewater; to a lesser extend desalted water)

To tackle the overuse of water resources, Jordan strategy relies on increasing use of recycled water, especially for agriculture – however it prioritizes desalination, which is costly.

Main infrastructures

Jordan water resources are very located and distant from agricultural or populated centers. As a consequence, Jordan developed large infrastructures, with the major ones being:

- Al-Wahda dam on the Yarmouk river;
- King Abdullah Canal (KAC) in the Jordan valley;
- As-Samra water treatment plan, which treats most of Great Amman wastewater and discharges them in the Zarqa river;
- King Talal dam on the Zarqa river, which irrigates the lower Jordan valley.

Drinkable water services

Drinking water services significantly improved benefiting from the infrastructures created by the centralization of the water sector. 99% of urban population and 97% of rural population has at least basic access to drinkable water (JMP data, 2020).

However, the proportion of non-revenue water reaches 50%, mostly due to leakages and illegal pumping. Moreover, 60% of water in domestic networks comes from groundwater which is unviable because largely overused.

Sanitation services

63% of the population is connected to a public sewage network, and two thirds of wastewater is treated. In 2015, Jordan counted 32 running wastewater treatment plants, including As-Samra plant which treats almost 70% of the country's wastewater (300 000 m³ per day).

DOCUMENTS AND RESSOURCES

• Key data:

Aquastat Survey ([FAO 2016](#))

JMP dataset : <https://washdata.org/data/>

Jordan Water Sector : facts and figures ([MWI 2015](#))

• Official documents:

National Water Strategy 2016-2025 ([FAO summary](#) and [Official publication](#))

• Services and governance analysis:

Assessment of the water harvesting sector ([FAO 2016](#))

Water utilities reforms – case studies from the Arab world ([ACWUA 2016](#))

Sustainable states: environment, governance, and the future of the Middle East ([CSIS 2021](#))

Water, energy, and food security nexus in Jordan, Lebanon, and Tunisia ([IUCN 2019](#))

• **Wikipedia page:** [Water supply and sanitation in Jordan](#)

KEY STAKEHOLDERS

National institutions

- [Ministry of Water and Irrigation \(MWI\)](#)
- [Water Authority of Jordan \(WAJ\)](#)
- [Jordan Valley Authority \(JVA\)](#)

UN agencies and key donors

- FAO : [pS-Eau link](#) – [website](#)
- UNICEF : [pS-Eau link](#) – [website](#)
- USAID : [pS-Eau link](#) – [website](#)
- GIZ : [pS-Eau link](#) – [website](#)
- AFD : [pS-Eau link](#) – [website](#)

Local NGOs

- Watershed And Development Initiative (WADI) : [pS-Eau link](#) – [website](#)
- Methods for Irrigation and Agriculture (MIRRA) : [pS-Eau link](#) – [website](#)

Research institutes and Universities

- Water, Energy and Environment Center (WEEC) : [pS-Eau link](#) – [website](#)
- Water Diplomacy Center : [pS-Eau link](#) – [website](#)
- Inter-Islamic Network on Water Resources Development and Management : [pS-Eau link](#) – [website](#)

LEGAL AND INSTITUTIONAL FRAMEWORK

Key institutional actors

Water and wastewater sectors are heavily centralized, under the authority of the Ministry of Water and Irrigation (MWI). The Ministry also supervises two other major bodies, the Water Authority of Jordan (WAJ) and the Jordan Valley Authority (JVA).

- The MWI is responsible of the National Strategy, research and development, as well as data collection and overall monitoring of infrastructures and projects. The Performance Management Unit (PMU) leads monitoring and evaluation activities and develops the participation of private sector, especially through public-private partnerships;
- The WAJ is in charge of planning, construction, exploitation and maintenance of drinkable water and sanitation services. Services management is direct in four governorates and ensured through three public companies supervised by the WAJ in the rest of the country: Miyahuna LLC (Amman, Madaba and Zarqa governorates); Aqaba Water Company (AWC – Aqaba governorate); Yarmouk Water Company (YWC – Irbid, Mafraq, Ajloun and Jerash governorates);
- The JVA oversees socio-economic development of the Jordan Valley, which includes development of the water sector and irrigation management; therefor the JVA is responsible for construction, exploitation and maintenance of dams, irrigation and water provision systems.

Exploitation of water and sanitation services has been opened to the private sector since 1999; however, it is applied to a limited number of large infrastructures whose ownership remains public.

National strategy and legal framework

The National Water Strategy has been updated for 2016-2025 and defines the orientations of water and sanitation sectors. It aims at building a coherent approach to the sector to facilitate its development, by defining objectives for the five following areas: (1) integrated water resource management; (2) water, sewage and sanitation services; (3) water for irrigation, energy and other uses; (4) institutional reforms; (5) information management and monitoring.

Several documents define the strategy's implementation framework:

[Water Sector Policy for Drought Management \(2018\)](#)

[Water Sector Capital Investment Plan 2016 – 2025 \(2016\)](#)

[Decentralized Wastewater Management Policy \(2016\)](#)

[Climate Change Policy for a Resilient Water Sector \(2016\)](#)

[Surface Water Utilization Policy \(2016\)](#)

[Water Demand Management Policy \(2016\)](#)

[Water Reallocation Policy \(2016\)](#)

[Water Substitution and Reuse Policy \(2016\)](#)

[Groundwater Sustainability Policy \(2016\)](#)

