



## Turkey Irrigation Modernization (P158418)

EUROPE AND CENTRAL ASIA | Türkiye | Water Global Practice |  
IBRD/IDA | Investment Project Financing | FY 2019 | Seq No: 7 | ARCHIVED on 16-Jun-2022 | ISR50972 |

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: 31-Aug-2022

Actual Mid-Term Review Date:

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"/> 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 is in its third year of implementation and is expected to last for an additional four years until the official closing date of February 27, 2026. The implementation progress to date is *Moderately Satisfactory*. Construction work at Eregli-Ivriz and Uzunlu irrigation schemes is progressing well. However, works implementation at Atabey and Alasehir irrigation schemes is slower than planned.

The activities under Component 2 "Innovation and Institutional Support" are progressing satisfactorily. The contracts for the SUTEM software development and for Bolvadin, Afyon solar-powered groundwater pilot have been signed and implementation is in progress. All of these activities are expected to be completed by January, 2023.

There was some budget saving due to the lower actual contract values for the four contracted irrigation schemes than planned, part of which will be used for rehabilitation of Asfar dam. The overall disbursement level is about 14.8%, which is expected to pick-up during the first and



second quarters of Fiscal Year 2023. The overall works implementation progress rate is 16.2% and the progress towards achievement of PDO is *Satisfactory*. The project is compliant with all relevant environmental and social safeguards policies and procedures.

## Risks

### Systematic Operations Risk-rating Tool

Risk Category	Rating at Approval	Previous Rating	Current Rating
Political and Governance	☐ Moderate	☐ Moderate	☐ Substantial
Macroeconomic	☐ Moderate	☐ Moderate	☐ 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	--	☐ Moderate	☐ 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	0.00	1,750.00	50,764.00
Date	22-Jan-2019	11-May-2021	31-May-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	11-May-2021	31-May-2022	27-Feb-2026
<input type="checkbox"/> Area provided with improved irrigation or drainage services (Hectare(Ha), Corporate Breakdown)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	1,750.00	50,764.00
Date	22-Jan-2019	11-May-2021	31-May-2022	27-Feb-2026
<input checked="" type="checkbox"/> Water users provided with improved irrigation service (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	369.00	17,312.00
Date	22-Jan-2019	11-May-2021	31-May-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.			
<input type="checkbox"/> Female water users provided with improved irrigation service (Number, Custom Breakdown)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	124.00	519.00
Date	22-Jan-2019	11-May-2021	31-May-2022	27-Feb-2026
<input checked="" type="checkbox"/> 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	11-May-2021	31-May-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	11-May-2021	31-May-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				
<b>► Length of modernized irrigation network (Kilometers, Custom)</b>				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	115.00	1,521.00
Date	22-Jan-2019	11-May-2021	31-May-2022	27-Feb-2026
Comments:	This refers to the length of primary, secondary and tertiary pressurized irrigation network financed by the project.			
<b>► Annual WUA consultations conducted and results discussed via DSI's communication channels (Number, Custom)</b>				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	12.00	70.00	245.00
Date	22-Jan-2019	11-May-2021	31-May-2022	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.			
<b>□ Annual WUA consultations specifically conducted with women (Number, Custom Breakdown)</b>				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	35.00
Date	22-Jan-2019	11-May-2021	31-May-2022	27-Feb-2026
<b>□ Percentage of women participants in consultations reporting increased awareness of WUA's activities and project investments (Number, Custom Breakdown)</b>				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	90.00
Date	22-Jan-2019	11-May-2021	31-May-2022	27-Feb-2026
<b>► Percent of grievances addressed within stipulated timeframe (Percentage, Custom)</b>				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	96.15	80.00
Date	22-Jan-2019	11-May-2021	31-May-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				
<b>► WUAs trained in the use of SUTEM MIS (Number, Custom)</b>				



	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	378.00
Date	22-Jan-2019	11-May-2021	31-May-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.			
<b>► Share of renewable energy used for Bolvadin irrigation (Percentage, Custom)</b>				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	69.00
Date	22-Jan-2019	11-May-2021	31-May-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.			
<b>► Reduction in Groundwater Withdrawal by Bolvadin Cooperative (Percentage, Custom)</b>				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	16.00
Date	22-Jan-2019	11-May-2021	31-May-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	36.46	215.16	14%
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%

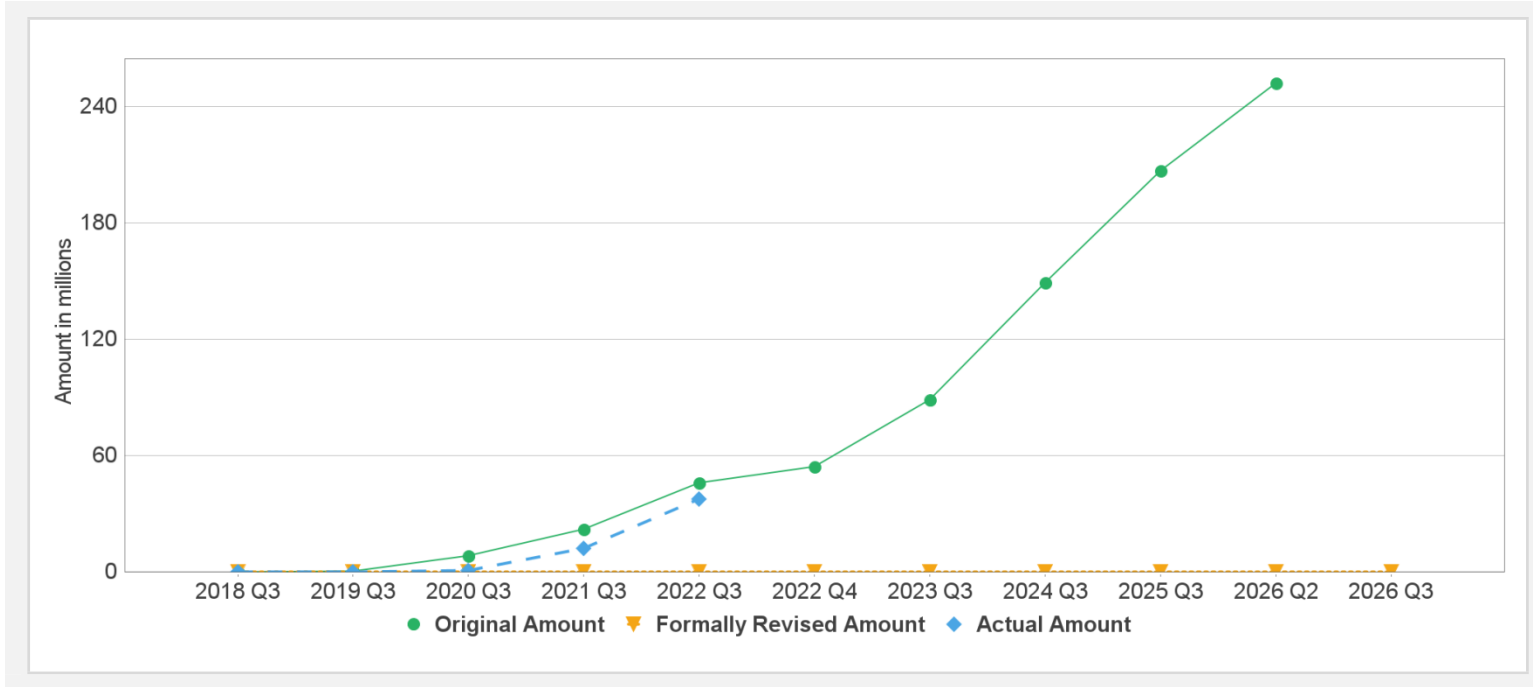
#### Key Dates (by loan)

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
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**Cumulative Disbursements**



**Restructuring History**

There has been no restructuring to date.

**Related Project(s)**

P167363-GEF Turkey Irrigation Modernization