



Turkiye Irrigation Modernization (P158418)

EUROPE AND CENTRAL ASIA | Turkiye | Water Global Practice |
IBRD/IDA | Investment Project Financing | FY 2019 | Seq No: 8 | ARCHIVED on 03-Jan-2023 | ISR53999 |

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"/> Satisfactory	<input type="checkbox"/> Moderately Satisfactory
Overall Implementation Progress (IP)	<input type="checkbox"/> Moderately Satisfactory	<input type="checkbox"/> Moderately Unsatisfactory
Overall Risk Rating	<input type="checkbox"/> Moderate	<input type="checkbox"/> Moderate

Implementation Status and Key Decisions

The project is in its fourth year of implementation and is expected to last for an additional three years until the official closing date of February 27, 2026. The Project aims to improve irrigation delivery through rehabilitation and modernization of selected irrigation 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 for irrigation of the existing irrigation scheme in Bolvadin and (ii) supporting DSI for implementation of the nationwide program (i.e. management information system known as SUTEM) to improve WUAs' capacity for water management.



The loan and grant funds were earmarked for the works at five irrigation schemes. All five contracts were signed by December 2020. However, commencement of works was delayed due to the launch of court cases by some of the bidders which were subsequently resolved. Due to lower bids and price adjustments, the total signed contract value was only US\$196 million (including VAT) resulting in about \$54 million savings. Some of those savings will be allocated for rehabilitation of the Afsar Dam, which is a water source for Alasehir Irrigation scheme. As of November 2022, total disbursement against the five work contracts is US\$49.5 million or Euro 45.5 million (20% of the loan and grant funds). It is projected to reach US\$76 million by end of FY23 and US\$122 million by end of calendar year 2023, which is more than double the current disbursement level. However, the overall uptick in disbursement during 2021 and 2022 masks differences in implementation progress among the five irrigation schemes. Construction work at Eregli-Ivriz and Uzunlu irrigation schemes is progressing well. However, progress at Atabey, Alasehir, and Bolvadin irrigation schemes is slower than planned due to issues with the contractors. The three non-performing contracts constitute 47% of the total work contracts, while their current disbursement level is only about 4.5% of the total signed works contract values.

Risks

Systematic Operations Risk-rating Tool

Risk Category	Rating at Approval	Previous Rating	Current Rating
Political and Governance	☐ Moderate	☐ Substantial	☐ Substantial
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	1,750.00	9,560.00	50,764.00
Date	22-Jan-2019	31-May-2022	20-Dec-2022	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	31-May-2022	20-Dec-2022	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	1,750.00	9,560.00	50,764.00
Date	22-Jan-2019	31-May-2022	20-Dec-2022	27-Feb-2026
▶Water users provided with improved irrigation service (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	369.00	369.00	17,312.00
Date	22-Jan-2019	31-May-2022	20-Dec-2022	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	124.00	124.00	519.00
Date	22-Jan-2019	31-May-2022	20-Dec-2022	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	31-May-2022	20-Dec-2022	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	0.00	0.00	378.00
Date	22-Jan-2019	31-May-2022	20-Dec-2022	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	115.00	355.10	1,521.00
Date	22-Jan-2019	31-May-2022	20-Dec-2022	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	70.00	102.00	245.00
Date	22-Jan-2019	31-May-2022	20-Dec-2023	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	0.00	10.00	35.00
Date	22-Jan-2019	31-May-2022	20-Dec-2023	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	0.00	9.80	90.00
Date	22-Jan-2019	31-May-2022	20-Dec-2022	27-Feb-2026
► Percent of grievances addressed within stipulated timeframe (Percentage, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	96.15	96.15	80.00
Date	22-Jan-2019	31-May-2022	20-Dec-2022	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	0.00	378.00
Date	22-Jan-2019	31-May-2022	20-Dec-2022	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	0.00	69.00
Date	22-Jan-2019	31-May-2022	20-Dec-2022	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	31-May-2022	20-Dec-2022	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)

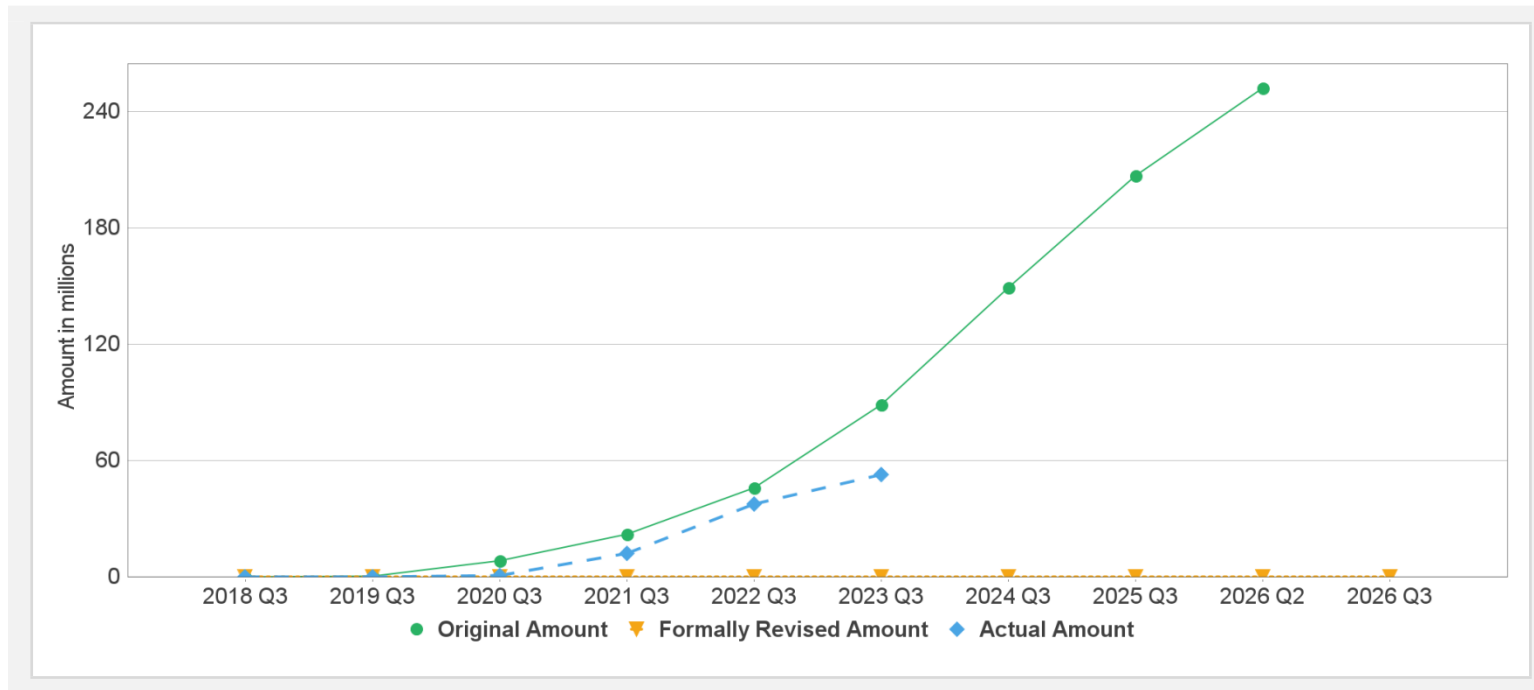
Project	Loan/Credit/TF	Status	Currency	Original	Revised	Cancelled	Disbursed	Undisbursed	% Disbursed
P158418	IBRD-89190	Effective	USD	252.00	252.00	0.00	51.74	198.15	 21%
P158418	TF-A9363	Closed	USD	2.00	0.00	2.00	0.00	0.00	 0%
P167363	TF-B0863	Effective	USD	2.00	2.00	0.00	0.98	1.02	 49%



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