

**YOZGAT BOĞAZLIYAN UZUNLU IRRIGATION
REHABILITATION PROJECT
Additional Resettlement Plan (RP)**



November 2024

DOCUMENT CONTROL PAGE

Ver.	Date of reporting	Prepared by	Approval
v1.	January 24	Emin Kurt DSI Kayseri Regional Directorate Real Estate and Expropriation Branch Manager Mehmet Emin Sen Kayseri Regional Directorate Real Estate and Expropriation Branch Directorate Expert	Hüseyin Ercan Deputy Head of DSI General Directorate Real Estate and Expropriation Department
v2.	January 24	Emin Kurt DSI Kayseri Regional Directorate Real Estate and Expropriation Branch Manager Mehmet Emin Sen Kayseri Regional Directorate Real Estate and Expropriation Branch Directorate Expert	Hüseyin Ercan Deputy Head of DSI General Directorate Real Estate and Expropriation Department
v3	September 2024	Emin KURT DSI 12th Regional Directorate Real Estate and Expropriation Branch Manager Mehmet Emin Sen DSI 12th Regional Directorate Expropriation Branch Directorate Personnel (Agricultural Engineer)	Hüseyin ERCAN General Directorate of State Hydraulic Works Department of Real Estate and Expropriation Coordinator

Contents

List of Table	5
List of Figure	5
Abbreviations	7
Definitions	8
Executive Summary	10
1. Introduction	13
1.1. Objectives of the RP	13
1.2. Yozgat Boğazlıyan Uzunlu Irrigation Rehabilitation Project	14
1.3. Area of Influence	15
1.4. Land Acquisition Needs and Procedures to be Followed	16
1.5. Project Duration	16
2. Baseline Information	16
2.1. Demographic Information	17
2.2. Agriculture, Animal Husbandary and Irrigation	17
3. Legal Framework	19
3.1. National Legislation	19
3.1.1. Applicable National Legislation on Land Acquisition	19
3.1.2. National Legislation Regarding Easement Right	21
3.1.3. National Legislation on Land Consolidation	21
3.2. World Bank ESS5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement	21
3.3. Gap Analysis Between Turkish Legislation and ESS5	22
4. Implementation, Compensation and Other Supports	28
4.1. Land Acquisition Process	28
4.2. Entitlement Matrix	30
4.3. Mitigation Measures	39
4.4. Responsibilities of DSI	39
4.5. Cut Off Date	42
5. Valuation Method	43
5.1. Valuation of Lands	43
5.2. Valuation of Plots	44
5.3. Valuation of Buildings on Land and Plot	44
5.4. Debris Value	44
5.5. Calculation of Easement Rights on Plots	45
5.5.1. Temporary Easement Price	46
5.5.2. Permanent Easement Price	46

5.5.3.	Calculation of the Loss of Value from Permanent Easement	47
5.6.	Replacement Cost	47
5.7.	Calculation of Tree Price	47
6.	Potential Impacts	47
6.1.	Identification of Project Impact	48
6.2.	Land Acquisition Impact	48
6.2.1.	Impact by Land Type	48
6.2.2.	Impact of Land Acquisition on Private Property	49
6.2.3.	PAPs whose Land Assets Affected by 10% or more through Expropriation	51
6.2.4.	Land Acquisition in Other Parcels	52
6.3.	Land Acquisition Impact on Vulnerable Groups	52
6.4.	Owners and Users Affected by Expropriation	53
6.4.1.	Legal Owners and Shareholders in Private Parcels	53
6.4.2.	Informal User	54
7.	Stakeholder Participation and Consultation Process	54
7.1.	Previous Stakeholder Engagement Activities	59
8.	Grievance Mechanism	60
9.	Monitoring, Evaluation and Reporting	64
10.	Budget	65
Annexes	66
Annex 1: Grievance Application Form/Closure Form		67
Annex 2: Land Access - Exit Protocol Sample		69
Annex 3: List of Affected Parcels		71
Annex 4: Questionary		73

List of Table

Table 1-1 Project Area (Settlement affected by RP).....	16
Table 2-1 Population of the Settlement in the Aol	17
Table 2-2 Agricultural Enterprise Sizes in Boğazlıyan Plain.....	17
<i>Table 2-3</i> . Information on Agriculture and Animal Husbandary in the Land Acquisition Area	18
Table 2-4 Uzunlu Irrigation Area Crop Pattern.....	18
Table 2-5 Irrigation Information, 2023.....	19
Table 3-1 Summary of National Legislation	19
Table 3-2 Gap Analysis.....	24
Table 4-1 Entitlement Matrix	32
Table 4-2 Responsibilities of DSI Units.....	40
Table 6-1 Distribution of Immovable Properties Affected by Expropriation According to Residence Areas	48
<i>Table 6-2</i> Land Acquisition Methods According to Real Estate Types	49
Table 6-3 Land Acquisition Information Regarding Private Parcels	49
Table 6-4 Information on PAPs Whose Land Assets Are Affected by 10% or More Due to Expropriation	51
Table 6-5 Affected Areas According to Property Types.....	52
Table 6-6 Vulnerable Groups	53
Table 6-7 Number of Affected Owners and Shareholders in Privately Owned Parcels	53
Table 7-1 Stakeholder Engagement Program for RP	55
Table 7-2 Interview Details.....	59
Table 0 -1 RP Budget.....	71

List of Figure

Figure 1-1 Project affected settlements	15
Figure 4-1 Expropriation Process	29
Figure 4-2 Reconciliation, Litigation and Payment Process	30
Figure 8-1 Grievance Mechanism.....	62
Figure 8-2 Grievance Channels	63

Abbreviations

BIRP	Boğazlıyan Uzunlu Irrigation Rehabilitation Project
CİMER	Presidential Communication Center
FRS	Farmer Registration System
DSİ	State Water Works
ESMP	Environmental and Social Management Plan
TFISIS	Flood, Fault and Intervention Spatial Information System
GM	Grievance Mechanism
CI	Cooperation Institutions
LCIP	Land Consolidation Implementation Report
LEP	Land Entry Protocol
PAP	People Affected by the Project
RP	Resettlement Plan
RPF	Resettlement Policy Framework
TIMP	Turkey Irrigation Modernization Project
TURKSTAT	Turkish Statistical Institute
IU	Irrigation Union
WB	World Bank

Definitions

Compensation: Refers to payments made by persons who have caused voluntary or involuntary damage to all personal and collective assets of right-holders whose access to land, water and other natural and income resources has been restricted. Beneficiaries are paid based on identified and agreed losses.

Cut-off date: Date of completion of the census and assets inventory of persons affected by the project. Persons entering the project area after the cut-off date are not eligible for compensation and/or resettlement assistance. Similarly, assets (such as built structures, crops, fruit trees, and woodlots) established after the date of completion of the assets inventory, or an alternative mutually agreed upon on the date (conditional), will not be compensated.

Deadline: Refers to the date agreed upon to conduct a full inventory of PAPs' lands, crops, trees and structures on the land and to prevent people from building and planting trees in the project area after the inventory.

Decare: The commonly used measurement for land size in Turkey. 1 acre is 1000 m².

Economic Displacement: Refers to the elimination of income or livelihoods of people affected by a project due to restricted access to various resources (land, water, etc.) as a result of land acquisition as a result of the construction and operation of a project and related facility operations.

Eligibility: Definition of displaced persons and criteria for determining their eligibility for compensation and other resettlement assistance, including relevant cut-off dates.

Expropriation: Refers to the acquisition or restriction of property rights through the payment of compensation to cover the full replacement cost of a property.

Involuntary Resettlement: Refers to any situation where land or assets of right holders are legally seized with or without the consent of the owners due to the implementation of the project, affecting access to such assets or income and livelihoods; resulting in social, economic impact as a result of resettlement or loss of housing.

Mitigation Measure: Refers to measures taken to minimize the negative impacts on the livelihoods of PAPs.

Physical Displacement: Refers to the loss of housing and property that may occur due to the relocation of PAPs from their homes, workplaces or business areas to another location as a result of the expropriation of their lands within the scope of the Project.

Project: The Turkish Irrigation Modernization Project (TSMP) including all its sub-projects (plans), components and phases.

This document covers the sub-project of Yozgat Boğazlıyan Uzunlu Irrigation Rehabilitation Project (BIRP).

Project Affected Person (PAP): Refers to persons whose existing building, land (residential, agricultural, etc.), annual or perennial crops, fruitful or non-fruitful trees or other immovable property and assets are completely or partially damaged due to the implementation of the Project and who own them or who can legally document that they own them and who have lost their right to dispose of them.

Land Acquisition: It refers to all methods of obtaining land for project purposes, which may include outright purchase, expropriation of property and land acquisition of access rights, such as easement or rights of way.

RP (Resettlement Plan): Refers to the procedures and actions to be put in place to mitigate the negative impacts of the project on immovable property, compensate for losses, and provide development benefits to project-affected individuals and communities.

RPF (Resettlement Policy Framework): Refers to the land acquisition principles and legal regulations to be applied during the project implementation process.

Livelihood: It refers to full range of means that individuals, families, and communities utilize to make a living, such as wage-based income, agriculture, fishing, foraging, other resource-based livelihoods, petty trade and bartering.

Livelihood Restoration: Refers to all forms of support and assistance to improve the livelihood and living conditions of PAPs who have been physically or economically displaced and bring them back to pre-implementation levels. A reasonable transition period will be determined for livelihood restoration support. **Replacement Cost:** Refers to a

method of valuation yielding compensation sufficient to replace assets, plus necessary transaction costs associated with asset replacement.

Resettlement: Refers to compensation for land acquisition and asset loss, regardless of whether there is actual displacement, loss of land, houses or assets, economic displacement, deprivation of other livelihoods. Compensation covers all measures taken to mitigate the negative impacts of the project on PAPs' property and/or livelihoods, including resettlement (if any) and/or livelihoods. Physical displacement as well as loss of crops and income are among the impacts of resettlement.

Stakeholder: Persons, groups, institutions and organizations that are likely to be affected or affected by a project.

Informal User: Refers to persons who cannot make any legal rights and claims on the land they occupy for housing, business and/or other reasons. Although they are not entitled to land compensation, they have the right to demand compensation for construction, rehabilitation and crop losses and temporary livelihood assistance.

Vulnerable/Disadvantaged Group/Person: It refers to those who may be more likely to be adversely affected by the project impacts and/or more limited than others in their ability to take advantage of a project's benefits.

Executive Summary

This document has been prepared in accordance with the ESS5 and relevant Turkish legislation. The RP covers six (6) settlements affected by temporary or permanent land acquisition through expropriation. The RP covers the impacts identified for these settlements, PAPs and parcels subject to land acquisition in identified parcels.

a. Project Area

This Land Acquisition / Resettlement Plan (RP) has been prepared for the acquisition of additional land through expropriation for the Yozgat Boğazlıyan Uzunlu Irrigation Rehabilitation Project under the Turkish Irrigation Modernisation Project (TIMP).

The area covered by the RP is limited to the settlements where land will be acquired through expropriation and includes Çalapverdi/Kaymakam Kemal Bey, Güveçli, Kemaliye, Uzunlu Bahçelievler, Uzunlu Koç and Yoğunhisar settlements.

b. Land Acquisition Method and Responsibility

In the settlements affected by the project, consolidation works have been carried out and due to the part of the land acquisition that could not be met by consolidation (Article 15 of the Implementing Regulation on Land Consolidation and In-Field Development Services; 'A maximum of 10% participation share deduction is made from the lands in the project area for the places that are needed by the project such as roads, canals, drainage channels and that will be used by the public. '), expropriation had to be applied.

DSİ will carry out the land acquisition process in accordance with the Expropriation Law No. 2942. The process includes the preparation of expropriation plans, determination of the owners and addresses of immovable properties, taking expropriation decisions, notifying the Land Registry Office and making administrative annotations on the title deed in accordance with Article 7 of the Law. The value of immovables subject to expropriation is assessed based on scientific and objective data in accordance with Article 11 of the Law. Land acquisition is carried out through settlement (willing seller) negotiations in accordance with Article 8 of the Expropriation Law. In the absence of a compromise, the administration will initiate price determination and registration lawsuits based on Article 10 of the Law.

DSİ General Directorate and DSİ 12th Regional Directorate are responsible for the implementation and monitoring of the land acquisition activities of the Project.

c. Potential Effects of Project

- Project Affected Persons (PAPs)

There are no houses / dwellings affected by the project in the expropriation area and no serious risk has been identified on the livelihoods or immovables of the beneficiaries.

For privately owned immovable properties, the number of PAPs affected by property expropriation is 561, the number of PAPs affected by permanent easement is 11, and the number of PAPs affected by both property expropriation and permanent easement is 57. The total number of affected shareholders is 572.

- **Parcels**

The total parcel (immovable) affected by expropriation is 205 parcels, 188 of which are privately owned. While evaluating the impact of expropriation on the income level of the beneficiaries, both the parcel directly affected by expropriation and the other immovables of the parcel owners in the project area were taken into consideration.

In the expropriation area, identification studies have been carried out by DSI 12th Regional Directorate and the valuation studies will be paid at full replacement cost in accordance with the World Bank's ESS5: Land Acquisition, Restriction of Land Use and Involuntary Resettlement.

When six (6) settlements within the RP impact area were analysed, it was determined that a total of 205 immovable properties affected by land acquisition were registered in the name of 188 private property, 14 in the name of Treasury, 2 in the name of public middle property and 1 in the name of village legal entity.

- **Effects of Land Acquisition**

Considering the parcels affected by expropriation; it is seen that only 302.307,35 m² (9.3%) of the total 3 268 197.02 m² title deed area is affected by expropriation (Property Expropriation + Permanent Easement) according to the ownership types of the immovables (Real Person, Legal Entity, Government Treasury Property and Public Medium Property), and only 255 078.61 m² (8.78%) of the total 2 904 683.08 m² title deed area in privately owned immovables.

According to the ownership types of immovables (Real Person, Legal Entity, Government Treasury Property and Public Medium Property), 99.40% of the total 302.307,35 m² area to be expropriated is property expropriation and 0.60% is permanent easement area. In the case of privately owned immovable properties due to expropriation, only 1.820,42 m² (0.7%) of the total area of 255 078.61 m² to be expropriated is affected by permanent easement and 99.30% is affected by property expropriation. And privately owned immovables constitute 83.87% of all immovables affected by expropriation (Property Expropriation + Permanent Easement).

Land acquisition will include property expropriation, permanent easement and leasing if necessary. ESS5 will be taken into account in all works and transactions to be carried out in this direction. Impacts on privately owned parcels have been assessed according to the type of land acquisition and the duration of the impact (permanent or temporary) in six (6) settlements.

In summary, only 255 078.61 m² (8.78%) of the total land area of 2 904 683.08 m² of privately owned immovable properties are affected by expropriation (Property Expropriation + Permanent Easement). In a total of 231 parcels affected by property expropriation, the minimum area affected by expropriation is 4,75 m², the maximum area is 9 705.40 m² and the average area is 1

391.77 m² per parcel. The average title deed size of privately owned immovable properties is 15 443.70 m². The number of parcels affected by permanent easement is 10, the minimum area affected is 16.11 m², the maximum area is 389.94 m² and the average area per parcel is 177.61 m². As it can be understood from the figures, it is foreseen that the income losses that may arise due to expropriation will remain at a minimum level and there is no PAP in the project expropriation area whose immovable is completely expropriated.

- Persons with 10% or more of Total Land Assets Affected:

Within the scope of RP, after evaluating all immovable properties remaining in the expropriation area, 3 owners (2 parcels) were identified, which are affected by expropriation of 10% or more of the total land in the irrigation area. DSI has made the type corrections of these parcels together with the subdivision process and will start the expropriation process later on. It has been determined that some of the owners and/or shareholders of the mentioned parcels have passed away and the majority of the remaining shareholders do not reside in these settlements.

The 3 owners, whose more than 10% of the total land holdings are affected, have an average area of 904.22 m² affected by expropriation. The minimum affected area is 367.85 m² and the maximum affected area is 1 976.96 m², which corresponds to 12.86% of their land assets on average. According to the land determinations (asset inventory) made by the authorities of DSI Regional Directorate in the expropriation area, it is understood that there is no cultivation/planting (agriculture) in both parcels. Therefore, the negative impact that may occur due to expropriation in this part of the irrigation area is not at a level to affect the livelihoods of households whose main source of income is agricultural production.

- Other Affected Parcels

Other affected parcel types include Treasury immovable, immovable belonging to legal entities and public middle property. The extent to which these lands are affected by expropriation is 16.13% of the title deed size. The level of expropriation of lands that have the characteristics of public middle property and can be considered as pasture, pasture and winter pasture is 3.06%. Therefore, it is expected that the minor expropriation in these lands will not have a negative impact on common livestock activities such as grazing.

- Vulnerable Groups

In the remaining 6 settlements in the project area, 41 people aged 65 and over reside. When 8 women farmers are added to this number, a total of 49 people / shareholders can be classified as vulnerable groups. It has been determined that the Project has no negative impact on vulnerable groups in terms of environmental, social, economic and land acquisition impacts, and that vulnerable groups do not experience difficulties in access to information, access to land and access to compensation.

DSI 12th Regional Directorate has not identified any informal users during the land acquisition works as of the existing conditions.

1. Introduction

The Project aims to develop a comprehensive irrigation modernization model which is not limited to improvements in the irrigation network; at a systematic approach to increase user participation in agricultural irrigation, increase agricultural productivity and strengthen the capacity of irrigation associations.

Türkiye has initiated an expansion and modernization program in the irrigation sector. The State Hydraulic Works (DSI) has the capacity and capability to manage a large infrastructure portfolio. In this context, the project will support institutional development with the active participation of beneficiaries by systematically addressing the design and operation of irrigation systems, improving social and environmental management, and encouraging the use of renewable energy in irrigation. The project will strengthen the institutional structure of the Irrigation Unions (IU), and a large portion of the financing will be allocated to the modernization of selected irrigation systems.

The model will include the following:

- (i) In addition to irrigation works aimed at increasing agricultural production, measures will be taken to strengthen user participation and relations between users.
- (ii) The capacity of Irrigation Unions (IUs) will be strengthened.

The priority infrastructure investments to be financed under the 1st component of the Türkiye Irrigation Modernization Project (TSMP) include replacing existing open canal systems (canals and distribution structures) with closed and pressurized systems. This component will be implemented by DSI and will also include support for the development of operation, maintenance and Irrigation Unions (strengthening the capacity of Irrigation Unions).

This Resettlement Plan (RP) has been prepared for the land acquisition activities undertaken by the State Hydraulic Works (DSI) for the Yozgat Boğazlıyan Uzunlu Irrigation Rehabilitation Project within the scope of the Türkiye Irrigation Modernization Project. This document is committed to comply with the principles and objectives in the Resettlement Policy Framework (RPF) prepared by DSI as the main document.

In the preparation of the RP, the following reports were used: the World Bank (WB) approved Uzunlu Land Consolidation Implementation Report (LICP) (December 2022), Konya Ereğli İvriz Irrigation LAP (March 2023), LICP monitoring reports (2 for 2023).

Within the scope of the RP, there are totally 205 properties affected by expropriation within six (6) residential areas.

1.1. Objectives of the RP

The Yozgat Boğazlıyan Uzunlu Irrigation Rehabilitation Project requires permanent land acquisition. The mitigation measures have been developed to mitigate the negative impacts of land acquisition and prevent physical resettlement in the project. Although land acquisition does not cause physical displacement, it is expected to cause economic displacement.

The purpose of the RP is to:

- Prevent and minimize economic displacement resulting from land acquisition as much as possible,
- Determine the impact of the project on economic displacement,
- Analyse the legislative approach to be followed in real estate acquisition,
- Explain the procedures to be followed in the acquisition of agricultural land, plots, buildings and other integral parts and other assets, if any,
- Summarize the institutional arrangements for land acquisition,
- Define the socio-economic profile of PAPs through household surveys, in-depth interviews, direct observations and focus group meetings,
- If necessary, determine the current and potential impacts and opportunities of the project for the restoration of income and livelihoods,
- Present the project's entitlement matrix,
- Provide information on attitudes towards the project and assistance priorities,
- Identify vulnerable groups and take measures to prevent them from being adversely affected by land acquisition under the project,
- Involve stakeholders in the project and convey stakeholder relations established by the project for land acquisition,
- Present a detailed implementation program of the project,
- Design a monitoring and evaluation framework for the acquisition of assets and restoration of income/livelihoods,
- Define grievance procedures,
- Define and implement a consultation process on land acquisition.

1.2. Yozgat Boğazlıyan Uzunlu Irrigation Rehabilitation Project

The Uzunlu Irrigation Rehabilitation project area is located within the borders of Boğazlıyan district of Yozgat province. It was put into practice under the responsibility of DSI 12th Regional Directorate with the Council of Ministers' decision (repealed) numbered 2013/4886 and dated 27.05.2013. Uzunlu Irrigation Rehabilitation Project was included in the ongoing Oğulcuk Dam Irrigation Project in order to eliminate the property problems in the villages within the Uzunlu irrigation area within the scope of the Oğulcuk Reservoir tender and to complete the consolidation works for the smooth progress of the construction works.

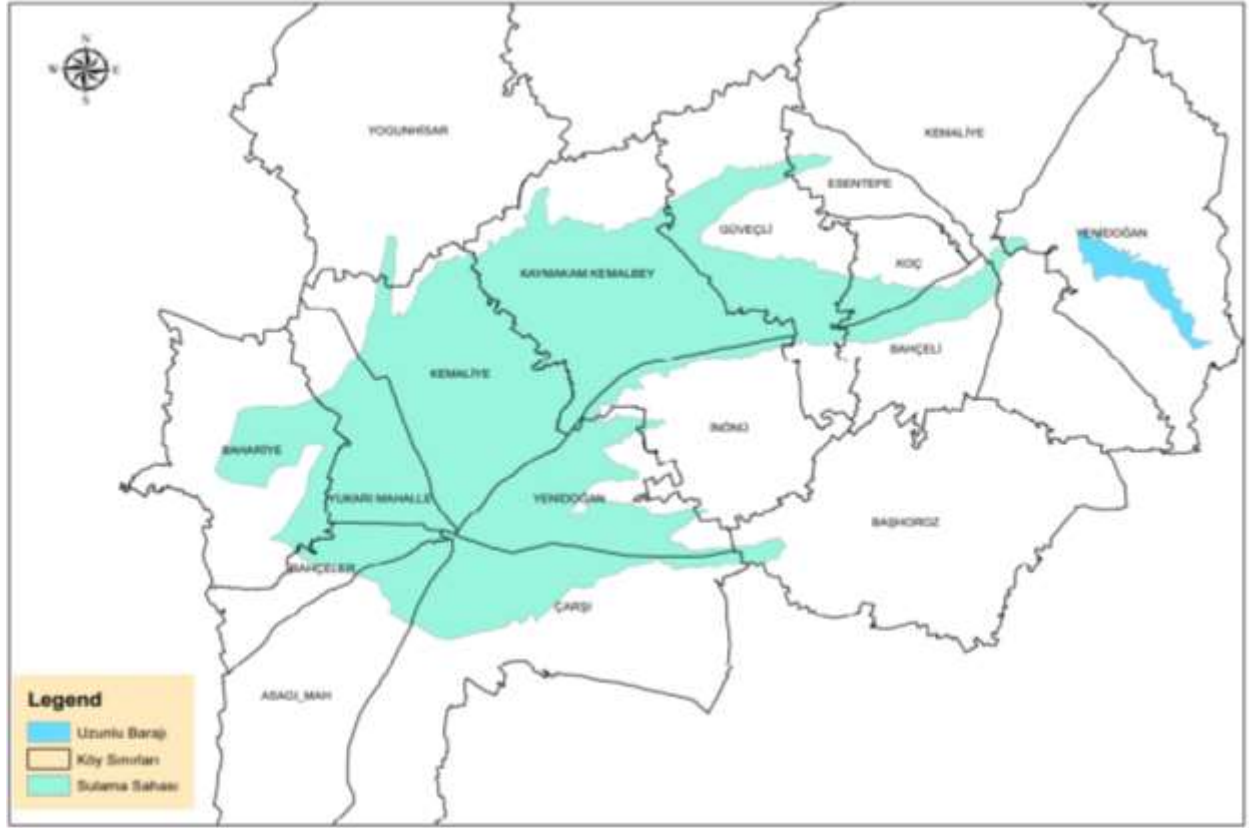


Figure 1-1 Project affected settlements

The name of the project is "Yozgat Uzunlu Irrigation Rehabilitation Project". Uzunlu Dam and its affiliated facilities are in operation. Since the irrigation network downstream of the dam cannot serve the entire irrigation area, rehabilitation of the network was required. Therefore, the prepared project is only for the irrigation area. Taking into account rezoning that have occurred since the zoning report, the irrigation area of the irrigation project has been recalculated and determined as 8,000 hectares gross. This irrigation area will irrigate the Boğazlıyan plain, which is immediately downstream of the dam, with water taken from the drainage outlet of the Uzunlu Dam. The irrigation area covers Bahariye, Başhoroz, Çalapverdi – İnönü, Çalapverdi – Kaymakam Kemal Bey, Güveçli, Kemalîye, Merkez Aşağı, Merkez Bahçeler, Merkez Çarşı, Merkez Yenidoğan, Merkez Yukarı, Uzunlu Bahçelievler, Uzunlu Esentepe, Uzunlu Kemalîye, Uzunlu Koç, Uzunlu Yenidoğan, Yoğunhisar settlements.

1.3. Area of Influence

The number of settlements affected by the consolidation works within the scope of irrigation rehabilitation works is 17 and 6 of them will be affected by the expropriation works. All of the settlements are located within the borders of Boğazlıyan district of Yozgat province. The total number of parcels affected by the project is 205 and 188 of them (91.71%) are privately owned parcels. The settlements and the number of parcels affected are given in the table below.

Table 1-1 Project Area (Settlement affected by RP)

No	Settlements	Total Number of Affected Parcels	Number of Private Property
1	Çalapverdi- Kaymakam Kemal Bey	103	102
2	Güveçli	43	35
3	Kemaliye	18	15
4	Uzunlu-Bahçelievler	1	1
5	Uzunlu-Koç	21	16
6	Yoğunhisar	19	19
	Total	205	188

Source: DSI, 2024

1.4. Land Acquisition Needs and Procedures to be Followed

Uzunlu Irrigation Rehabilitation project area is located within the borders of Boğazlıyan district of Yozgat province and was implemented together with Oğulcuk Dam Irrigation Project under the responsibility of Kayseri 12th Regional Directorate with the Council of Ministers' decision dated 12.10.2012 and numbered 2323. Later, with the inclusion of Oğulcuk Dam Irrigation Project into Uzunlu Irrigation Rehabilitation Project, within the scope of Oğulcuk Dam tender, the ownership problems of the villages in Uzunlu irrigation area were tried to be solved and consolidation works started. The drainage channel routes in the final project were examined by DSI and it was determined that some discharge channel routes were not suitable, most discharge channels did not have block spaces, and there were errors in channel flow rates. There is no block area for the channel route in T2, T3, T5, T6, T8 and T9 drainages except for T9 drainage. Therefore, expropriation is required for these discharge channels.

The average elevation of the project area varies between 1070 - 1150 m and an area of 8812 hectares is within the scope of consolidation. The location of the project area is presented in **Hata! Başvuru kaynağı bulunamadı.**

1.5. Project Duration

Although it is difficult to give a definite date for the completion of expropriation procedures are planned to be completed until December 2026. The land consolidation procedures are completed. Expropriation procedures have been initiated for the discharge channels and land acquisitions have been achieved through conciliation without going to court. It is anticipated that progress in the remaining sections will be achieved through conciliation.

2. Baseline Information

2.1. Demographic Information

The population of the affected settlements was determined to be 5200 people in 2023. 51 percent of the population is female, and 49 percent is male.

Table 2-1 Population of the Settlement in the Aol

No	Settlement	Population	Men	Women
1	Çalapverdi- Kaymakam Kemal Bey	2091	1062	1029
2	Güveçli	132	64	68
3	Kemaliye	2004	1331	673
4	Uzunlu-Bahçelievler	226	119	107
5	Uzunlu-Koç	369	181	188
6	Yoğunhisar	451	239	212
	Total	5273	2996	2277

Source: Turkish Statistical Institute (TURKSTAT)

2.2. Agriculture, Animal Husbandry and Irrigation

Agricultural activities in the project area form the basis of the regional economy. In particular, the sugar factory in Boğazlıyan encourages landowners to plant sugar beets. Barley, wheat, oats and corn are also cultivated in the region. Water scarcity, inadequacy of irrigation infrastructure and difficulties in providing the necessary labor force for agricultural production are the main reasons for monoculture agriculture.

According to LICP, it is seen that the lands in Boğazlıyan Plain are very fragmented, and the size of the enterprises is not suitable for mechanized agriculture. There are 10,287 parcels in the project area, this number has been reduced to 6,892 parcels with a 33% consolidation rate.

Table 2-2 shows that the lands are very fragmented, and the enterprises are small-scale.

Table 2-2 Agricultural Enterprise Sizes in Boğazlıyan Plain

Enterprise size (decare)	Number of Enterprises	Area (%)
1-20	4947	22.8
21-50	800	36.2
51-100	341	30.4
101-150	56	5.0
151-200	57	2.4
201-500	24	2.1
Over 500	12	1.1
Total	6237	100

Source: LICP, 2022

Boğazlıyan Irrigation Union (BIU) has 4 irrigation areas. One of these is Uzunlu area within the scope of the project. The others are Yahyasaray (3436 ha, 28%), Karahallı (206 ha, 2%) and Fehimli (1210 ha, 10%). The total irrigation area of Boğazlıyan Irrigation Union is 12,074 hectares, 7,222 hectares (60%) of which belongs to Uzunlu irrigation.

According to the information received from Boğazlıyan District Directorate of Agriculture and Forestry, the number of farmers registered in the Farmer Registration System (FRS/ÇKS) in the project area is 964. The common crop pattern is warm and cool climate cereals (80%). The area where irrigated agriculture is carried out is approximately 12% of the total arable land in the district. There are 416 head of cattle and 8,443 sheep and goats in the affected settlements.

Table 2-3 . Information on Agriculture and Animal Husbandary in the Land Acquisition Area

No	Settlements	Number of farmers registered to FRS	Total Agricultural Area Registered in FRS (Decare)	Grain (Decare)	Corn (Decare)	Orchard (Decare)	Forage Crops (Decare)	Irrigated Land (Decare)	Number of Cattle	Number of Sheep and Goat
1	Çalapverdi-Kaymakam Kemal Bey	183	13.488	9.322	115	0	156	1.046	11	0
2	Kemaliye	227	12.878	10.725	53	6	110	1.863	240	2.055
3	Uzunlu-Bahçelievler	159	5.532	5.109	0	0	0	393	0	0
4	Uzunlu-Kemaliye	101	11.421	9.184	3	0	20	916	114	691
5	Uzunlu-Koç	116	3.119	2.918	11	0	19	291	0	0
6	Yoğunhisar	178	22.597	17.840	275	89	64	3.934	51	4.645
	Total	964	69.035	55.098	457	95	369	8.443	416	7.391

Source: Boğazlıyan District Agriculture and Forestry Regional Directorate, 2023

In 2023, 68% of the crops cultivated in the irrigation area are sugar beets. Other crops are corn, potatoes, sunflowers and forage crops. Details are indicated below:

Table 2-4 Uzunlu Irrigation Area Crop Pattern

Products	Area (ha)	%
Sugar Beet	781	%68
Corn	99	%9
Potato	94	%8
Sunflower	84	%7
Forage Crops	77	%7
Vegetables	6	%1
Total	1.141	100%

Source: Boğazlıyan Irrigation Unions, 2023

For the 2023 irrigation season, declarations were received from 182 farmers in 6 settlements for the irrigation of a total of 6,043 da of land, and the average land size per farmer is 33 da.

Table 2-5 Irrigation Information, 2023

No	Settlements	Number of Users	Number of Parcels	Planted Area (da)	Space per User (da)
1	Çalapverdi-Kaymakambey	60	452	2.123	35
2	Kemaliye	22	92	826	38
3	Uzunlu-Bahçelievler	33	81	524	16
4	Güveçli	27	238	1.440	53
5	Uzunlu-Koç	18	38	304	17
6	Yoğunhisar	22	92	826	38
	Total	182	993	6.043	33

Source: Boğazlıyan Irrigation Unions, 2023

Between 21 and 24 May 2024, two engineers specialised in expropriation did surveys and studies on field and question forms can be seen by the Annex 10.4.

3. Legal Framework

This section discusses national legislation and regulations as well as international standards and requirements regarding the land acquisition practices of the project.

3.1. National Legislation

3.1.1. Applicable National Legislation on Land Acquisition

National legislation on land acquisition in Turkey is governed by various regulations, including but not limited to the Turkish Constitution, Land Registry Law, Cadastre Law, Expropriation Law and Settlement Law.

Table 3-1 Summary of National Legislation

Law	Content
Turkish Constitution	The Turkish Constitution addresses expropriation issues in Article 46.
Expropriation Law (No. 2942)	This Law regulates the procedures to be carried out by the State and public legal entities in the expropriation of immovable property owned by real and private legal entities in cases where public interest requires it, the calculation of the expropriation price, the registration of the immovable property and easement rights in the name of the administration, the withdrawal of

Law	Content
	<p>unused immovable property, the transfer of immovable property between administrations, mutual rights and obligations and the procedures and methods of resolution of disputes based on these.</p> <p>The relevant articles of the Law that will be referred to during the Project's land acquisition activities are explained briefly in Appendix B1.</p>
Cadastral Law (No. 3402)	The purpose of this Law is to establish the land registry as stipulated by the Turkish Civil Code No. 4721 and to establish the infrastructure of the spatial information system by determining the boundaries of immovable properties on land and maps and determining their legal status based on the cadastral or topographical cadastral map of the country according to the country coordinate system.
Agricultural Reform Law (No. 3083)	This Law aims to ensure that irrigation areas and areas deemed necessary by the President. It seeks to increase land efficiency, consolidate fragmented land, establish new settlements, and ensure the proper use of agricultural land for both production and national security purposes.
Notification Law (No. 7201)	This Law provides the basis for a process for notifying property owners. It consists of specific procedures that must be followed to reach a range of public and private property owners, including those whose addresses are unknown.
Soil Protection and Land Use Law (No. 5403)	This Law lays down rules and principles for determining land and soil resources and their classification, preparing land utilization plans, preventing non-purpose utilization, and defining the tasks and obligations to ensure land and soil preservation

All expropriation activities carried out by DSI are realized in accordance with the Expropriation Law No. 2942.

Turkish expropriation legislation does not require compensation to be paid to unofficial land users (for buildings and/or trees). However, payment can be made to those who prove their ownership with legal documents or through court proceedings. On the other hand, in the expropriation of lands registered in someone else's name, abandoned and/or not acquired by the owner, the minimum maintenance cost of the buildings and the cost of the trees are paid to their owners. The values assessed within the framework of Article 11 of the Law are paid to their owners.

While it is essential that the work and transactions are carried out on the basis of reconciliation during the expropriation process, in the event of an urgency decision by the President, the expropriating institution is allowed to seize the land urgently in accordance with Article 27 of the Expropriation Law. In this case, there is a condition that the amount determined by the court for the real estate required for the project is deposited into the bank in the name of the owner. The urgent land seizure authority defined in Article 27 of the Law is not preferred by DSI except in cases of necessity, as it prolongs the expropriation process, increases the workload of the administration and the courts, and is an exceptional practice.

3.1.2. National Legislation Regarding Easement Right

The Expropriation Law No. 2942 stipulates that easement rights will be established within the framework of land acquisition. According to Article 4 of the Law, "Instead of expropriating the ownership of an immovable property, easement rights can be established through expropriation on a certain section, height, depth or source of an immovable property, if it is sufficient for the purpose.

In expropriation transactions carried out by establishing easement rights, the real estate owner will be able to benefit from the real estate and use the right of ownership to the extent that the type and nature of the easement right allows. The easement right to be established on the real estate can be established on a certain section, height, depth or source of the real estate.

The expropriation price and easement price must be assessed according to the methods used in the expropriation of immovable property or resources specified in Article 11 of Law No. 2942, amended by Law No. 4650.

3.1.3. National Legislation on Land Consolidation

DSI is the main institution assigned for land consolidation in Türkiye. The legal infrastructure of land consolidation is based on the Annex-9 article of the Law No. 6200 on Services Provided by the General Directorate of State Hydraulic Works, the Implementation Regulation on Land Consolidation and On-Farm Development Services No. 30679 prepared in accordance with the Article 6 of the Agricultural Reform Law, the Land Regulations Regarding Irrigation Areas No. 3083 and the Article 24 of the Law No. 5403 on Soil Protection and Land Use.

The Land Consolidation and On-Farm Development Services Implementation Regulation was published and entered into force on February 7, 2019. Before this regulation entered into force, land consolidation operations were carried out by the General Directorate of Agricultural Reform. According to Article 2 of the Land Consolidation and On-Farm Development Services Implementation Regulation No. 30679, DSI is authorized to provide land consolidation and on-farm development services as the implementing institution.

3.2. World Bank ESS5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement

The World Bank's ESS5 on Involuntary Resettlement addresses the risks arising from involuntary or forced resettlement in development projects, covers measures to reduce such risks, and is relevant to all involuntary or forced resettlement procedures.¹

¹For the full text of the policy document and implementation guidelines, see (Guidance Note For Borrowers and Land Acquisition, Restrictions on Land Use and Involuntary Resettlement)

<https://documents1.worldbank.org/curated/en/294331530217033360/ESF-Guidance-Note-5-Land-Acquisition-Restrictions-on-Land-Use-and-Involuntary-Resettlement-English.pdf>

<https://thedocs.worldbank.org/en/doc/837721522762050108-0290022018/original/ESFFramework.pdf#page=67&zoom=80>

The WB Standard on Land Acquisition, Restrictions on Land Use and Involuntary Resettlement, as defined in the ESS5, is driven by the following objectives:

- To avoid involuntary resettlement or, when unavoidable, minimize involuntary resettlement by exploring project design alternatives.
- To avoid forced eviction.
- To mitigate unavoidable adverse social and economic impacts from land acquisition or restrictions on land use by: (a) providing timely compensation for loss of assets at replacement cost; and (b) assisting displaced persons in their efforts to improve, or at least restore their livelihoods and living standards in real terms, to pre-displacement levels or to levels prevailing prior to the beginning of project implementation, whichever is higher.
- To improve living conditions of poor or vulnerable persons who are physically displaced, through provision of adequate housing, access to services and facilities, and security of tenure.
- To conceive and execute resettlement activities as sustainable development programs, providing sufficient investment resources to enable displaced persons to benefit directly from the project, as the nature of the project may warrant.
- To ensure that resettlement activities are planned and implemented with appropriate disclosure of information, meaningful consultation, and the informed participation of those affected.

The ESS5 requires that land acquisition should not be carried out without compensation to the affected persons.

'Replacement cost' is the methodology used to value assets under the ESS5: 'For agricultural lands, this cost refers to the amount equivalent to the total market price of land close to the affected land, with an equivalent yield or use potential before the project or displacement, and the costs for the title deed fees and other taxes on the land in question.

The ESS5 also requires efforts to provide access to equivalent or acceptable resources and income opportunities within the scope of the Project, taking into account the difficulty of financially compensating for losses in certain areas, such as access to public services, customers and suppliers.

Although the ESS5 covers all affected persons, it requires that special attention be given to vulnerable persons within the scope of the Project.

3.3. Gap Analysis Between Turkish Legislation and ESS5

In addition to similarities, there are also various differences between the national regulations and WB's ESS5 with regards to compensation, support, resettlement and livelihood restoration for affected persons. The deficiencies related to the Irrigation Modernization Project in Türkiye

are discussed in detail below. A summary of these deficiencies and the proposed countermeasures are also shown in the table below.

Table 3-2 Gap Analysis

No	Gap/Deficiency	Legislation in Turkey	World Bank Policy Requirements	Measures to Address Deficiencies
1	Resettlement Plan	There is no legal regulation for the preparation of a Resettlement Plan covering all displaced persons and host communities.	The World Bank's policy requires the preparation of a Resettlement Plan.	Although the project activities do not require any physical resettlement, an economic displacement is expected due to partial expropriation (mostly due to easement) in some irrigation projects. In this direction, a special RP has been prepared by DSI for the project.
2	Valuation Method	<p>According to the "Communiqué on the Approximate Unit Costs of Buildings to be Used in the Calculation of Architectural and Engineering Service Fees" published annually by the Ministry of Environment, Urbanization and Climate Change for buildings, the building is calculated based on its approximate unit costs and depreciation is deducted from the net present value calculation.</p> <p>Compensation is paid for immovable properties in the nature of land based on the actual use of the property and its market value.</p> <p>Title deed expenses incurred for these transactions are not covered.</p>	<p>The loss of land and other similar fixed assets and real estates must be compensated at the full replacement cost before construction. The 'Land for land' method is another option for disposed lands.</p> <p>There is no deduction for depreciation.</p> <p>The title deed and transaction costs of PAPs must also be covered.</p>	<p>DSI agrees to pay the replacement price for all real estates that will be affected by expropriation. The replacement price includes the costs of title deed and other transactions. The compensation to be offered to the rightful owners by DSI in accordance with Turkish legislation will be at a level that will cover the current Market Value of the land + Title deed and other transaction costs.</p> <p>Loss of value due to permanent easement in real estate will be compensated.</p> <p>In lands, the cost of currently cultivated/planted crops will be added to the expropriation price.</p> <p>The expropriation fee will be determined to cover the renewal fee.</p> <p>According to Article 8 of the Expropriation Law, legal expenses arising from the agreements made regarding expropriation transactions will be covered by DSI.</p>
3	Restoration of Livelihoods	There is no provision in the Expropriation Law regarding the restoration of livelihoods and any assistance to be provided during the transition period.	If more than 10% of PAP lands are affected, cash compensation is offered based on their value to cover the full replacement cost. If this level is 10% or more, it is necessary to assist the displaced persons in their efforts to improve living standards, income generation	<p>The project is expected to have positive impacts on household livelihoods.</p> <p>There are 2 parcels that lost 10% or more of their total land assets as a result of expropriation works. The average size of the affected areas is 904.22 m² per parcel. The impact that may occur in these areas is not at a level that will affect the</p>

			<p>capacity and production levels or at least help them return to their pre-project levels.</p>	<p>livelihoods of households whose main source of income is agriculture.</p> <p>Cooperation programs will be organized with relevant public institutions to improve the livelihoods of PAPs.</p> <p>Expertise and resources are needed for livelihood restoration support, transition support and alternative income generation support. DSI, in collaboration with other public institutions at the provincial level, will restore livelihoods to the extent possible in line with the alternatives proposed in the Entitlement Matrix.</p> <p>No entry will be made to the land without paying the expropriation fee.</p> <p>In entering and exiting the land, Land Entry and Exit Protocols will be prepared. Explanatory templates are provided in Annex 10.2.</p> <p>The relevant land will be made ready for use before being delivered to its owner.</p> <p>Trainings will be organized by the Ministry of Agriculture and Forestry to raise awareness of cultivators and water users on topics such as selection of appropriate irrigation methods, planning of irrigation time, water saving, modern irrigation methods, reduction of water losses, water harvesting and plant pattern, and correct application of crop rotation.</p>
4	<p>Losses to occupants and informal users, including vulnerable communities.</p>	<p>According to the legislation, PAPs who have lost land are the legal owners. Seasonal workers/migrants or economically displaced persons are not included in the PAP definition.</p> <p>If unauthorized users of Treasury real estate submit a decision of ownership, their buildings and planted/planted crops are compensated. However, no payment is made under any circumstances for users</p>	<p>Economically displaced persons, seasonal workers and other vulnerable groups should also be considered as PAPs. All PAPs should be compensated for their losses, regardless of their property status.</p>	<p>Regardless of their ownership status, all PAPs will be identified within the framework of project-specific Resettlement Plans (RP) and measures will be taken to compensate all land users.</p> <p>In order to restore the livelihoods of PAPs with unauthorized user status, one or more of the following measures will be implemented by DSI:</p> <p>Land users who have property rights will be supported in obtaining the title deed for the land in question.</p>

		<p>who have an integral part of pasture and forest lands.</p> <p>According to Article 19 of the Expropriation Law, those who build structures or plant trees on other people's lands are paid the full replacement cost of the trees and the cost of supplies for the structures as compensation.</p>		<p>In accordance with Article 19 of the Expropriation Law, if unauthorized users prove their right of possession, monetary compensation will be paid to cover the replacement cost of the affected products and structures.</p> <p>DSI will ensure that contractors give priority to unauthorized users within the scope of work/employment opportunities related to the project.</p>
5	Consultation and Disclosure of Information	<p>Turkish legislation on land acquisition includes limited provisions regarding public disclosure, public consultation and participation.</p> <p>It is seen that the institution carrying out the expropriation process is legally obliged to notify the PAPs of this expropriation decision.</p> <p>The organization carrying out the expropriation process also conducts negotiations and consultations and assesses the value of the assets.</p> <p>Since there is no obligation to prepare a Stakeholder Engagement Plan, there is no need for additional consultation by law.</p>	<p>According to the ESS5:</p> <ul style="list-style-type: none"> •The Project-specific RP is fully disclosed to the public. •All stakeholders are provided equal opportunities to access and comment on Project documents, and consultation meetings are held in a place accessible to everyone who wishes to participate. • Consultations are also held with vulnerable groups. 	<p>The project's RP will be announced to the public on the DSI website and information will be provided in public places accessible to all PAPs, including vulnerable communities. DSI will prepare an information brochure on land acquisition and expropriation payments and inform PAPs. During expropriation processes, DSI will ensure the continuity of the consultation process through its own staff and the Irrigation Union. DSI will inform those who invest in treasury land or use the land without legal rights, as well as tenants and other stakeholders, including tenants, through official correspondence and consultation, as with owners, as well as legal rights holders. Information will be provided on the impacts and land needs related to the relevant sub-projects.</p> <p>The RP includes information on how DSI will involve stakeholders in the project. (For more information, see RP, Chapter 7: Consultation and Participation)</p>
6	Cut-off date	<p>Turkish legislation requires the preparation of an asset inventory. Land acquisition through expropriation requires the preparation of the exact number of immovable assets affected by the project and the list of their owners. An asset inventory is prepared only for legal rights holders. There is no obligation to inform PAPs about the completed asset inventory and the deadline.</p>	<p>A full census is carried out to identify PAP lands, crops and real estate and to determine the rightful owners.</p>	<p>A full census will be conducted for PAPs and real estates.</p> <p>A deadline will be set for determining the beneficiaries. The deadline is defined as the date on which the asset inventory of PAPs and real estates is completed. Persons settling in the project area after the deadline will not be able to benefit from compensation support.</p> <p>No compensation will be paid for fixed assets (such as constructed structures, crops, fruit trees and woodlands)</p>

				established after the asset inventory completion date or a mutually agreed alternative date.
7	Grievance Mechanism	A national grievance mechanism (CIMER) has been implemented for use by all Affected Persons.	A project-specific grievance reporting mechanism is required.	<p>Currently, a four-stage Grievance Mechanism is implemented within DSI. (For more details, see RP, Chapter 8: Grievance Mechanism). This mechanism will be developed by taking into account the collection of project-specific objections and grievances.</p> <p>PAPs will be informed about their legal rights regarding the impacts during the construction process and the initiated grievance mechanism.</p> <p>The contract to be signed with the contractor will include provisions that the company will compensate for any damage that the company may cause</p>
8	Monitoring and Evaluation	There is no monitoring and evaluation practice regarding land acquisition in Turkish law.	The WB requests reporting on the implementation of the RP, monitoring of its effects and evaluation of its results.	<p>RP will be monitored and evaluated.</p> <p>Key performance indicators for monitoring will be determined by DSI and internal and external monitoring activities will be carried out at regular intervals (For more details, see RP, Chapter 9: Monitoring and Evaluation).</p>

In case of conflict between national legislation/regulations and the WB ESS5, this RP, harmonized with ESS 5, shall prevail.

4. Implementation, Compensation and Other Supports

4.1. Land Acquisition Process

The land acquisition process will be carried out by DSI in accordance with the Expropriation Law No. 2942. Accordingly, expropriation plans are prepared, the owners of the real estate are determined, and an expropriation decision is made for the real estate located in the expropriation area and notified to the Land Registry Directorate and administrative authorities. The Land Registry Directorate puts the expropriation annotation in the land registry in accordance with Article 7 of the Law. The estimated value of the real estate is assessed using scientific and objective data within the scope of Article 11 of the Law. First of all, land acquisition will be carried out through willing buyer-willing seller arrangements in accordance with Article 8 of the Expropriation Law.

If the expropriation process is initiated through the purchase method and an agreement is reached with the rightful owners for the value determined by the DSI Valuation Commission, an agreement report is signed and the agreement report constitutes the legal basis for the ex officio registration of the said real estate in the land registry.

If an agreement cannot be reached with the rightful owners, the expropriation fee is determined by the court in accordance with Article 10 of the Law and paid to the owner, and the immovable property is registered in the name of the administration.

If another Public Institution's real estate is needed, the provision stipulated in Article 30 of the Law shall apply. If an agreement cannot be reached with the administration that owns the real estate, this matter shall be finalized by the Administrative Court.

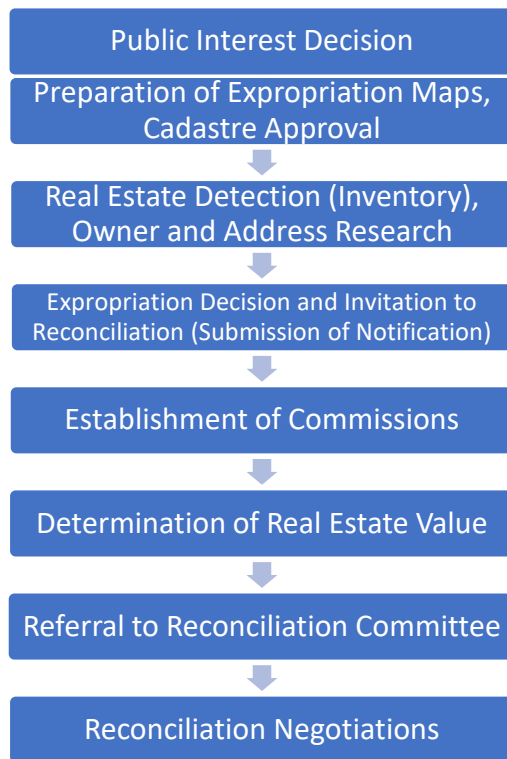


Figure 4-1 Expropriation Process

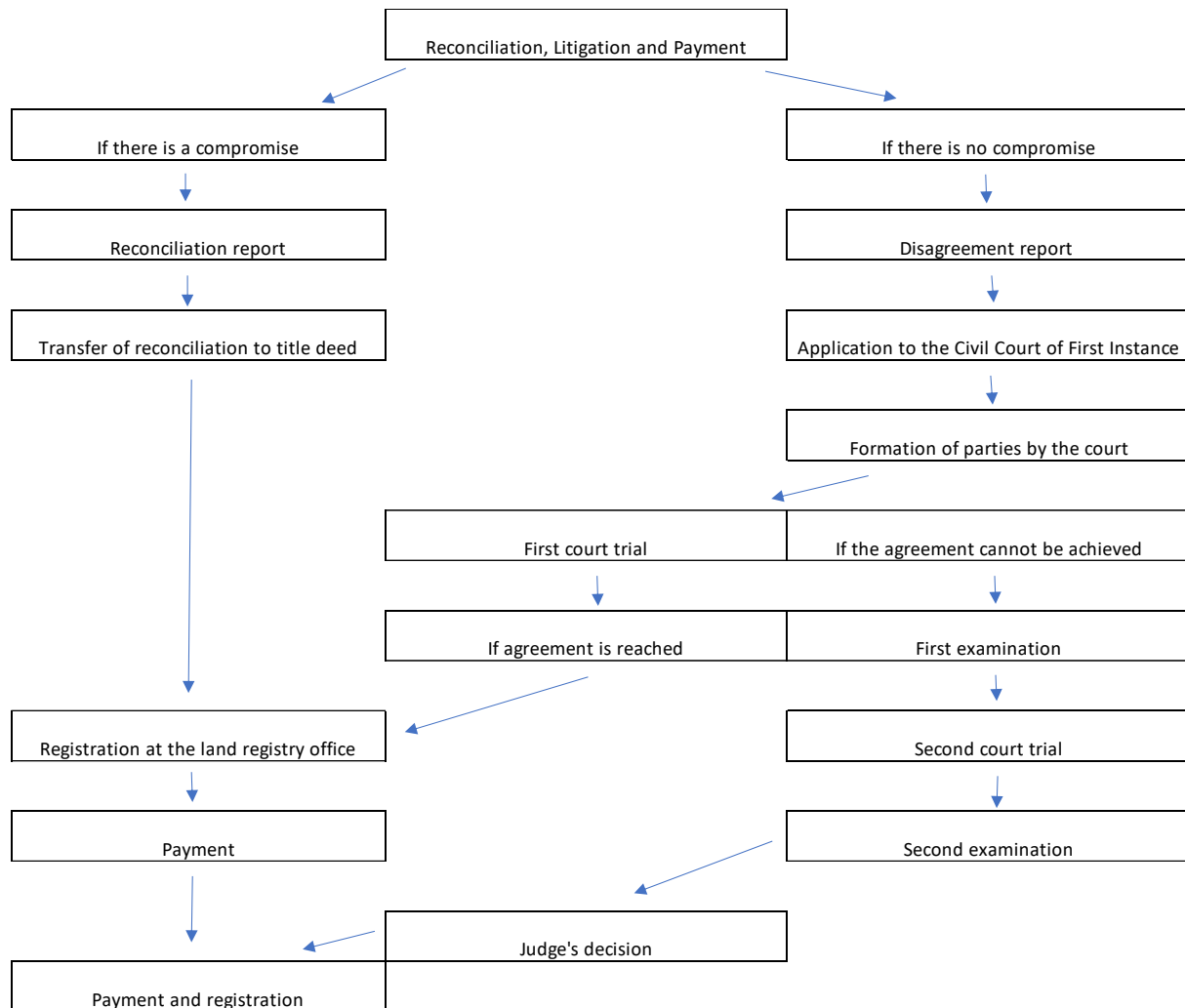


Figure 4-2 Reconciliation, Litigation and Payment Process

4.2. Entitlement Matrix

The rights holders affected by the project's property expropriation and land acquisition activities through permanent and temporary easement are as follows:

- Owners and users of registered lands,
- Product owners on registered lands,
- Land users whose ownership can be legalized (those who can prove their possession),
- Owners and users of real estate properties (including informal users),
- Official tenants (on private and public lands),
- Product owners without land title deeds (including informal users),
- Vulnerable groups,
- Animal owners who graze their animals on project-affected lands,

Payments can be made to those who prove their ownership with legal documents or through court proceedings. In the expropriation of lands registered in someone else's name, abandoned and/or not acquired by the owner, the minimum maintenance cost of the buildings is paid to the owners, while the cost of the trees is also assessed and paid to the relevant person. The individuals and groups mentioned above will be able to benefit from the supports specified in the entitlement matrix. The entitlement matrix determined within the framework of the studies carried out is shown below.

Table 4-1 Entitlement Matrix

Impact Subject to Compensation	Project Affected Persons	Compensation Method	Implementing Institution	Additional Provisions
Immovable				
1. Expropriation of Property	1.1. Registered Private Landowners	<ul style="list-style-type: none"> Cash compensation will be provided to ensure the acquisition of an equivalent property. A Land Entry Protocol will be prepared for the parcels whose owners can be reached and requested, and entries to the land will be made accordingly. The protocol will be announced in the muhtar's offices. The land will not be entered until the expropriation fee is deposited into the bank. Information will be provided on land acquisition, expropriation process, legal rights, valuation and price determination. Any unpaid product price will be paid before entering the land. 	DSI	<p>The land is acquired permanently and its ownership is registered in the name of DSI. Expropriation will be carried out in accordance with Turkish legislation. Land and fixed assets will be compensated at a replacement cost appropriate to market value and in a manner that will allow Affected Persons to acquire equivalent assets (to be valued at the project start date). Real estate valuation is carried out by the DSI Valuation Commission in accordance with the procedures specified in the law. Lands are valued according to the capitalization of annual net income. Legal expenses incurred as a result of agreements made within the scope of Article 8 of the Expropriation Law regarding expropriation transactions will be covered by DSI. PAPs will be informed about land acquisition. PAPs will be informed about their legal rights</p>
	<p>1.2. Land users whose rights can be legalized</p> <p>(Users with customary rights on treasury lands, lands not subject to registration and lands owned by institutions)</p> <p>If there are disputed parcels where one of the defendants is a private person</p>	<ul style="list-style-type: none"> Legal process will be carried out in accordance with the provisions of the Expropriation Law for lands with property rights. In case of temporary losses in such lands, the following compensation method will be valid: Cash compensation will be given to cover the acquisition of equivalent real estate. A Land Entry Protocol will be prepared for the parcels whose owners can be reached and requested, and land entries will be made accordingly. The protocol will be announced in the mukhtars' offices. No entry will be made to the land without paying the expropriation fee. Information will be provided on land acquisition, expropriation process, legal rights, valuation and price determination. Any unpaid product fees are paid before entering the lands. In addition to the compensation methods specified in permanent property acquisition, the land will be entered after the expropriation fee is deposited into the account number determined by the relevant court without waiting for the conclusion of the case. When the result of the case regarding the property is finalized, the legal owner can withdraw the expropriation fee from the account number. 	DSI and the relevant Court	

				<p>regarding the impacts during the construction process and the grievance mechanism. If additional land acquisition is needed, the rules specified in the RP will be applied.</p> <p>PAPs are informed about the developments in the disputed parcels.</p>
2.Acquisition of permanent easement right	2.1. Registered Private Owners/Users	<ul style="list-style-type: none"> The easement fee foreseen by the law for lands will be paid to the title deed owners and land users. A Land Entry Protocol will be prepared for the parcels whose owners can be reached and requested, and land entries will be made accordingly. The protocol will be announced in the mukhtars' offices. Entry to the land will not be allowed without paying the easement fee. A Land Exit Protocol will be prepared and implemented with the land owner and/or user whose approval can be obtained or with the owners or users who request. The protocol will be signed by DSI, the Contractor and two members of the board of alderman. Any unpaid product prices are paid before entering the lands. 	DSI	<p>The right to use the land during construction belongs to DSI. However, the ownership right continues to be registered in the name of the land owner/owners. Once construction is completed, the land is returned to the landowner. In permanent easement areas, the landowner and/or user cannot build any structure or additional building on the pipeline and cannot plant deep-rooted trees. The land in question will be made usable before being delivered to the owner. PAPs will be informed about the land acquisition.</p>
	2.2. Land users whose rights can be legalized (for example, those with the right of possession over land)	<p>Land users with property rights will be provided with title deeds for the land in question. In case of temporary damage to such lands for which title deeds have been obtained, the following compensation method will be valid:</p> <ul style="list-style-type: none"> According to Article 19 of the Expropriation Law, easement rights for the land will be compensated. A Land Entry Protocol will be prepared for the parcels whose owners can be reached and requested, and land entries will be made accordingly. The protocol will be announced in the muhtar's offices. No entry will be made to the land until the easement fee is paid along with the ownership right. A Land Exit Protocol will be prepared and implemented with the land owner and/or user whose approval can be obtained or with the owners or users who request. The protocol will be signed by DSI, the Contractor and two members of the board of alderman. Any unpaid product prices are paid before entering the lands. 	DSI	<p>The land in question will be made available for use before being handed over to the owner.</p>

3. Temporary land loss (establishment of easements and land restrictions) (corridor)	3.1. Registered Private Owners/Users	<ul style="list-style-type: none"> The cost of the easement right foreseen by the Law for the land will be covered. A Land Entry Protocol will be prepared for the parcels whose owners can be reached and requested, and land entries will be made accordingly. The protocol will be announced in the muhtar's offices. No entry will be made to the land until the easement fee is paid. A Land Exit Protocol will be prepared and implemented with the land owner and/or user whose approval can be obtained or with the owners or users who request. The protocol will be signed by DSI, the Contractor and two members of the board of alderman. Any unpaid product prices are paid before entering the lands. 	DSI	The right to use the land during construction belongs to DSI. However, the ownership right continues to be registered in the name of the land owner/owners. Once construction is completed, the land is returned to the landowner. Land owners/users can use their land without any usage restrictions after construction. The land in question will be made usable before being handed over to the owner. PAPs will be informed about land acquisition.
	3.2. Land users whose rights can be legalized (for example, those with the right of possession over land)	<ul style="list-style-type: none"> According to Article 19 of the Expropriation Law, easement rights for the land will be compensated. A Land Entry Protocol will be prepared for the parcels whose owners can be reached and requested, and land entries will be made accordingly. The protocol will be announced in the muhtar's offices. No entry will be made to the land until the easement fee is paid along with the ownership right. A Land Exit Protocol will be prepared and implemented with the land owner and/or user whose approval can be obtained or with the owners or users who request. The protocol will be signed by DSI, the Contractor and two members of the board of alderman. Any unpaid product prices are paid before entering the lands. 	DSI	The land in question will be made usable before being handed over to the owner.
4. Temporary Use Rights (Temporary facilities, camps, construction sites, storage areas, etc.)	4.1. Registered private plots and/or public lands	<ul style="list-style-type: none"> The land is rented on the terms and prices agreed upon jointly with the landowner. At the end of the contract made by the contractor company, the land is restored to its former state and returned to its owner. The land is used in accordance with the terms of the lease agreements made with the owners and is restored and returned to its owner upon completion of the work. In temporary rentals made by the contractor, equitable rental payments will be made and the company will obtain the opinion of DSI on this matter. 	DSI and Contractor	The land in question will be made usable before being handed over to the owner. Records of such temporary rental agreements will be kept by DSI.
Buildings/Trees and Crops				
5. Non-residential buildings (Barns, irrigation structures)	5.1. Owners and users of immovable properties (including unauthorized users)	<ul style="list-style-type: none"> Compensation will be paid to cover the cost of replacement in accordance with the legislation. According to Article 19 of the Expropriation Law, if unauthorized users prove their right of possession, compensation will be paid to cover the cost of renewal. 	DSI	Following the demolition of the building, the excavation or remaining materials will be left to the beneficiaries for the

, water wells, fences, chicken coops, etc.)					bidders. Dismantling and transportation support for usable assets (fences, poles, pipes, etc.) will be provided.
6. Trees	6.1. Owners and users of immovable properties	<ul style="list-style-type: none"> • Compensation will be paid to trees with economic value based on the net present value (taking into account the tree's species, age, economic life, etc.). • The ownership of the affected trees on common lands (treasury, etc.) will be determined with the support of DSI and compensation will be paid to the affected people. • According to Article 19 of the Expropriation Law, tree prices will be paid to the property owner. 	DSI		The trees to be cut will be returned to their rightful owners. If requested, uprooting and transportation support will be provided for replanting.
7. Cultivated crops	7.1. Product owners with land title deeds	<ul style="list-style-type: none"> • Cash compensation will be paid to the producer based on the sales price at the time of harvest, taking into account the cost of the expected production amount. 	DSI		In order to prevent crop losses, harvest will be waited for whenever possible. If this is not possible, the cost of the crop will be paid to the cultivator in case of emergency access to the land.
	7.2. Formal tenants (on private and public lands)	<ul style="list-style-type: none"> • The official tenant of the land will be compensated in cash based on the sales price to be offered to the producer at harvest time, taking into account the costs of the expected production amount. 	DSI		In order to prevent crop losses, harvest will be waited for whenever possible. If this is not possible, the cost of the crop will be paid to the cultivator in case of emergency access to the land.
	7.3. Product owners without land title (including unauthorized users)	<ul style="list-style-type: none"> • The cultivator will be compensated in cash based on the sales price received at harvest time, taking into account the costs related to the expected yield. 	DSI		In order to prevent crop losses, harvest will be waited for whenever possible. If this is not possible, the cost of the crop will be paid to the cultivator in case of emergency access to the land.
	7.4. Product owners of the plots in dispute	<ul style="list-style-type: none"> • The producer will be compensated in cash based on the sales price at the time of harvest, taking into account the cost of the expected production amount. Ownership will be determined by the court and compensation will be paid. 	DSI		In order to prevent crop losses, harvest will be waited for whenever possible. If this is not possible, the cost of the crop will be paid to the cultivator in case of emergency access to the land.

Livelihood, Vulnerable Groups, Quality of Life				
<p>8. Livelihood Loses</p>	<p>8.1. Land owners (Those who lost more than 10% of their land)</p> <p>8.2. Female farmers</p> <p>8.3. Vulnerable groups (elderly, women, seasonal workers)</p> <p>8.4. All other rights holders and relevant local stakeholders</p>	<p>In order to restore livelihoods, DSI will provide one or more of the following facilities:</p> <ul style="list-style-type: none"> • Information will be provided about the agricultural and livestock supports that institutions can provide. • Information and capacity building, agricultural consultancy and training services will be provided on irrigated agriculture. • Water users will be informed about smart irrigation systems/smart agricultural practices. • Services such as agricultural consultancy/training will be provided to female farmers and vulnerable groups by the Water Users' Association in cooperation with DSI (on-farm water management) and the Ministry of Agriculture and Forestry. • During the construction period, water users will be able to benefit from the irrigation service of the IUs. • Open reinforced concrete channels that will remain dysfunctional during the construction period will be removed. • Within the scope of rural development supports, information will be provided about grant programs for supporting individual irrigation systems and support will be provided for project preparation. • The water valves that users will receive in the project will be placed in common areas as much as possible, and the placement of valves in private areas will be avoided as much as possible. Valve locations will be changed if necessary. • An irrigation program will be prepared for farmers. A program for sample farmers will be prepared by the District Directorate of Agriculture and Forestry. • DSI ensures that contractors will prioritize unauthorized users and/or families of vulnerable communities for potential temporary or permanent employment opportunities related to the project based on labor needs. • DSI guarantees that contractors will prioritize purchasing services and goods from local suppliers. • Vulnerable communities will be informed about the project. <p>Developing irrigation rehabilitation projects for water users located outside the irrigation area and ensuring their inclusion in the new pipeline network, where possible.</p>	<p>DSI</p> <p>Institutions to be Collaborated</p> <p>Province-District Directorate of Agriculture and Forestry, Consultant /Contractor</p>	<p>During the modernization of irrigation systems, DSI will prioritize the use of public lands for the permanent land acquisition needs of the projects. Permanent land acquisition needs will be avoided to the extent possible. Additional consultations will be held with vulnerable communities on their rights regarding livelihood losses. PAPs will be informed about their legal rights regarding impacts during the construction process and the grievance mechanism. The Ministry of Agriculture and Forestry will organize activities and provide training to raise awareness of producers and water users on issues such as selection of appropriate irrigation method, irrigation scheduling, application of correct rotation, water saving, modern irrigation methods, and water reduction. Training activities on topics such as water harvesting, plant patterning, etc. will be carried out in a planned and continuous manner</p>

<p>11. Protecting quality of life and public health during construction</p>	<p>11.1 Project Affected Persons</p>	<ul style="list-style-type: none"> • ESMP measures will be implemented for the construction period. 	<p>DSI and Contractor</p> <p>National levels). Local institutions and stakeholders will be regularly informed about the upcoming activities. The contract to be signed with the contractor will include provisions regarding the compensation of damages caused by the company. The measures specified in the ESMP will be implemented and monitored (Grievance mechanism, dust, noise, traffic, waste management, hazardous waste, etc.).</p>
---	--------------------------------------	--	--

4.3. Mitigation Measures

Mitigation measures to be taken within the scope of the project;

For land acquisition;

- Determining the real estate values of registered lands/plots in a way that will meet the replacement cost,
- Payment of compensation for all types of structures, crops and trees on real estate,
- Ensuring that land users who have the right to possess untitled lands obtain the right to possess, calculating the real estate values according to the replacement value, paying crop and tree compensations,
- Payment of permanent and temporary easement fees for real estate,
- Not entering the lands without depositing the expropriation fees into the bank,
- Returning the lands without any problems at the end of the temporary easement periods.

For livelihoods and vulnerable groups;

- Organizing trainings on irrigated agriculture, product patterns, smart agriculture practices, etc. by relevant institutions,
- Providing information about agriculture and livestock grant programs offered by institutions such as the Ministry of Agriculture and Forestry,
- Carrying out various promotional activities for water users,
- Removing concrete water channels and opening these areas to agriculture,
- Creating paths (tracks) for animals to reach grazing areas during construction work,
- The damages that the contractor may incur during the construction shall be covered by the contractor,
- Informing users about how the system will be operated during the operation period by organizing visits to the sample irrigation area,
- Continuing the ongoing construction activities without damaging the existing system, repairing the damage in case of damage and restoring the existing system to its former state, and delivering water to farmers during the irrigation season,
- Informing the mukhtars and farmers about how to irrigate the parcels and supply water in settlements that are outside the irrigation area but receive irrigation water and where there may be some restrictions on water supply during the transition to operation, and developing measures in this direction.

4.4. Responsibilities of DSI

The issues that DSI is responsible for within the scope of RP are summarized below:

- Carrying out land acquisition transactions through property expropriation, temporary and permanent easement,

- Carrying out the valuation procedure for all expropriation processes and affected assets,
- Monitoring and reporting the land acquisition process,
- Establishing and operating a grievance mechanism regarding the project, closing grievances and demands within 30 days,
- Organizing information meetings for all stakeholders, including sensitive groups, and organizing announcements and information meetings for the RP,
- Preparation and distribution of brochures, posters and banners that will introduce the rights defined in the RP, the persons eligible for these rights, the land acquisition process and the grievance mechanism regarding the project,
- Collecting the necessary information (land users, sensitive groups, impact levels, etc.) to update the RP and updating it when necessary,
- Conducting and reporting RP monitoring and evaluation studies,
- Determination and supervision of the contractor that will carry out the construction activities,
- Informing the contractor about the international standards that must be followed,
- To follow up on any grievances regarding the contractor and to ensure that the contractor compensates for any damages that may arise due to negligence,
- Implementation and monitoring of the ESMP for the construction period.

DSI units that will take part in the project implementation are shown below.

Table 4-2 Responsibilities of DSI Units

Related Institution	Unit/Department	Terms of Application
DSI	Department of Real Estate and Expropriation	<p>Ensuring the allocation of areas that need to be expropriated, approving subcontractors and ensuring coordination with the Regional Directorate,</p> <ul style="list-style-type: none"> - Preparing and carrying out RP, - Submission of the RP to the World Bank for preliminary evaluation, - Conducting quality control and review of RP, - Ensuring that regular monitoring activities are carried out regarding the implementation of the RPs, - To monitor and coordinate the preparation of RP Reports, <p><u>To coordinate the following activities to be carried out by the Regional Directorate:</u></p> <ul style="list-style-type: none"> - Carrying out land acquisition activities, - Attending information meetings,

		<ul style="list-style-type: none"> - Monitoring the land acquisition process, - Monitoring and closing grievances regarding land acquisition, - Payment to PAPs regarding expropriation and easement transactions - Preparation of expropriation plans for the parcels affected by the project other than those covered by the first section, - Determination of expropriation values and coordination of meetings with PAPs in accordance with Article 8 of the Expropriation Law
DSI	Department of Operation and Maintenance	Conducting the Project.
DSI	Department of Investigation, Planning and Allocations	Implementation, monitoring and reporting of the ESMP by ensuring coordination.
DSI	Department of Irrigation	<ul style="list-style-type: none"> - Publication of RP on the official website of DSI, - Summarizing environmental and social issues related to project implementation to the World Bank through regular progress reports, - Coordinate the World Bank supervisions on environmental and social protection policies related to project implementation and communicate with the Bank.
DSI	12. Regional Directorate (Kayseri)	<ul style="list-style-type: none"> - Implementation and monitoring of the RP, - Carrying out land acquisition activities, - Attending information meetings, - Monitoring and closing grievances regarding land acquisition, - Payment to PAPs regarding expropriation and easement transactions - Preparation of expropriation plans for the parcels affected by the project other than those covered by the first section, - Determination of expropriation values and coordination of meetings with PAPs in accordance with Article 8 of the Expropriation Law - Preparation of necessary brochures and other information documents to inform the public and relevant stakeholders, - Appointment of a Public Relations and Environmental Specialist to work in the district to manage the impacts of the project, the construction plan, the rights and authorities of PAPs, and the grievance mechanism at the local level,

		<ul style="list-style-type: none"> - To conduct inspections regarding the implementation of the RP by the construction contractor, to make recommendations and to decide whether additional measures are necessary, - To resolve the contractor's grievances and damages arising from this, - Operating the Grievance Mechanism, - Ensuring coordination with local and regional stakeholders to be cooperated with, developing and implementing cooperation, - Providing support to DSI field personnel and IUIU representatives in the preparation of gender awareness trainings, - Determining the irrigation program to be implemented during construction work together with the Irrigation Union, - Ensuring that lands are restored and delivered to their rightful owners, - Implementation, monitoring and reporting of the RP and ESMP. - To provide up-to-date information about the existing irrigation systems and social structure to the Department of Real Estate and Expropriation and the Department of Operation and Maintenance by ensuring coordination with the relevant Irrigation Union.
DSI	DSI 123. Branch Office (Yozgat)	<ul style="list-style-type: none"> - Implementing the RP, - Holding public participation meetings - Distribution of brochures and other information documents required to inform the public and relevant stakeholders, - Informing the Irrigation Union's personnel about the Grievance Mechanism, - Operating the Grievance Mechanism, - Preparation of land entry and exit protocols, - Determination of PAPs in the field (User, impact level, etc.) - Regularly informing the Irrigation Union and PAPs about the developments in the project, - Monitoring the canalettes to be removed within the scope of the project together with the Boğazlıyan Uzunlu Water Users' Association,

4.5. Cut Off Date

A cut-off date will be in place for the identification of rights holders. Cut-off date is defined as the date of completion of the count of PAPs and assets inventory of immovable properties. Persons occupying the project area after the cut-off date will not be taken into consideration for compensation and/or resettlement assistance. Similarly, fixed assets (such as built structures,

crops, fruit trees, and woodlots) established after the date of completion of the immovable assets inventory, or an alternative mutually agreed on date, will not be compensated. This date will be the date of announcement of the public interest decision.

5. Valuation Method

The recommended valuation method for the affected assets is detailed in the following sections.

5.1. Valuation of Lands

The real estates to be expropriated are evaluated within the framework of the principles in Article 11 of the Law, taking into account the market value of the real estate. In the valuation, all factors that will affect the value of the real estates are taken into consideration.

The Valuation Commission prepares the valuation report with justifications based on the following features of the real estate subject to expropriation:

- a) Type and kind,
- b) Surface area,
- c) All qualities and elements that may affect its value and the separate value of each element,
- d) Tax declaration, if any,
- e) Value assessments made by official authorities on the date of expropriation,
- f) In lands, the net income that the immovable property or resource will bring if used as is and according to its location and conditions.
- g) In lands, the sales value according to comparable sales without a special purpose before the expropriation date,
- h) In buildings, official unit prices and building cost calculations and depreciation share,
- i) Other objective measures that will be effective in determining the price, provided that the effect of each measure is explained,

By stating the answers to all these elements separately in the report to be prepared on the basis of the basis and taking into account the declarations of the relevant parties, they determine the value of the immovable property based on a reasoned evaluation report in accordance with the valuation standards accepted by the Capital Markets Board.

- i. Net income: A land is affected by many factors such as dry or irrigated farming, slope, crop productivity, product selling price.
- ii. Capitalization rate: Calculated by dividing the average net income from the property by the real sales price of the property. The capitalization rate is affected by many factors.

- iii. Land market value: It refers to the values of real estate in the free market based on supply and demand. In expropriations, land values are calculated according to the income method.
- iv. Land features: Land/plot separation, location, irrigability, slope, soil structure, soil depth, whether it will be exposed to flooding and erosion, etc. should be determined.

5.2. Valuation of Plots

Plots can be valued based on three different criteria such as market price, conversion price and complementary value. It is legally mandatory to evaluate plots subject to expropriation according to the market price criterion.

In practice, the value of a plot is usually determined by direct comparison with similar plots whose real sales price is known. Therefore, it is necessary to know the real sales prices of plots that are similar to the plot being valued in terms of various features and to calculate the average m² price based on these prices.

5.3. Valuation of Buildings on Land and Plot

If there are structures on the areas to be expropriated, first of all, the architectural project and zoning information, structure classes and ages of these structures are determined. Unit price analyses are used to calculate the cost for specially constructed buildings in the expropriation area. The general practice is to make an evaluation based on the circular on approximate unit prices of structures published by the Ministry of Environment and Urbanization every year. When this price is determined, the depreciation rates determined according to the class and age of the buildings in the Amended Article 23 of the Regulation on the Evaluation of Tax Values Based on Real Estate Tax published in the Official Gazette on December 2, 1982 are taken into account. It is mandatory to use the cost method in the valuation of structures as required by the legislation. In addition, the deficiency or excess of some basic elements in the structure reduces or increases the unit square meter values for buildings in the same class. Even the change in the quality of the materials used in buildings with the same features changes the value of the building. In this case, what needs to be done is to reveal the deficiencies or excesses of the building with the current inventory and deduct them from the building value or add them to the building value.

Within the scope of RP, compensation fee will be paid to cover the entire renovation cost of the buildings. According to the land detection activities in this project, there is no structure that can be subject to depreciation.²

5.4. Debris Value

If the debris remains with the property owner, the calculated debris cost must be deducted from the total cost. However, demolition and transportation costs must also be calculated and paid to the property owner.

²This conclusion was reached according to the field research conducted by the DSI 12th Regional Directorate on 01.02.2024.

5.5. Calculation of Easement Rights on Plots

In order to calculate the easement right price to be established on a plot, the sales prices of the plots that will constitute a precedent for the plot in question are determined. Then, the decrease in value that may occur in the entire plot after the easement right is established is analyzed. The difference between the price of the real estate before the easement right is established and the price after the easement right is established is the easement price.

When calculating the easement fee for lands, the sales prices (market value) of comparable properties before the expropriation date are taken as basis.

When calculating the real estate after easement for the parcels, the restrictions imposed on the use of the real estate (in the zoning plan) will need to be taken into account. In the establishment of easement rights, the Valuation Commission must determine the following issues:

1. Loss of value in land due to waterways, high voltage lines, natural gas and oil pipelines passing over or under the land,
2. The value of the damage/loss caused by this transition or partial use.

Agricultural lands are valued according to the methods used in property expropriation. The damage suffered by the landowner is calculated according to the net income method. In this direction, the values of the land before and after the easement are calculated. The difference between them gives the easement fee.

In determining the loss of value due to easement in agricultural lands on which easement rights are established, the following criteria will be taken into consideration:

- Total area of the real estate,
- Geometric condition of the real estate,
- Type of the real estate (such as agricultural land, plot and building),
- Usage method of the real estate,
- Area and geometry of the part of the real estate where easement right is established,
- Quality of the public service subject to easement right etc.

Many factors such as the width of the area where the easement is established, known health risks, terrorism and accident risks need to be taken into consideration. The rate of loss of value cannot be increased or decreased due to any possible defect or benefit in the real estate subject to easement in the future, the conditions of the real estate as of the valuation date are taken into account. Other possible losses can only be subject to compensation within the scope of general provisions.

Easement rights can be established on fruitless orchards or groves and some or all of the trees can be cut down. In this case, the easement fee will need to be calculated according to the income capitalization criterion. The difference between the value calculated based on the income to be obtained according to the land use before the easement and the value after the easement will give the easement fee. The cost of the cut fruit trees is calculated separately and paid.

5.5.1. Temporary Easement Price

The easement right is established for a period of 1-10 years, i.e. (n) years. If a temporary easement is established, the net income loss that will occur on the easement area within (n) years is accumulated until the date the easement right is established.

If a temporary easement right is established, the loss of value is not calculated as if there was a permanent easement right on the entire property. The resulting damage is calculated by taking into account the income or rental amount lost during the easement right period.

5.5.2. Permanent Easement Price

If the easement period is long (such as 49 - 99 years), it is defined as a permanent easement. The difference between the land value before the easement and the land value after the easement, in short, the loss of value in the land value, constitutes the easement fee. It can be calculated in 3 ways:

1. Calculating the loss of income that will occur due to net income loss (decrease in productivity or increase in cost),
2. Change in capitalization interest rate,
3. Taking into account the net income loss and the change in the capitalization interest rate.

Loss of income to be incurred due to net income loss:

The easement fee is calculated by dividing the difference between the net income before the easement and the net income after the easement by the capitalization interest rate. When calculating the net income after the easement;

- Type and kind of land,
- Usage method,
- Location of the area where easement is established,
- The ratio of the area where easement is established to the total area of the real estate,
- The decrease in efficiency and the change in costs are determined by taking into account the geometry of the real estate and the area where easement is established.

When calculating the permanent easement fee, in agricultural lands, the easement fee cannot exceed 35% of the price calculated as a result of the expropriation of the relevant part. In plots (urban parcels), this rate cannot exceed 50%. This rate represents the maximum amount determined by the Supreme Court of Appeals in accordance with the laws of the Republic of Turkey. There is no change in the ownership of the lands and these restrictions are removed when the use of the lands ends.

5.5.3. Calculation of the Loss of Value from Permanent Easement

According to the Expropriation Law and the Supreme court practice, the loss of value in real estate due to expropriation is considered as the expropriation price in the establishment of easement rights. The price may vary depending on whether the real estate is agricultural land or plot, the type and size of use of the real estate, the location, surface area, geometrical condition of the area where easement rights are established, and the nature and route of the easement rights.

5.6. Replacement Cost

In line with the World Bank ESS5, it is mandatory to pay replacement cost within the framework of international standards for those who permanently lose their lands due to the relevant public service. The replacement cost items to be paid to those who lose their lands due to expropriation within the scope of the project activities are as follows:

- Purchase and sale fee at the land registry office,
- Land registry office revolving fund fee,
- Transportation costs.

According to the current land registry legislation, each of those who will buy and sell real estate at the land registry office (buyer - seller) must pay a land registry fee of 2% of the sales price declared at the land registry office, and also pay the revolving fund fee determined for each district. The transportation costs of the right holders related to these transactions may also arise.

In this case, an addition must be made to the expropriation prices determined according to the land market research to cover the full replacement price. Since the replacement price will be taken into account when determining the expropriation price, no additional addition will be made to the calculated expropriation price.

5.7. Calculation of Tree Price

The income calculated for the valuation of areas such as orchards, vineyards, etc. where perennial production is carried out is called periodic income and the valuation is made according to the capitalization method of periodic incomes in accordance with Article 11 of the Expropriation Law No. 2942.

It is necessary to determine the annual income obtained throughout the economic life of the orchards and the facility and production expenses incurred, and to add the income-expense differences together with the capitalization rate at the end of the economic life.

Then, with the "Capitalization of Periodic Fixed Incomes", first the bare land value and then the total value of the orchard in any "t" year is found with the help of equations.

6. Potential Impacts

6.1. Identification of Project Impact

In the 6 settlements affected by all land acquisitions examined by the DSI Regional Directorate, the land sizes and parcel types expected to be affected by the project were determined according to the expropriation map.

No residences were identified as affected in the entire project area, and no significant risks or impacts on livelihoods or properties were identified.

The land acquisition effects of the project are limited to the parcels where construction works will be carried out. The temporary land acquisition areas in these parcels will be restored and transferred to their users. Therefore, this effect is temporary. In the case of permanent easement, the lands on the route will continue to be used after construction, subject to some restrictions. Since the areas to be expropriated are generally valves, hydrant locations, and service roads, the impact of expropriation on the income of the beneficiary is very small. Households have other lands where they carry out agricultural production outside the parcels affected by the project.

6.2. Land Acquisition Impact

6.2.1. Impact by Land Type

The parcel numbers specified in the first report have been revised due to the parcels to be expropriated being subdivided. As a result, within the RP impact area, the total number of affected parcels is 205, 188 of which are private property, 14 parcels to the treasury, 2 parcels to public property, and 1 parcel to a legal entity (Village Legal Entity). In the assessment of the impacts, the parcel sizes before and after the subdivision were taken into account. More details are provided in the following sections.

Table 6-1 Distribution of Immovable Properties Affected by Expropriation According to Residence Areas

Settlement/ Affected Parcels (number and type)	Private Property	Treasury Land	Public Common Property	Legal Entity Property	Total
UZUNLU-KOÇ	16	5	0	0	21
UZUNLU-BAHÇELİEVLER	1	0	0	0	1
GÜVEÇLİ	35	5	2	1	43
ÇALAPVERDİ-KAYMAKAM KEMAL BEY	102	1	0	0	103
KEMALİYE	15	3	0	0	18
YOĞUNHİSAR	19	0	0	0	19
TOTAL	211	16	2	1	205
	91.71%	6.8396%	0.98%	0.49%	100%

Source: DSI, 2024.

According to the property types of the real estates (Real Person, Legal Entity, Government Treasury Property and Public Common Property), 99.40% of the total 304.127,77 m² area to be expropriated is property expropriation, while 0.60% is permanent easement area. In the real estates with private ownership due to expropriation, only 1.776,09 m² (0.7%) of the total 255.078,61 m² area to be expropriated is affected by permanent easement, while 99.30% is affected by property expropriation. And the real estates with private ownership constitute 83.87% of all the real estates affected by expropriation (Property Expropriation + Permanent Easement).

Table 6-2 Land Acquisition Methods According to Real Estate Types

Affected Area	Private Property	Government Treasury Property	Public Common Good	Legal	Total	Total Affected Area (%)
Title Deed Area (m ²)	2,904,683.08	196,402.36	165,949.88	1,161.70	3,268,197.02	
A. Expropriated Area (m ²)	253,302.52	39,546.13	9,303.44	155.26	302,307.35	99.40%
B. Permanent Easement Area (m ²)	1,776.09	44.33	0.00	0.00	1,820.42	0.60%
Total Affected Area (A+B) (m ²)	255,078.61	39,590.46	9,303.44	155.26	304,127.77	100%
(%)	83.87	13.02	3.06	0.05	100	
A. Area Affected by Expropriation/Total Title Deed Area (%)	8.72%	20.14%	5.61%	13.36%	9.25%	
B. Area Affected by Permanent Easement/Total Title Deed Area (%)	0.06%	0.02%	0.00%	0.00%	0.06%	
Total Affected Area (A+B)/Total Title Deed Area (%)	8.78%	20.16%	5.61%	13.36%	9.31%	

Source: DSI, 2024.

6.2.2. Impact of Land Acquisition on Private Property

Land acquisition will include property expropriation and permanent easement rights, as well as leasing if necessary. Land acquisition impacts on privately-owned parcels have been assessed according to the duration of the impact (permanent or temporary) and the total impact. The ratio of expropriated land to the total land area is 8.72% in private parcels, 0.06% in permanent easements, and 8.78% in total land acquisition. In summary, 8.78% of private parcels are affected by expropriation, and the average affected area is 1,391.77 m² per parcel. Specifically, it is seen that only 87.20 m² of the 1000 m² title deed area of the parcels falling within the expropriation area is affected by expropriation.

Table 6-3 Land Acquisition Information Regarding Private Parcels

Impact on 188 Private Plots in 6 Settlements	
Affected Area	Private Property
Total Title Deed Area (m ²)	2,904,683.08
Expropriated Area (m ²)	253,302.52

Number of Parcels	182
The Least Area (m ²)	46.98
The Most Area (m ²)	9,705.40
Average Affected Area Per Parcel (m ²)	1,391.77
Permanent Easement Area (m ²)	1,776.09
Number of Parcels	10
The Least Area (m ²)	16.11
The Most Area (m ²)	389.94
Average Affected Area Per Parcel (m ²)	177.61
Note: 4 of the private property parcels have both expropriation and permanent easement rights.	

Source: DSI, 2024.

a. Expropriation of Property

It is the change of ownership in the parcels that are permanently affected as a result of the expropriation work carried out by DSI for service roads, valves and hydrant locations. As a result of expropriation, the ownership of these lands will be transferred to DSI.

In private parcels; The number of parcels affected by expropriation is 188.

- The area affected by expropriation is at least 46.98 m², at most 9,705.40 m², with an average of 1,391.77 m². These rates are quite low and reveal that the project does not have a significant impact on livelihoods.
- The average affected area (expropriation + permanent easement) is 1,356.80 m², corresponding to 8.78% (1,356.80 / 15,450.44 *100) of the average title deed size.
- There are no structures affected by expropriation on the real estate. Nearly all of the 205 parcels have not been planted and are empty. It has been determined that wheat has been planted only in 2 parcels, and there are willow and poplar trees of various ages and numbers on the other parcels.

b. Permanent Easement

Permanent easement is the restriction of land use in the area where easement is established for 49 years. The owner or user of the land may continue to use their land during this period, but they may not be able to plant trees, etc. or build structures such as shelters, vineyards, etc. All of the real estates where easement is established are vacant and no planting / planting is done.

On private parcels in permanent easement;

- The number of parcels affected by the permanent easement is 10. 0.06% (six out of ten thousand) of the total title deed area is affected by the permanent easement.
- The average area affected in privately-owned parcels subject to permanent easement rights is quite small: 177.61 m².

- Permanent easement area varies between 16.11 and 389.94 m².

c. Temporary easement

Establishment of temporary easement rights does not include permanent land acquisition. It is valid for access to land, expropriation of property and establishment of permanent easement areas during construction works related to the pipeline. If the construction works are completed at the end of the period, the land is restored and delivered.

Before entering the land, a photo of the land will be taken. The land entry will be recorded with a report by DSI and the contractor company.

There is no private parcel affected by the temporary easement.

6.2.3. PAPs whose Land Assets Affected by 10% or more through Expropriation

There is no PAP in the project area whose parcels have been completely expropriated.

After evaluating all lands, **3 owners (2 parcels)** were identified whose total land assets were affected by expropriation at 10% or more. There are a total of 572 owners affected by the drainage channels, and only three (3) (0.56%) of them have lands affected at a level of 12.86%.

The administration has completed the subdivision process for all parcels to be expropriated and changed the title deed type to channel. Table 6 – 4 shows the total title deed areas of the owners and the level of their impact from expropriation. Accordingly, it has been determined that 10% and more of the land assets of 3 owners (2 parcels) in the village of Çalapverdi / Kaymakam Kemal Bey, Boğazlıyan district, Yozgat province are subject to expropriation.

In the investigation, it was determined that some of the owners and/or shareholders of these parcels had passed away and that the majority of the remaining shareholders did not reside in these settlements. A Farmer Registration System (ÇKS) query was requested from the Yozgat Provincial Directorate of Agriculture and Forestry for 3 owners and no record was found indicating that the individuals were engaged in agricultural production.

The average area affected by expropriation for three (3) owners is 904.22 m². The affected area is the lowest 367.85 m² and the highest 1 976.96 m², corresponding to an average of 12.86% of land assets. DSI According to the land determinations (asset inventory) made by the Regional Directorate officials in the expropriation area, it is understood that no planting/sowing (agriculture) is done in either parcel. Therefore, it has been concluded that the negative impact that may occur due to expropriation in this part of the irrigation area is not at a level that will affect the livelihoods of households whose main source of income is agricultural production.

Table 6-4 Information on PAPs Whose Land Assets Are Affected by 10% or More Due to Expropriation

Information on PAPs Affected by 10% and Above of Total Land Assets									
No	Name Surname	District	Village	Block	Parcel	Expropriation Area (m ²)	Total Title Deed Area (m ²)	Expropriation Rate	Average (%)
1	M*** B***	Boğazlıyan	ÇALAPVERDİ/KAYMAKAM KEMAL BEY	378	42	367.85	2,744.49	13.40%	12.86%
2	M*** B***	Boğazlıyan	ÇALAPVERDİ/KAYMAKAM KEMAL BEY	378	42	367.85	2,744.49	13.40%	

3	H*** A***	Boğazlıyan	ÇALAPVERDİ/KAYMAKAM KEMAL BEY	362	46	1,976.96	16,804.96	11.76%	
---	-----------	------------	----------------------------------	-----	----	----------	-----------	--------	--

Source: DSI, 2024.

The owners in question have been assessed as a “disadvantaged/vulnerable group” according to the WB criteria and DSI will take the necessary measures to eliminate the grievances of these people.

6.2.4. Land Acquisition in Other Parcels

Other types of parcels affected include those belonging to the treasury, village legal entity and public common property. 13.49% of the total title deed area of these lands is affected by land acquisition (expropriation + permanent easement). It is assessed that the decrease that will occur due to expropriation in these lands will not have a negative impact on widespread animal husbandry activities such as grazing.

Table 6-5 Affected Areas According to Property Types

Area and Title Deed Sizes of Other Affected Parcels					
Affected Area	Treasury Land	Public Common Good	Village Legal Entity	Total	Area/Title Size (%)
Total Title Deed Area (m ²)	196,402.36	165,949.88	1,161.70	363,513.94	100%
A. Expropriated Area (m ²)	39,546.13	9,303.44	155.26	49,004.83	13.48%
B. Permanent Easement Area (m ²)	44.33	0.00	0.00	44.33	0.01%
Total Affected Area (A+B) (m ²)	39,590.46	9,303.44	155.26	49,049.16	13.49%
Total Affected Area (A+B)/Total Title Deed Area (%)	20.16%	5.61%	13.36%	13.49%	

Source: DSI, 2024.

6.3. Land Acquisition Impact on Vulnerable Groups

The impact of land acquisition through expropriation on vulnerable groups is negligible.

While preparing the DSI asset inventory (land surveys), it was determined that the project did not have a negative impact on vulnerable groups according to field observations. During construction activities, utmost care will be taken not to affect irrigation infrastructure and livelihoods. Expropriation and easement fees will be deposited into the accounts of the owners defined in the vulnerable group, like other owners, within the period stipulated by the Law, and DSI officials will inform vulnerable groups about the payments. DSI officials will also inform vulnerable groups through household visits in the meetings regarding land acquisition to be held in the villages.

Based on field observations and information and data obtained from the field, it can be said that the project will not have any negative impacts on sensitive groups in terms of environmental, social, economic and land acquisition impacts, and that sensitive groups will be informed about all issues that may affect their lives due to the project.

There are 41 people aged 65 and over living in 6 settlements in the project area. A total of 49 people, including 8 female farmers, are classified as vulnerable groups in the project area.

Details are shown in the table below:

Table 6-6 Vulnerable Groups

No	Settlement	Over 65 Years of Age Owner-Shareholder	Female Farmer (Under 65) Owner-Shareholder	TOTAL
1	UZUNLU-KOÇ	12	2	14
2	UZUNLU-BAHÇELİEVLER	1	0	1
3	GÜVEÇLİ	8	1	9
4	ÇALAPVERDİ-KAYMAKAM KEMAL BEY	14	5	19
5	KEMALİYE	0	0	0
6	YOĞUNHİSAR	6	0	6
TOTAL		41	8	49

Source: DSI, 2024

6.4. Owners and Users Affected by Expropriation

While preparing the expropriation files, the user identification of the lands was made by the DSI Regional Directorate.

6.4.1. Legal Owners and Shareholders in Private Parcels

A total of 572 shareholders in privately-owned parcels are affected by expropriation and permanent easement. Therefore, almost all shareholders are affected by more than one type of land acquisition. Details by settlement are shown below.

Table 6-7 Number of Affected Owners and Shareholders in Privately Owned Parcels³

No	Settlement/Private Plots Legal Owner Shareholder Number	Affected by Expropriation and Easement
1	UZUNLU-KOÇ	51
2	UZUNLU-BAHÇELİEVLER	5
3	GÜVEÇLİ	100
4	ÇALAPVERDİ-KAYMAKAM KEMAL BEY	265
5	KEMALİYE	54
6	YOĞUNHİSAR	97
TOTAL		572

Source: DSI, 2024

³ The name and surname of the same owner in the same village are counted only once.

6.4.2. Informal User

As a result of the land acquisition studies carried out by the DSI Regional Directorate, no informal users were identified.

The RP undertakes to pay compensation to those who earn income from lands they do not own, in return for the value of their crops or perennial fruit trees, if users bring a decision of ownership. This usually involves informal use of state-owned land or land belonging to another party. In order to identify these users, the mukhtars are informed in advance that product and user assessments will be conducted. The survey day is announced one week before the start of the surveys and the participation of land users is requested. A commission formed by the participation of DSI mukhtars and users determines the users and products. Since user and product determinations are made openly and transparently, errors are usually at a minimum level.

RP agrees to compensate land users for the cost of cultivated products, if any. If there are products and trees identified prior to the Land Entry Protocol, the prices to be paid are determined according to the type of each product. Payment is made to the user before signing the Protocol.

Currently, DSI has not detected any unregistered users on treasury lands.

7. Stakeholder Participation and Consultation Process

The ESS5 requires prior consultation for PAPs in projects financed by the World Bank. DSI held consultation meetings with the Irrigation Unions and local people before the start of irrigation modernization works and documented these meetings. During the consultation meetings, general information about the project was shared, including the justification of the project, land requirements and impacts, legal rights of the people who are likely to be affected, and the work schedule.

The contact information and available hours of the project officer to be contacted for questions and problems regarding land acquisition and other impacts related to construction have been shared with all local stakeholders. The Stakeholder Participation Program, which includes the different messages and participation methods that DSI will give in meetings with different stakeholder groups, is included in this section. DSI will ensure that land acquisition issues are addressed in these meetings.

Similarly, the Grievance Mechanism to be established by DSI will be open to objections and grievances regarding land acquisition. DSI will try to resolve these feedbacks and grievances to the extent possible within the framework of irrigation modernization activities. The project contact person to be appointed for the project will record the main questions and problems raised in the meetings and the steps taken to resolve them.

It will also proactively explain the issues that are important to the participants of the meetings held within the scope of the project and will make an effort to keep all stakeholders informed throughout the project process.

Table 7-1 Stakeholder Engagement Program for RP

No	Subject	Detail	Stakeholder Engagement Method	Stakeholders	Frequency (recommended)
1	Uzunlu Irrigation Union Project Information Meetings (start and end dates of construction, design, implementation, investment programme, etc.)	<p>The interviewed PAPs and mukhtars of the affected settlements stated that they would like to be informed about the details of the project and the most important issue they would like to be informed about is the project details.</p> <p>Accordingly, DSI and Irrigation Union will inform them about the start and end dates of the project, technical design of the project, potential benefits/losses, tender processes, construction phases and expected outputs.</p> <p>More information about the Project will be shared during the meetings to be held in Boğazlıyan Uzunlu Irrigation Union and affected settlements etc.</p> <p>During the construction phase of the Project, information activities will continue to be organised regularly.</p> <p>Communication between the contractor and Irrigation Union regarding the implementation of the Project will be established by DSI.</p>	<p>Information Meetings</p> <p>Brochures and Posters</p> <p>Sharing project reports</p> <p>Press publications</p> <p>DSI Website</p>	Irrigation Union Members	Every 6 months
				Non-Members of Irrigation Unions	Every 6 months
				Vulnerable groups	Every 6 months
				Boğazlıyan District Governorate	Every 6 months
				Bogazlıyan Municipality	Every 6 months
				Bogazlıyan District Directorate of Agriculture	Every 6 months
				Bogazlıyan Provincial Directorate of Agriculture	Every 6 months
				Boğazlıyan Chamber of Agriculture	Once a year
Mukhtars	Every 6 months				
2	Grievance Mechanism	<p>The Project's Formal Grievance Mechanism and Registration System will be introduced and stakeholders will be informed about it. The grievance mechanism and reporting channels will be open to anyone with requests and concerns regarding the Project. The Project's grievance system and the communication channels through which PAPs can submit their grievances and requests will be shared both through printed materials such as posters and brochures and verbally at stakeholder engagement meetings. Stakeholders will be informed by DSI about the resolution processes of their grievances and requests.</p>	<p>Meetings</p> <p>Brochures and Posters</p> <p>DSI Website</p> <p>Reports</p> <p>Press publications</p> <p>Grievance Forms</p>	Irrigation Union Members	Every 6 months
				Non-Members of Irrigation Unions	Every 6 months
				Boğazlıyan District Governorate	Every 6 months
				Bogazlıyan Municipality	Every 6 months
				Agricultural workers	As needed
				Mukhtars	Every 6 months
				Bogazlıyan District Directorate of Agriculture	Every 6 months
				Boğazlıyan Chamber of Agriculture	Once a year

3	Land Acquisition (expropriation, permanent and temporary easement)	<p>PAPs will be informed about land acquisition rights and potential land use restrictions.</p> <p>PAPs will be regularly informed about land acquisition activities carried out by DSI.</p> <p>PAPs will be informed in detail about the stages of land acquisition.</p> <p>Grievances and requests regarding land acquisition will be recorded and resolved within the scope of the project's grievance and request system and stakeholders will be informed.</p> <p>Negotiations will be held with PAPs regarding the expropriation price determined in accordance with Article 8 of the Expropriation Law.</p> <p>Land Acquisition Information Guide will be prepared and shared with PAPs.</p> <p>A brochure on land use restrictions will be prepared and shared with Project Affected Persons.</p>	<p>Information Meetings</p> <p>Legal documents (announcements, parcelisation plans, etc.) new</p> <p>DSI Website</p> <p>Email</p> <p>Telephone</p>	Members of the Irrigation Association Affected by the Project	Once a year
				Persons Affected by the Project who are not members of the Irrigation Union	Once a year
				Boğazlıyan District Governorate	Once a year
				Bogazlian Municipality	Once a year
				Bogazlıyan District Directorate of Agriculture	Once a year
				Mukhtars	Every 6 months
				Those affected by land acquisition (legal owners and occupiers)	Land acquisition process
4	Acquisition of Immovable Property (water well, shelter, tree etc.)	<p>PAPs will be informed about their rights regarding the acquisition of immovable property. PAPs whose immovable properties are affected will be regularly informed about the immovable acquisition activities carried out by DSI.</p> <p>Grievances and requests related to immovable property acquisition will be recorded and resolved within the scope of the project's grievance and request system and stakeholders will be informed.</p>	<p>Information Meetings</p> <p>DSI Website</p> <p>Email</p> <p>Telephone</p>	PAPs (legal owners and possessors) affected by immovable property acquisition	During the acquisition of immovables
5	Groundwater users	Information will be given on how water wells used for irrigation purposes will be affected by the project during construction and operation periods, usage rights and restrictions.	Information Meetings	Users irrigating through a water well	Once a year
				Mukhtars	Once a year
6	Introduction of RP	After the disclosure of the RP, it will be updated with the opinions of stakeholders and announced again. If deemed necessary as a result of the studies to be carried out for the acquisition of the remaining lands, the RP will be updated and PAPs and mukhtars will be informed about this issue.	<p>Information Meetings</p> <p>DSI Website</p>	Irrigation Union Members	As needed
				Non-Members of Irrigation Unions	As needed
				Vulnerable groups	As needed
				PAPs affected by land acquisition	As needed
				Mukhtars	As needed

7	Ensuring Access to Fields and Grazing Areas	During the construction phase of the Project, crossing points will be established where necessary to ensure access of PAPs to the land and transition of animals to grazing areas and PAPs will be informed about this issue. Grievances on this issue will be monitored and resolved.	Information Meetings	Irrigation Union Members	Once a year
			DSI Website		
			Brochure/poster	Non-Members of Irrigation Unions	Once a year
				Mukhtars	Once a year
8	Water supply during construction	PAPs will be informed by the Irrigation Union and DSI on how water will be supplied during construction and the related water planning.	Meetings	Irrigation Union Members	Once a year
			DSI Website		
				Non-Members of Irrigation Unions	Once a year
				Mukhtars	Once a year
9	Female water users	Meetings will be organised to increase women's level of knowledge on the project. Information meetings will be organised by DSI for women water users on the features of the new irrigation system, alternative agricultural methods and capacity building and improvement for registration to irrigation unions. Gender equality will be considered in these meetings and the meetings will be organised before the irrigation season. (Women will need to be selected to participate in the training activities and the venue of the training will need to be selected taking into account the needs of women. The timing of the training should also be determined outside the seasons when agricultural activities are intensive and when women receive training. they work in their own fields).	Information Meetings	Women members of the irrigation union	Once a year
			Brochures and Posters		
			DSI Website		
			Field visits	Women Water Users who are not members of irrigation unions	Once a year
			Monitoring and evaluation		
			Reports		
			Grievance Forms		
10	Irrigation Methods and Techniques (drip irrigation, sprinkler etc.)	After the completion of the construction phase of the project, information will be provided on irrigation systems that will increase productivity depending on the crop pattern. When necessary, agricultural training activities will be organised for stakeholders by the Provincial and District Directorates of Agriculture and Forestry.	Meetings	Irrigation Union Members	Once a year
			Brochures and Posters		
			DSI Website	Non-Members of Irrigation Unions	Once a year
			Field visits	Mukhtars	Once a year
				Chamber of Agriculture	Once a year
11	Crop Pattern (Rotation) Recommendations	During the construction and operation periods, suggestions will be made depending on possible changes in water supply and information will be given about the crop pattern. After the completion of the construction phase, agricultural training activities for stakeholders will be organised by the Provincial and District Directorates of Agriculture and Forestry, if needed.	Meetings	Irrigation Union Members	Once a year
			Brochures and Posters		
				Non-Members of Irrigation Unions	Once a year
				Provincial/District Directorates of Agriculture	Once a year
12	Information about Smart Agriculture applications	Smart Agriculture practices for PAPs will be introduced with Provincial/District	Meetings	Irrigation Union Members	Once a year

		Directorate of Agriculture. Thus, PAPs will be able to learn Smart Agriculture practices that they can apply after the completion of modernisation construction activities.	Brochures and Posters	Non-Members of Irrigation Unions	Once a year
				Mukhtars	Once a year
13	Co-operation with Local and Regional Institutional Stakeholders	Cooperation with local and regional stakeholders will be developed in order to identify capacity building activities (agricultural extension, training, etc.) and support programmes to be organised for PAPs and to inform PAPs about them, and to carry out the preliminary activities to be carried out during the project. During the operation phase of the project (crop pattern, drip irrigation system to be used, etc.), it will be ensured to identify potential problems and develop measures to mitigate them and inform PAPs about these activities.	Information Meetings	PEKs	Once a year
			Brochures and Posters	Vulnerable groups	Once a year
			Sharing project reports	Yozgat Governorship	Once a year
			Press publications	Boğazlıyan District Governorate	Once a year
			DSI Website	Bogazlian Municipality	Once a year
				Bogazlıyan District Directorate of Agriculture	Once a year
				Yozgat Provincial Directorate of Agriculture	Once a year
				Boğazlıyan Chamber of Agriculture	Once a year
				Mukhtars	Once a year
14	Monitoring and evaluation	Stakeholders will be informed about the progress of the project. Project related grievance notifications and stakeholder engagement processes will be monitored and followed up.	Meetings	Irrigation Union Members	Once a year
			Reports	Non-Members of Irrigation Unions	Once a year
			Field visits	Boğazlıyan District Governorate	Once a year
			Monitoring and evaluation forms	Bogazlian Municipality	Once a year
				Bogazlıyan District Directorate of Agriculture	Once a year
				Mukhtars	Once a year

7.1. Previous Stakeholder Engagement Activities

According to the legislation of the Republic of Turkey, the written opinions and suggestions of the persons affected by the consolidation should be obtained before starting the consolidation works. In 2018, a total of 13516 interviews were conducted. The number of owners interviewed corresponds to 70% of the 19272 shareholders.

Table 7-2 Interview Details

No	Settlements	Meeting Dates	Number of Interview Participants
1	Uzunlu Bahçelievler	10.04.2018	562
2	Uzunlu Esentepe	12.04.2018	55
3	Uzunlu Kemaliye	14.04.2018	62
4	Uzunlu Koç	16.04.2018	213
5	Uzunlu Yenidoğan	18.04.2018	110
6	Çalapverdi İnönü	20.04.2018	535
7	Çalapverdi-Kaymakam Kemal Bey	22.04.2018	4.429
8	Merkez Yukarı	24.04.2018	637
9	Merkez Aşağı	26.04.2018	236
10	Merkez Bahariye	28.04.2018	598
11	Merkez Bahçeler	30.04.2018	224
12	Merkez Çarşı	2.05.2018	932
13	Merkez Kemaliye	4.05.2018	1.663
14	Merkez Yenidoğan	6.05.2018	813
15	Güveçli	8.05.2018	2.302
16	Başhoroz	10.05.2018	72
17	Yoğunhisar	12.05.2018	73
Total		April - May 2018	13.516

Source: DSİ 12th Regional Directorate, 2023

Consolidation works within the scope of Uzunlu irrigation area were started in 2018 and necessary information brochures were posted in the mukhtars' offices in the units declared as application area and letters were written to the municipalities informing that the application was made. Farmers were informed about the meeting dates through letters and announcements, and information about the project was given at the information meetings held on 14 March 2018 at

Boğazlıyan Wedding Hall. The demands of property owners were received in the meetings held at the neighbourhood level.

DSİ and Irrigation Union carry out regular information activities. A liaison office was kept open for 4 years between 2017 and 2020 so that citizens can go and get information during the consolidation.

In line with the requests received from PAPs and the information received from the contractor company, DSİ employees reach the citizens by finding the relevant owners and confirming them through the mukhtar. An expert from the Land Consolidation and In-Field Development Services Branch Directorate is assigned for damage and income loss payments and visits village headmen's offices every week. He also carries out home visits for vulnerable groups.

Irrigation Union, district governorships and mukhtars are informed about the dam occupancy rates.

The Irrigation Union uses methods such as WhatsApp, official letters, announcements, meetings with mukhtars, meetings in coffee houses in villages, announcements from mosque loudspeakers and SMS. It is also possible for farmers to come to the Irrigation Union and get information.

Under the World Bank's training programme, 20 farmers were sent to the training centre of the Ministry of Agriculture and Forestry in Adana on 23.11.2023.

8. Grievance Mechanism

DSİ has established an easily accessible grievance mechanism to record and resolve any negative/positive feedback or grievances by affected parties and other stakeholders during the project implementation phase. The grievance mechanism aims to manage all possible grievances and requests of affected stakeholders regarding land acquisition processes and/or other environmental and social impacts and issues during the construction phase. The Project's Grievance Mechanism will be operated in accordance with the requirements of World Bank policies.

Currently, DSİ has a Grievance Mechanism consisting of four main channels:

1. Irrigation Union
2. DSİ Numbered Branch Office
3. DSİ Regional Directorate
4. General Directorate of State Hydraulic Works

Thus, affected people or stakeholders will be able to submit their objections and grievances to any of these institutions/organizations via email/phone or through personal grievances through national grievance reporting mechanisms such as Presidential Communication Center (CIMER)⁴.

⁴ <https://www.cimer.gov.tr/>

All grievances related to land acquisition will be collected at the DSI 12th Regional Directorate in Kayseri. Grievances collected at the local level will be forwarded by DSI 123th Branch (Yozgat) and Boğazlıyan Uzunlu Irrigation Union to DSI Regional Directorate 12 in Kayseri.

In addition, the grievances and requests to be made through the “Flood, Failure and Intervention Spatial Information System (TAMBIS)” mobile application, developed by the General Directorate of State Hydraulic Works to enable early warning in case of flooding, where notifications regarding failures and interventions can be received, will be taken into consideration by the grievance and request mechanism of the project.

Incoming grievances are recorded electronically by DSI General Directorate Support Services Department (grievances submitted through written petitions, CIMER, public institutions and organizations, etc.). Real and legal persons can follow the electronically recorded grievances by authenticating their identity via turkiye.gov.tr address. The grievance and request mechanism allows anonymous grievances to be raised and addressed. These grievances will also be recorded.

Incoming grievances will be directed to the relevant units according to the type and content of the grievance and will be examined and resolved within the specified response period (30 days). All grievances made through written documents, applications or CIMER are recorded by DSI. In cases where grievances reported by phone need to be resolved by DSI, the complainant is directed to submit his/her objection and/or grievance in writing through the Grievance Mechanism. Officers in all departments prepare monthly reports on grievances submitted through both DSI Grievance Mechanism and CIMER. Individuals can also submit their grievances/requests to DSI via turkiye.gov.tr.

While the grievances received through Irrigation Unions are generally related to the problems encountered during the implementation phase, the grievances received through other units can be related to all works and operations carried out by DSI. Irrigation Unions record the grievances received and share them with DSI when necessary and upon request.

The grievance mechanism is shown below:

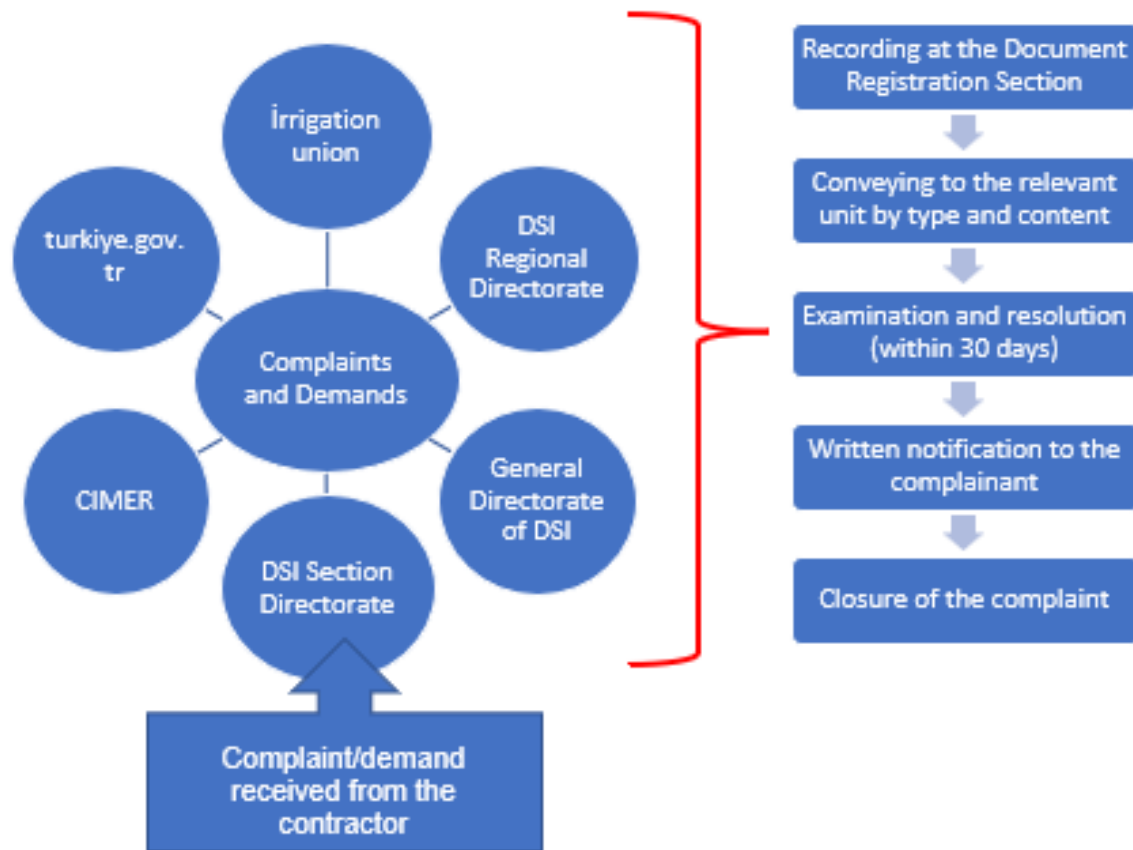


Figure 8-1 Grievance Mechanism

DSI will ensure the functioning of the Grievance Mechanism. The Public Relations Specialist to be assigned by DSI at the project site will be responsible for recording grievances made by phone or in writing. DSI will assign a Public Relations Specialist to disseminate information about the grievance mechanism.

A database will be established by the Irrigation Association for all written and verbal grievances received by the Irrigation Association (IU) regarding the Project. DSI will also inform the management of the Irrigation Association about the grievance resolution process.

The contractor who will carry out the construction works of the Project will forward the grievances and requests to DSI. In case the contractor damages the land, infrastructure or crops, DSI undertakes to compensate the contractor for the damages. The contract to be signed with the contractor will include provisions regarding the compensation of damages to be caused by the company.

Within the implementation period, objections can be made to the nearest DSI unit (Irrigation Union, Project Directorate, DSI Branch Directorate, Regional Directorate or General Directorate) in person, by phone or e-mail. All objections received will be recorded and the parties making

these objections will be responded to in writing. PAPs will be informed about their legal rights regarding impacts during the construction process and the grievance mechanism initiated.

PAPs will be regularly informed by DSI officials every 6 months about the legal process and rights regarding land acquisition and expropriation/land consolidation and construction processes.

Any grievances and requests made by PAPs or other stakeholders will be recorded by DSI on project basis. Incoming grievances will be evaluated and closed, and closed grievances will be documented and kept.

Any grievance received by DSI will be responded within 30 days of receipt. If it takes more than 30 days to resolve the grievance, the complainant will be notified and an attempt will be made by higher level officials to resolve the issue within one month.

Grievances can be submitted by written petition, e-mail or in person. Grievances received through this channel will be forwarded to the relevant units by the Department of Irrigation, Foreign Financed Projects Branch Directorate. Two separate grievance forms will be used for the Grievance Mechanism. The first one is the 'Grievance Application Form'. When there is a grievance, a copy of the completed grievance form will be forwarded to the applicant upon request. Once corrective measures have been taken and the grievance has been resolved, a 'Closure Form' will be completed by the grievance officer. Sample Grievance Forms are provided in Annex 10.1. The figure below shows the communication channels for the grievance and request mechanism.

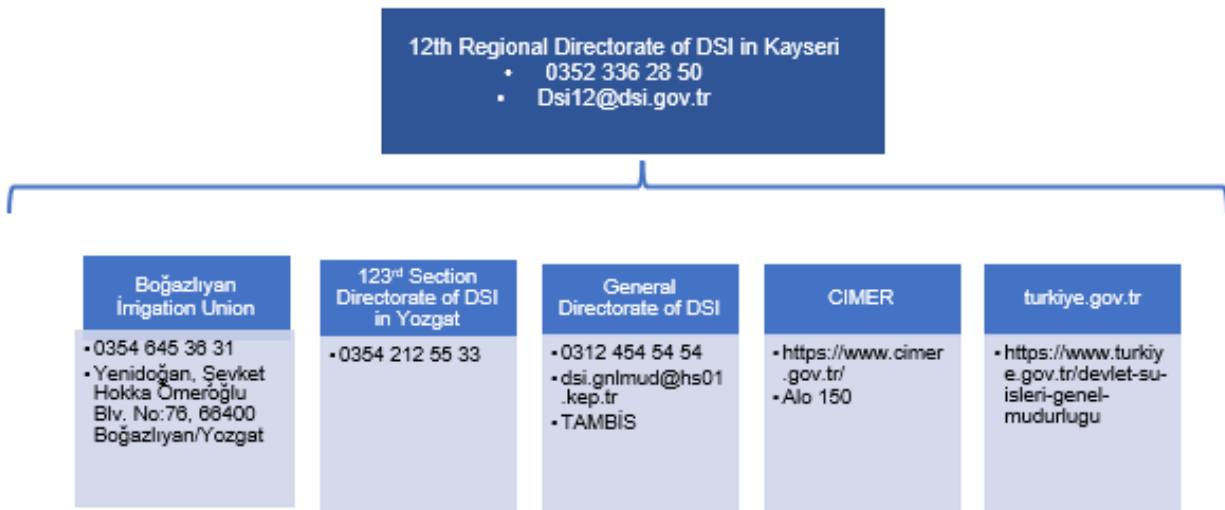


Figure 8-2 Grievance Channels

DSI will inform all project affected persons and communities about the Grievance Mechanism through engagement activities and introduce them to the project field staff where they can raise any grievance regarding project implementation.

9. Monitoring, Evaluation and Reporting

The main objective of RP implementation is to reduce or eliminate negative social impacts on affected people and communities and restore livelihoods to pre-project levels. The objectives of monitoring activities for the RP are as follows:

- To fulfill the actions and commitments under the RP in a timely and complete manner,
- Ensure that affected parties who meet the eligibility criteria are paid the full amount of compensation to which they are entitled within agreed periods,
- Follow up on objections and grievances made by PAPs and take appropriate corrective measures if necessary.

Land acquisition processes will be regularly monitored and followed up through semi-annual monitoring and follow-up activities.

The General Directorate of DSI and the 12th Regional Directorate of DSI in Kayseri will be responsible for the implementation and monitoring of the land acquisition activities of the Project. A Project Management Team assigned within the Regional Directorate will monitor the implementation of the RP and be in constant communication with construction contractors, beneficiaries and other stakeholders in the affected communities and submit semi-annual reports on the progress of the RP to the Region. The Coordinator and the Project Management Team (Relevant Expert) within the Directorate General of DSI will be informed by coordinating the steps taken to resolve grievances.

RP monitoring activities will be carried out under the supervision of the Department of Irrigation and the Department of Real Estate and Expropriation of DSI and through the active follow-up of the relevant regional directorates. Land acquisition activities carried out by DSI will be monitored and will be monitored through regular field visits and reports to be prepared by the project field team. Where necessary, DSI may choose to hire a consultant for the implementation and monitoring of the RP.

DSI will monitor the land acquisition processes and inform the World Bank through semi-annual reports on the progress made in implementation and relevant non-conformities.

As mentioned above, the World Bank will also follow up on the processes under regular supervision and will propose solutions to major issues as needed.

The topics covered in the monitoring reports are listed below;

- Information on owners and users in the impact area and affected area (distribution of public and private lands, general data of right holders, general data of land users, data of vulnerable groups),
- Method and stage of expropriation (if there is a reconciliation process, date of public interest decision, information and consultation on parcels obtained through reconciliation and litigation, etc.),
- Status of the expropriated lands (parcels under litigation, registered parcels, confiscated parcels, parcels returned to use after the construction of the project, etc.),

- Restoration of lands, entries and exits of the lands,
- Analysis of the grievance redress mechanism related to land acquisition, information on recorded grievances (number of grievances received, subject of grievance, number of male and female complainants, ratio of resolved and pending grievances, time to resolve grievances, etc.),
- Monitoring of vulnerable groups, issues that need to be monitored and evaluated,
- Summary of consultations with PAPs and other stakeholders (including consultations with women and vulnerable groups) according to the RP in the period in question

10. Budget

An estimated budget has been created in the RPF for the implementation of the RP. Consequently, the budget allocated for land acquisition is TRY 24.184.006,45.

In addition, the supports from third parties other than DSI (the Provincial-District Directorates of Agriculture etc.) and the cash realizations by the contractor within the scope of land acquisition (rental, etc.) and the grievance mechanism will also be among the budget items.

However, land acquisition is an ongoing process and has not been completed, yet. While updating the RP, this budget will also be updated and DSI will also provide information on the realizations of budget items under the reporting to the World Bank.

Table 0 -1 RP Budget

Item No	Subject	Total Actual Budget (TRY)
1	Expropriation	24.006.895,67
2	Easement	61.785,05
3	Acquisition of Immovable properties (trees, buildings etc.) on parcels	115.079.60
4	Crops on parcels	246,12
Total		24.184.006,45

Annexes

1. Annex 1: Grievance Application Form/Closure Form
2. Annex 2: Land Access – Exit Protocol Sample
3. Annex 3: List of Affected Parcels
4. Annex 4: Questionnaire

Annex 1: Grievance Application Form/Closure Form

GRIEVANCE FORM			
Name of the Complainant:		Date:	
Title:			
Complainant's;		HOW THE GRIEVANCE IS RECEIVED	
Name Surname (Anonymous grievances received will also be recorded*)		Telephone	<input type="checkbox"/>
Telephone		Information Meeting	<input type="checkbox"/>
Address		Application to Field Office	<input type="checkbox"/>
Village		Mail/E-mail	<input type="checkbox"/>
Signature (if applicable)		Field visit	<input type="checkbox"/>
		Other:	<input type="checkbox"/>
GRIEVANCE DETAILS			
<p>* IMPORTANT NOTE</p> <p>Especially in anonymous grievances, the complainant will be asked through which channel he/she would like to receive information and the desired information channel (telephone, e-mail, etc.) will be specified.</p>			

GRIEVANCE CLOSURE FORM		
EVALUATION OF THE GRIEVANCE	Expropriation	<input type="checkbox"/>
	Damage to homes or livelihoods	<input type="checkbox"/>
	Environmental or social issues	<input type="checkbox"/>
	Work-related	<input type="checkbox"/>
	Other	<input type="checkbox"/>
Does it require compensation?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
CONCLUSION		
<p>CLOSURE</p> <p>This section is to be completed and signed by the complainant and the grievance review committee after the compensation has been received and the grievance has been resolved. (A bank receipt or other document showing that the compensation has been made may be attached instead of the complainant's signature).</p>		
Authorized person on behalf of the institution	Complainant	
Name Surname	Name Surname	
Date and Signature	Date and Signature (if applicable)	

Annex 2: Land Access - Exit Protocol Sample

 DEVLET SU İŞLERİ GENEL MÜDÜRLÜĞÜ				<h1>Land Access Protocol</h1>			
Province				Protocol No			
Neighborhood				Date			
Neighborhood/Village							
Block/Parcel							
Land Acquisition Type							
Property Expropriation				Temporary Easement			
Permanent Easement				Leasing			
Description							
<p>The Contractor has acquired the above mentioned land for the construction works of the Turkey Irrigation Modernization Project (TSMP). For each parcel to be handed over to the Contractor, a Land Entry Protocol (LEP) is signed at least 3 days in advance and handed over to the Contractor together with the DSI Representative witnessed by the parcel owner, one of the shareholders, the land user and the mukhtar. The Contractor shall not enter any parcel without signing the AGP.</p>							
Owners of the Signs		Name Surname		Date		Signature	
Owner/Shareholder							
Land User							
Mukhtar and/or member							
Contractor Representative							
DSI Representative							
Opinions		<p>Opinions All structures such as fences, stone walls, underground and above ground cables, etc. that will not be paid for as they will be restored by the Contractor at the end of construction will be listed.</p> <p>All assets within the above mentioned scope and in need of restoration will be listed, photographed and attached to this document before the Land Entry Protocol is signed.</p>					
List of Annexes							
Assets on the Land (If applicable) Description							

Trees on the land (If applicable) Description



Land Exit Protocol

Province		Protocol No	
Neighborhood		Date	
Neighborhood/Village			
Block/Parcel			
Land Acquisition Type			
Property Expropriation		Temporary Easement	
Permanent Easement		Leasing	
Description			
<p>The Contractor shall complete the construction works of the Turkey Irrigation Modernization Project (TMSP) and hand over the abovementioned land as before. This protocol does not guarantee any interest or claim of interest on the part of the Contractor or DSİ.</p>			
<p>The Construction Company has restored and returned the above-mentioned temporarily leased land to the Owner or Land User. The Owner or Land User confirms that the land has been restored by the Construction Company.</p>			
Owners of the Signs	Name Surname	Date	Signature
Owner/Shareholder			
Land User			
Mukhtar and/or member			
Contractor Representative			
DSI Representative			
Opinions	<p>All structures on the land should be listed and attached to the land exit protocol.</p> <p>Any extra compensation previously received by the beneficiary from the contractor should be mentioned above.</p> <p>The Land Exit Protocol is completed for temporarily acquired land that will be returned to the owner by the contractor.</p> <p>The land should be returned in the same condition as before it was acquired.</p>		
List of Annexes			

Annex 3: List of Affected Parcels

It is presented in an excel file as a separate annex.

Annex 4: Questionary

QUESTIONNAIRES FOR OWNERS/SHAREHOLDERS/USERS WITH 10% OR MORE OF THE EXPROPRIATED PARCEL

Survey conducted by [Name and Surname] Date Survey No: Settlement:

1. Personal Information

Name - Surname	Sex	Age	Phone Number
----------------	-----	-----	--------------

2. Residence Status in the Location of the Affected Parcel (Mark with X)

- a. Permanent
- b. Seasonal
- c. Non-resident

3. Disadvantaged/Vulnerable Group, if any. (Mark with X, multiple options can be selected)

- a. Over 65 years of age
- b. Women-headed household
- c. Woman farmer
- d. Disabled people
- e. Self and/or Family Member Receiving Support from SYDV
- f. Informal User

4. Main Source of Livelihood (Mark with X, multiple options can be selected)

- a. Agricultural activities
- b. Sheep and goat farming
- c. Cattle husbandary
- d. Retirement
- e. Worker in a private sector

- f. Civil service
- g. Craftmanship
- h. Others

5. 10% User Status on Parcels Affected by Expropriation (Mark with X)

- | | |
|------------------|--------------------|
| User Type | User Status |
| a. Owner | |
| b. Shareholder | |
| c. Formal User | |
| d. Informal User | |

6. Information on the Lans Affected by Expropriation and Land Owned and Used

Land	The Land Affected by Expropriation	Land Owned by the Owner	Land Used by the Formal User	Land Used by the Informal User
Numbae of Parcel				
Total Area (m²)				
Total Area (decar)				