



Project Information Document (PID)

Concept Stage | Date Prepared/Updated: 07-Jul-2025 | Report No: PIDDC01354

**BASIC INFORMATION****A. Basic Project Data**

Project Beneficiary(ies) Tunisia, Tunisia	Operation ID P511719	Operation Name Water Security and Resilience Project	
Region MID EAST,NORTH AFRICA,AFG,PAK	Estimated Appraisal Date 16-Dec-2025	Estimated Approval Date 31-Mar-2026	Practice Area (Lead) Water
Financing Instrument Investment Project Financing (IPF)	Borrower(s) SONEDE	Implementing Agency SONEDE	

Proposed Development Objective(s)

To improve the management of the demand and to increase and diversify the supply of potable water in the project area; and improve the performance of of operators in the potable water and irrigation sub-sectors.

PROJECT FINANCING DATA (US\$, Millions)**Maximizing Finance for Development**

Is this an MFD-Enabling Project (MFD-EP)?	Yes
Is this project Private Capital Enabling (PCE)?	Yes

SUMMARY

Total Operation Cost	200.00
Total Financing	200.00
of which IBRD/IDA	199.99
Financing Gap	0.00

DETAILS**World Bank Group Financing**

International Bank for Reconstruction and Development (IBRD)	199.99
--	--------

Non-World Bank Group Financing

Counterpart Funding	0.00
---------------------	------



Local Beneficiaries	0.00
Environmental and Social Risk Classification	Concept Review Decision
Substantial	The review did authorize the preparation to continue

B. Introduction and Context

Country Context

1. **Tunisia is a lower middle-income country with a highly diversified economy led by a large service sector. At the same time, it continues to face challenges such as limited growth, substantial public expenditures, and persisting regional disparities and unemployment.** After stalling in 2023, Tunisia’s economy is showing gradual recovery, with growth of 1.4% in 2024 and 1.9% projected for 2025. Assuming drought conditions ease, it is expected that moderate growth will occur over 2025–27 but risks to this remain substantial. Transfers to State-Owned Enterprises (SOEs), together with public sector employment, subsidies and social protection programs, contributed to a rising debt burden from 40% (2010) to 80% (2023) of GDP. The debt of the 50 largest SOEs constitutes 38% of the GDP (2020). Inequality increased for the first time in decades: the Gini Index rose from 32.8 (2015) to 33.7 (2021). Disparities persist between lagged interior regions and developed coastal regions. Unemployment stands at 16%, with gender disparities (22% for women versus 13% for men). Graduate unemployment is 31%, reflecting youth exclusion.
2. **Following the 2024 Presidential elections, the government identified its priorities for the next five years.** These maintain continuity with the directions outlined in the 2023-2025 National Development Plan and are expected to be formalized through the 2026-2030 Plan under preparation. While keeping the overall goal of promoting sustainable growth and social justice, a new focus on jobs and economic inclusion was ranked amongst the top priorities. Enhancing human capital remains critical, with a focus on employability. Other priorities include energy transition, addressing water scarcity, expanding digitalization, improving the business environment, and supporting private sector development.
3. **The Tunisian economy is highly vulnerable to water scarcity.** According to the Tunisia Country Climate and Development Report (CCDR, 2023), 83% of Tunisia’s GDP is linked to areas under high or very high water stress, rendering the economy vulnerable in the face of droughts. In Tunisia, 39% of the jobs are water-dependent (half in agriculture; half in construction and manufacturing), implying even greater vulnerability to water stress than in other MENA countries (e.g. in Egypt and Jordan the analogous rates of job water dependence are 32% and 19%, respectively) (CLEAR dashboard, 2023).

Sectoral and Institutional Context

Increasing water demand-supply gap



4. **Tunisia successfully developed its water supply to the benefit of its population and economy.** The country achieved nearly universal access to drinking water, and the provision of some form of sanitation for 97% of the population. The country fully developed its irrigation potential, with 450,000 ha equipped (15% of arable land). Irrigated agriculture uses 75% of the water (in years of no restrictions) and generates 43% of agricultural production (CCDR, 2023). More recently, Tunisia has been investing in non-conventional sources, however, at present desalination and reuse of treated wastewater (TWW) contribute only 2% and 1%, respectively, to the total water supply.
5. **The traditional supply-oriented approach is reaching its limit with regard to conventional resources.** Surface water is mobilized to almost full capacity (95%). Groundwater is overexploited (133%), leading to saltwater intrusion and increased costs for abstraction. Water quality is at risk: 27% of the effluents treated by the sanitation utility (*Office National de l'Assainissement*, ONAS) do not comply with national standards. This undermines the potential for TWW reuse, and it exacerbates risks to ecosystems and public health.
6. **Climate change further threatens Tunisia's water endowment.** The CCDR highlighted that Tunisia is among the countries most vulnerable to climate change in the Middle East and North Africa (MENA). Since 2015, the country has been grappling with a multiyear drought which has resulted in significantly low reservoir levels, well below historical averages. As a coping mechanism, farmers and other water users have increased withdrawals from aquifers, aggravating over-exploitation. Across all climate change scenarios, it is projected that by 2050, the increase in temperature and uncertainty around precipitation, coupled with changes in the frequency and intensity of extreme weather events, will drive a further decline in water availability.
7. **Demand for water has been increasing due to population growth (threefold since 1950), increased urbanization, irrigation expansion and economic growth.** Despite increasing water scarcity, Tunisia is still facing challenges at demand-side management, intended as reducing losses and optimizing usage. About 23% of drinking water and 30% of irrigation water in public schemes is lost through leakages before reaching consumers. Major investments in efficient on-farm irrigation technologies failed to decrease water consumption due to lack of concomitant governance actions (quotas, volumetric water pricing, incentives). Tunisia records lower agricultural water productivity than peer countries in the MENA Region.
8. **Tunisia's growing water gap threatens the country's socio-economic development: if no action is taken to address water insecurity, a quarter of the country's water demand will go unmet by 2050 (CCDR, 2023).** Efforts to address this growing imbalance between supply and demand are often reactive and short-term, highlighting the need for more coordinated and long-term solutions. In times of drought, priority is generally given to human and industrial demands, while restrictions are imposed on irrigation with far-reaching consequences for agricultural production. As a result, farmers lack visibility on water allocation, which complicates planning for the agricultural season and inclines them to focus on lower-value crops, affecting incomes, jobs, and food security, while fueling groundwater overexploitation. It is particularly concerning that despite the severe restrictions on irrigation, the potable water utility (*Société Nationale d'Exploitation et de Distribution des Eaux*, SONEDE) does not receive sufficient water to meet the needs for drinking water and carries out water rationing. In a business-as-usual scenario, the economy could shrink by 3.4% of GDP in 2030 and by 6.4% in 2050 (CCDR, 2023). The agricultural sector would be particularly affected, with its value added expected to fall by 15% by 2030 and by 29% by 2050. By 2030, the poverty rate would increase to 21.3%, a 1.5% increase relative to the baseline scenario.

Governance, Institutional and Legal framework



9. **The water sector's outdated legislative framework renders tackling the growing water gap in Tunisia even more complex.** Tunisia's Water Code dates back to 1975, when the country was not yet suffering from water deficits. The revision of the Water Code has been under discussion since 2009, but the evolving country context and some misalignment at technical level have delayed its approval.

10. **The Tunisian water sector involves a multiplicity of institutions.** The Ministry of Agriculture, Hydraulic Resources, and Fisheries (*Ministère de l'Agriculture, des Ressources Hydrauliques et de la Pêche*, MARHP) oversees the potable water sub-sector through the SONEDE; the irrigation sub-sector through its regional offices (*Commissariats Régionaux de Développement Agricole*, CRDAs); as well as cross-cutting aspects of water resources management through its planning department. The State Secretary for water resources reports to the MARHP Minister. The Ministry of Environment oversees the sanitation sub-sector through the ONAS. Decision-making process in the public institutions, as well as administrative procedures, in the water sector, are complex which in some cases have generated some delays. Users' groups play a role in rural areas across the sub-sectors, such as the water users associations (*Groupeement de Developpement Agricole*, GDA) in irrigation.

11. **Limited interministerial coordination results in delayed responses to structural water scarcity and droughts.** This is apparent in the case of TWW reuse, for which there is insufficient communication between ONAS, the Ministry of Environment and MARHP, and the need for more alignment on investment priorities for wastewater treatment and reuse. Decisions that need to be approved by the Interministerial Council often suffer delays. For example, ONAS's proposed tariff increases have been repeatedly postponed by the Interministerial Council since 2023.

12. **Efforts to modernize the institutional and legal framework have yet to yield substantial outcomes.**

Financial sustainability

13. **Water utilities and operators in Tunisia largely rely on increasingly strained public resources.** State financial support plays an important role in addressing the gap between revenue collected from customers and the costs required not only for infrastructure renewal and expansion, but also for operation and maintenance. However, current levels of support have not kept pace with these needs, contributing to ongoing challenges in maintaining infrastructure quality and sector performance. These financial pressures have been further intensified by rising inflation in recent years. More specifically:

- **The SONEDE recovers 90% of O&M costs.** A tariff adjustment program has been under implementation since 2019. SONEDE's financial viability risks being further undermined by Tunisia's program of expansion of desalination capacity, which is very expensive.
- **The ONAS recovers 70% of O&M costs.** No tariff adjustments have been implemented since 2022, while the operational subsidies have been falling short, with only partial coverage of maintenance needs. ONAS' dire financial position is at the heart of the hiring freeze that has been in place since 2008, with the consequent loss of expertise in the sub-sector.
- **The CRDAs and GDAs recover only 50% of O&M costs.** Tariffs have been frozen since 2002. In 2021, a gradual tariff adjustment was launched, but shortly after suspended due to the prolonged drought, which led to restrictions in water provision to farmers.

14. **ONAS is increasingly leveraging private sector participation in O&M to overcome its operational challenges.** The ONAS is outsourcing its O&M functions for 32% of WWTPs, 56% of pumping stations and 47% of networks. This is a significant progression compared to 2022 values of 14%, 18% and 17%, respectively. Through the WBG-supported Sanitation Public-Private Partnership (PPP) Support Project (ONAS PPP, P162957), the ONAS is exploring concession



contracts that involve more advanced forms of private sector engagement, including performance-based compensation, extended contract durations (ten years), and targeted infrastructure improvements with a modest private contribution to capital investment (limited to 4%). IFC provided transaction advisory to help ONAS develop this project and the World Bank is financing it. The ONAS PPP project is also strengthening the PPP Unit in ONAS in charge of monitoring all PPP contracts, to facilitate interactions with the concessionaires and the national PPP Authority (IGPPP). Through IGPPP's technical support, the ONAS now aspires to go even further by leveraging higher shares of private sector financing through PPPs, as indicated by the ongoing tender for El Hessiane WWTP DBFMO (Design, Build, Finance, Maintain, Operate) contract (final bid expected in December 2025). For this transaction, IFC is partnering with the ONAS and the IGPPP to lead a group of DFIs for the review of the bankability of the investment based on which bidders will submit their offers.

The Plan Eau 2050

15. **The Plan Eau 2050 – the MARHP's water strategy - aims to close the water demand-supply gap by 2050.** As such, it serves as a cornerstone for the country's economic development (livelihoods and jobs), human development (food security and public health), and environmental sustainability. Presented to the Higher Water Council in 2023, the *Plan Eau 2050* advocates for infrastructure development, institutional and governance improvements, legal reforms, and interministerial coordination mechanisms; but the buy-in of several proposals remains limited. The Plan - segmented into a series of 5- to 10-year investment plans - estimates a total financing need of US\$23 billion, or US\$900 million per year. This is well beyond the financing capacity of the budget, corresponding to 60% of total public annual investments.

Tunisia Water Security and Resilience (RESEau) Program

16. **In November 2023, the Government of Tunisia requested World Bank's support for a significant expansion of the country's capacity for TWW reuse, primarily in agriculture.** The subsequent technical review by the World Bank and associated policy dialogue led to the recommendation to take a programmatic approach to broaden the support to potable water, sanitation and irrigation; in recognition of the interconnected nature of the challenges across all water sub-sectors and of the need for a holistic approach to achieve impact at scale.

17. **As part of this process, the World Bank prepared a Water sector note based on priorities identified in the *Plan Eau 2050*, which was shared with several concerned Ministries (Ministry of Economy and Planning, MEP; Ministry of Finance; MARHP; Ministry of Environment) in December 2024.** The note identifies institutional and governance reforms across all water sub-sectors, touching on water demand, supply and financial sustainability. These measures need to be implemented in parallel with infrastructure investments under the current 5-year plan of the *Plan Eau 2050*, to ensure that the anticipated benefits of the investments would materialize and be sustainable. The priority reforms include the high-level governance framework, which needs to be aligned with – and improve upon – the actual reality on the ground. Regulatory obstacles and inefficiencies could be removed, to ensure that institutions are put in the best conditions to perform. Finally, there is a need for adoption of a performance-based approach in managing the water infrastructure base. The ten priority reforms are laid out along these axes (governance, regulation and performance) for demand management, supply augmentation and financial sustainability.



Table 1: Ten priority governance and institutional reforms in the water sector in Tunisia

	<i>Demand management</i>	<i>Supply augmentation</i>	<i>Financial sustainability</i>
<i>Governance</i>	1-Approval of the Water code		
	2-Enhancement of interministerial coordination		
	3-Adoption of groundwater strategy	4-Adoption of industrial pre-treatment program	
<i>Regulation</i>	5-Decree on operator of public irrigation schemes	6-Decree on TWW reuse	7-Circular on TWW tariff
<i>Performance</i>	8- Technical performance improvement of SONEDE, ONAS and irrigation operators		9- Commercial performance improvement of SONEDE, ONAS and irrigation operators
			10-Signature of PPP for desalination

Relationship to CPF

18. **The RESEau Program is aligned with the World Bank Group’s Country Partnership Framework (CPF; Report No. 180304-TN) 2023-2027 for Tunisia.** It supports the GoT’s development plan to expand the economy to benefit all, create quality jobs, integrate environmental sustainability and boost resilience to climate change. The proposed Program is aligned with:

- **High-Level Objective 3 on improved resilience to climate change, and notably to Objective 3.3 on improving water services.** Through its interventions across all water sub-sectors (potable water, irrigation and sanitation), the Program supports sustainable water management, climate resilience, and access to high-quality services.
- **High-Level Objective 1 on greater accountability of public institutions,** by strengthening technical and commercial performance of utilities (SONEDE and ONAS) and public operators (CRDAs), laying the foundations towards fiscal sustainability, and stimulating private sector participation.

19. **The Program will contribute to the World Bank Group’s Global Challenge Program (GCP) on Fast-Tracking Water Security and Climate Adaptation and to key initiatives in MENA.** The ultimate targets of the Plan Eau 2050 align with the pillars of the WBG’s *Meyahuna Hayatuna* Initiative in MENA, with a priority focus on water for people, food, planet, growth and jobs.

C. Proposed Development Objective(s)

To manage the demand and increase the supply of potable water in the project area; and to improve the performance of the potable water utility.

Key Results (From PCN)

20. The proposed PDO indicators are (i) water losses reduced (10 Mm³/yr); (ii) production of desalination and TWW increased (18 Mm³/yr); (iii) interruptions of service reduced (or alternative indicator of technical performance); and (iv) collection rate increased (or alternative indicator of financial performance).

D. Concept Description

21. **Component 1. Demand management** – SONEDE aims to manage *demand* through a combination of technical and managerial measures (Reform #8), including reducing physical losses through network upgrades; enhancing operational



efficiency through improved network management; and through sensitization of clients in the use of the resource. This component will finance the upgrade of existing networks, possibly adopting a performance-based contract. Private sector financing, even if in limited amounts, will be explored.

22. **Component 2. Supply diversification and increase** – The SONEDE aims to diversify and increase *supply* through the expansion of existing desalination plants, possibly adopting a DBO or BOOT model.

23. **Component 3. Financial sustainability and institutional strengthening** – The SONEDE aims to improve its commercial performance (Reform #9), by identifying a more efficient way of doing business. The project is expected to finance the digitalization of operations to improve operational, financial, and commercial performance, notably by: (i) replacing obsolete water meters with smart meters; (ii) introducing improved monitoring systems; (iii) enhancing customer management through digital billing and mobile payment solutions; and (iv) introducing client relationship tools to strengthen revenue collection and service quality. This component will also support an analysis of the impacts of desalination expansion on cost structures and the implications for tariffs, together with trainings for SONEDE staff on identifying and structuring PPPs. This would be conducive to the preparation and signature of a first batch of PPP contracts (Reform #10). This component will be complemented by grant resources to lay foundations for improved inter-ministerial coordination and planning.

24. **Component 4. Project Management** – Activities will include, among others: (i) project management, monitoring and evaluation activities, including the purchase of equipment, and carrying out project financial and technical audits; (ii) establishing a comprehensive environmental and social management system (including creating the structures, processes, and skills necessary for long-term compliance with international standards); and (iii) stakeholder communication and advocacy strategy.

Legal Operational Policies

Policies	Triggered?
Projects on International Waterways OP 7.50	Yes
Projects in Disputed Area OP 7.60	No

Summary of Screening of Environmental and Social Risks and Impacts

25. The environmental risk rating is assessed as Substantial, based on the nature and scale of the planned physical interventions, the sensitivity of the project's coastal setting, and the current limitations in the institutional capacity of the implementing agency. The operation involves extensive civil works in densely populated urban and peri-urban areas, including the rehabilitation of potable water networks and the expansion of a coastal desalination plant. These activities carry the potential for a range of adverse environmental impacts, including brine discharge into the marine environment, localized air and noise pollution, generation of hazardous and non-hazardous waste, and high energy consumption during both construction and operation phases. While the planned works are not located in protected or critical habitats, the coastal location of the desalination facility introduces potential risks to marine ecosystems, particularly related to salinity changes and thermal impacts. Although some of these risks are expected to be site-specific, they involve technical



complexity and require robust, sustained monitoring and mitigation. At this stage, the implementing agency, SONEDE, does not have an operational Environmental and Social Management System (ESMS) aligned with ESF and has not previously implemented Bank-financed projects under ESF. This may limit its ability to meet relevant standards without targeted capacity support. To address these gaps, institutional strengthening measures including ESMS development will be integrated into project design, alongside site-specific environmental management tools. The social risks are also assessed Substantial, due to social exclusion, labor and working conditions, community health and safety, and stakeholder engagement weaknesses. Key risks include (i) social exclusion, particularly of rural communities, women and girls who may be left behind if project benefits are not distributed equitably. Inclusive design measures will be necessary to ensure fair access to services and equal opportunities. (ii) Labor and working conditions risks, including potential labor influx, unequal employment opportunities, and gaps in occupational health and safety, may lead to community tensions or violations of labor standards (e.g., child labor, unfair treatment wage gaps, or restrictions on freedom of association). Labor management procedures and mechanisms to integrate labor force will be put in place to mitigate these risks. (iii) Community health and safety risks are expected during construction due to accidents or exposure to hazardous materials. Risks of Sexual Exploitation and Abuse/Sexual Harassment (SEA/SH) will be addressed through a dedicated SEA/SH action plan outlining mitigation measures. Meaningful and inclusive consultations are essential to ensure transparency and responsiveness throughout project implementation. Special efforts will be made to engage vulnerable groups and promote their active participation. Both environmental and social risks are considered manageable with appropriate mitigation measures, strong implementation support, and a clear commitment to building institutional capacity. The project offers a valuable opportunity to enhance E&S practices particularly through institutionalizing SONEDE's ESMS, and strengthening inclusive stakeholder engagement processes in the water sector.

CONTACT POINT

World Bank

Gabriella Izzi
Senior Irrigation Specialist

Habab Taifour
Lead Water Specialist

Floris Dalemans
Water Specialist

Borrower/Client/Recipient

SONEDE
Abdelhamid Mnajja
Director
mnajja.abdelhamid@yahoo.fr

Implementing Agencies



SONEDE
Abdelhamid Mnajja
Director
mnajja.abdelhamid@yahoo.fr

FOR MORE INFORMATION CONTACT

The World Bank
1818 H Street, NW
Washington, D.C. 20433
Telephone: (202) 473-1000
Web: <http://www.worldbank.org/projects>

APPROVAL

Task Team Leader(s):	Gabriella Izzi, Habab Taifour, Floris Dalemans	
Approved By		
Practice Manager/Manager:	Michael Haney	28-May-2025
Country Director:	Alexandre Arrobbio	07-Jul-2025