



Turkiye Irrigation Modernization (P158418)

EUROPE AND CENTRAL ASIA | Turkiye | Water Global Practice |
IBRD/IDA | Investment Project Financing | FY 2019 | Seq No: 11 | ARCHIVED on 29-Jun-2024 | ISR60786 |

Implementing Agencies: Devlet Su İşleri (DSI), Republic of Turkey

Key Dates**Key Project Dates**

Bank Approval Date: 22-Jan-2019

Effectiveness Date: 30-May-2019

Planned Mid Term Review Date: 22-Aug-2022

Actual Mid-Term Review Date: 24-Oct-2022

Original Closing Date: 27-Feb-2026

Revised Closing Date: 27-Feb-2026

Project Development Objectives

Project Development Objective (from Project Appraisal Document)

The objective of the project is to improve irrigation delivery, through rehabilitation and modernization of distribution infrastructure in selected schemes, and through strengthening of capacity of WUAs.

Has the Project Development Objective been changed since Board Approval of the Project Objective?

No

Components Table

Name

Component 1. Irrigation System Modernization:(Cost \$249.00 M)

Component 2. Innovation and Institutional Support:(Cost \$2.00 M)

Component 3. Project Management:(Cost \$3.00 M)

Overall Ratings

Name	Previous Rating	Current Rating
Progress towards achievement of PDO	<input type="checkbox"/> Moderately Satisfactory	<input type="checkbox"/> Moderately Satisfactory
Overall Implementation Progress (IP)	<input type="checkbox"/> Moderately Satisfactory	<input type="checkbox"/> Moderately Satisfactory
Overall Risk Rating	<input type="checkbox"/> Moderate	<input type="checkbox"/> Moderate

Implementation Status and Key Decisions

The Project aims to improve irrigation delivery through rehabilitation and modernization of four schemes under Component 1 and strengthening capacity of Water User Associations (WUAs) under Component 2. Component 1 includes rehabilitation and modernization of four irrigation schemes, namely: Alasehir irrigation scheme in Manisa, Atabey irrigation scheme in Isparta, Eregli-Ivriz left bank irrigation scheme in Konya, and Uzunlu irrigation scheme in Yozgat. The Project activities under Component 2 includes (i) piloting a solar energy-based pumping of groundwater to irrigate an existing irrigation scheme in Bolvadin and (ii) support the implementation of the nationwide WUAs capacity building program to improve irrigation water management.

Overall, the project has disbursed US\$113.5 million. The work implementation progress for the four contracts has reached 48%. The construction work at Eregli Ivriz is complete. The work progress at Uzunlu is about 77.68% and is expected to be completed by December 2024. A new



contractor is deployed for Alasehir irrigation scheme and the construction work is expected to resume in September/October, 2024; after the end of the irrigation season. For Atabey, the Specific Procurement Notice has been issued in June, 2024. Implementation of works and capacity building activities under GEF-funded Component 2 are progressing well. The work contract for Groundwater Stewardship Pilot which includes installation of solar panels to generate renewable energy is completed and is expected to be connected to the power network of Türkiye Electricity Distribution Inc. The development of SUTEM hardware is completed. A total 803 personnel from WUA's, DSI General Directorate and Regional Directorates benefitted from the training program.

The total irrigation service area planned to be improved was 50,764 hectares, of which 18,048 hectares are completed. Farmers report significant benefits due to improvements in irrigation reliability and adequacy of services including resilience to climate variability and change, reduction in production costs, increases in cropping intensity, increases in crop yield, and diversification towards high value crops. Overall, the emerging results show that the project contributed to sustaining the livelihoods of farmers, who were hitherto affected by water scarcity, which was exacerbated by climate change.

Risks

Systematic Operations Risk-rating Tool

Risk Category	Rating at Approval	Previous Rating	Current Rating
Political and Governance	☐ Moderate	☐ Moderate	☐ Moderate
Macroeconomic	☐ Moderate	☐ Substantial	☐ Substantial
Sector Strategies and Policies	☐ Moderate	☐ Moderate	☐ Moderate
Technical Design of Project or Program	☐ Low	☐ Low	☐ Low
Institutional Capacity for Implementation and Sustainability	☐ Moderate	☐ Moderate	☐ Moderate
Fiduciary	☐ Moderate	☐ Moderate	☐ Moderate
Environment and Social	☐ Substantial	☐ Substantial	☐ Substantial
Stakeholders	☐ Substantial	☐ Moderate	☐ Moderate
Other	--	☐ Low	☐ Low
Overall	☐ Substantial	☐ Moderate	☐ Moderate

Results

PDO Indicators by Objectives / Outcomes

Improve irrigation service delivery in selected schemes in Turkey				
▶ Area provided with new/improved irrigation or drainage services (Hectare(Ha), Corporate)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	15,280.00	18,048.00	50,764.00
Date	22-Jan-2019	04-Dec-2023	07-Jun-2024	27-Feb-2026
Comments:	This indicator measures the total area of land provided with irrigation and drainage services under the project, including in (i) the area provided with new irrigation and drainage services, and (ii) the area provided with improved irrigation and drainage services, expressed in hectare (ha).			



□Area provided with new irrigation or drainage services (Hectare(Ha), Corporate Breakdown)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	0.00
Date	22-Jan-2019	04-Dec-2023	07-Jun-2024	27-Feb-2026
□Area provided with improved irrigation or drainage services (Hectare(Ha), Corporate Breakdown)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	15,280.00	18,048.00	50,764.00
Date	22-Jan-2019	04-Dec-2023	07-Jun-2024	27-Feb-2026
▶Water users provided with improved irrigation service (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	1,350.00	4,250.00	17,312.00
Date	22-Jan-2019	04-Dec-2023	07-Jun-2024	27-Feb-2026
Comments:	This refers to the number of farmers receiving pressurized irrigation water delivery through the modernization activities financed by the project.			
□Female water users provided with improved irrigation service (Number, Custom Breakdown)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	250.00	415.00	519.00
Date	22-Jan-2019	04-Dec-2023	07-Jun-2024	27-Feb-2026
▶Increase in irrigation efficiency (Percentage, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	15.00
Date	22-Jan-2019	04-Dec-2023	07-Jun-2024	27-Feb-2026
Comments:	This refers to the increase in irrigation efficiency realized by the reduction of conveyance losses. Values and targets refer to efficiency increase, in absolute percentage points from baseline, averaged over project schemes.			

Strengthen the institutional capacity of Water User Associations.

▶Water User Associations (WUAs) regularly reporting on water use data (Number, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	181.00	181.00	378.00
Date	22-Jan-2019	04-Dec-2023	07-Jun-2024	27-Feb-2026



Comments: This refers to the number of WUAs which are actively collecting and uploading water management data in the SUTEM MIS

Intermediate Results Indicators by Components

Component 1. Irrigation Systems Modernization				
► Length of modernized irrigation network (Kilometers, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	694.54	718.00	1,521.00
Date	22-Jan-2019	04-Dec-2023	07-Jun-2024	27-Feb-2026
Comments:	This refers to the length of primary, secondary and tertiary pressurized irrigation network financed by the project.			
► Annual WUA consultations conducted and results discussed via DSI's communication channels (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	252.00	50.00	245.00
Date	22-Jan-2019	04-Dec-2023	07-Jun-2024	27-Feb-2026
Comments:	This refers to the formal consultations with WUAs organized by DSI before and during the construction period as well as during the implementation period. The four selected schemes correspond to 5 WUAs and DSI will conduct 7 consultations per year with each WUA. Results of the annual WUA consultations, including women consultations, will be shared with the water users via DSI's communication channels.			
☐ Annual WUA consultations specifically conducted with women (Number, Custom Breakdown)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	20.00	20.00	35.00
Date	22-Jan-2019	04-Dec-2023	07-Jun-2024	27-Feb-2026
☐ Percentage of women participants in consultations reporting increased awareness of WUA's activities and project investments (Number, Custom Breakdown)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	9.80	40.00	90.00
Date	22-Jan-2019	04-Dec-2023	07-Jun-2024	27-Feb-2026
► Percent of grievances addressed within stipulated timeframe (Percentage, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	89.19	96.00	80.00
Date	22-Jan-2019	04-Dec-2023	07-Jun-2024	27-Feb-2026



Comments: Baseline data will be determined by DSI and then the annual progress will be entered accordingly. The indicator refers to grievances addressed within stipulated timeframes(tbc)/total number of grievances filed.

Component 2: Innovation and Institutional Support

► WUAs trained in the use of SUTEM MIS (Number, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	181.00	378.00
Date	22-Jan-2019	04-Dec-2023	07-Jun-2024	27-Feb-2026

Comments: This refers to the number of WUAs which have received the equipment and trainings needed for using the SUTEM MIS.

► Share of renewable energy used for Bolvadin irrigation (Percentage, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	78.00	69.00
Date	22-Jan-2019	04-Dec-2023	07-Jun-2024	27-Feb-2026

Comments: This refers to the share of solar energy generated for irrigation in Bolvadin Groundwater Stewardship Pilot being used to cover the electricity needs for the operation of the irrigation system in Bolvadin.

► Reduction in Groundwater Withdrawal by Bolvadin Cooperative (Percentage, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	16.00
Date	22-Jan-2019	04-Dec-2023	07-Jun-2024	27-Feb-2026

Comments: This indicator monitors the reduction in groundwater withdrawal by the Bolvadin Cooperative.

Performance-Based Conditions

Data on Financial Performance

Disbursements (by loan)

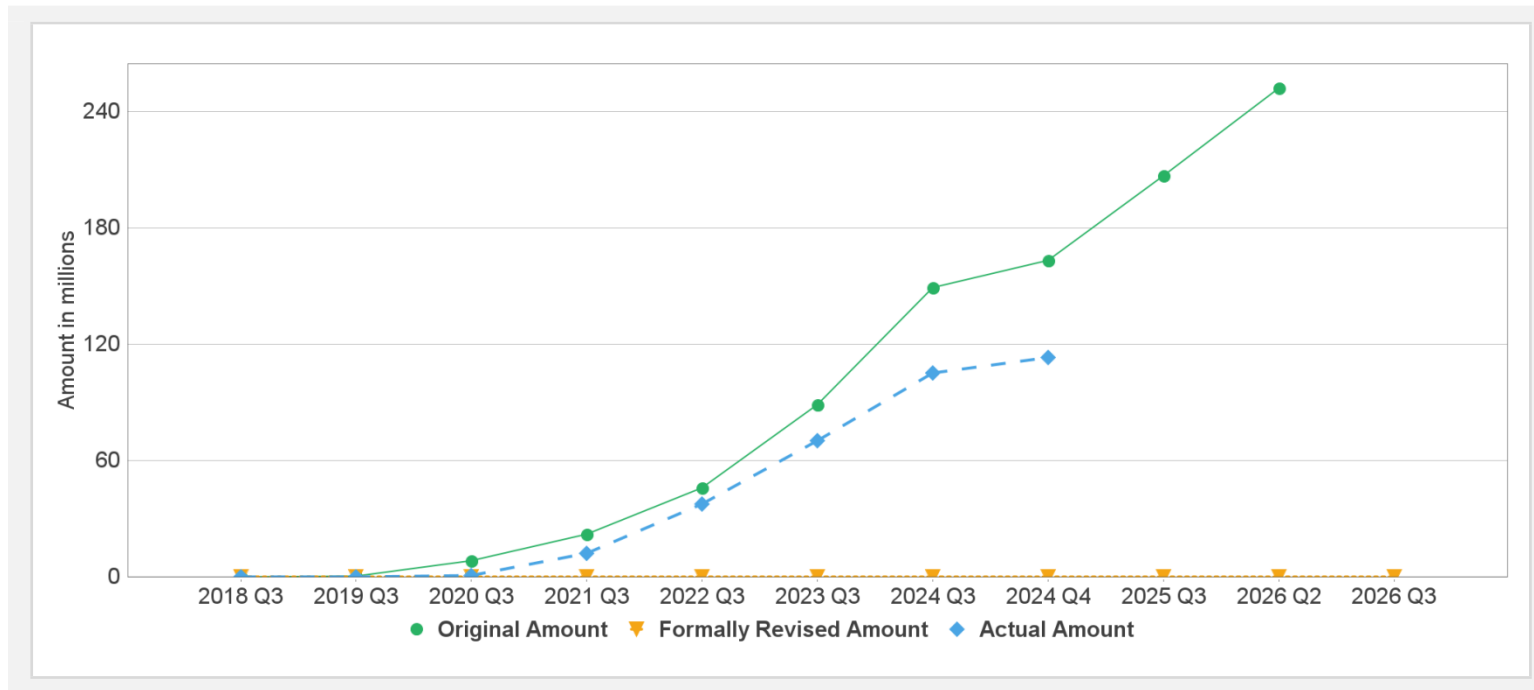
Project	Loan/Credit/TF	Status	Currency	Original	Revised	Cancelled	Disbursed	Undisbursed	% Disbursed
P158418	IBRD-89190	Effective	USD	252.00	252.00	0.00	111.36	135.54	45%
P158418	TF-A9363	Closed	USD	2.00	0.00	2.00	0.00	0.00	0%
P167363	TF-B0863	Effective	USD	2.00	2.00	0.00	1.83	0.17	92%



Key Dates (by loan)

Project	Loan/Credit/TF	Status	Approval Date	Signing Date	Effectiveness Date	Orig. Closing Date	Rev. Closing Date
P158418	IBRD-89190	Effective	22-Jan-2019	15-Feb-2019	30-May-2019	27-Feb-2026	27-Feb-2026
P158418	TF-A9363	Closed	04-Feb-2019	04-Feb-2019	30-May-2019	27-Feb-2026	03-Jul-2019
P167363	TF-B0863	Effective	04-Feb-2019	04-Feb-2019	30-May-2019	27-Feb-2026	27-Feb-2026

Cumulative Disbursements



Restructuring History

There has been no restructuring to date.

Related Project(s)

P167363-GEF Turkey Irrigation Modernization ,P181624-Additional Financing: Türkiye Irrigation Modernization Project