Konya Ereğli İvriz Left Bank Irrigation Rehabilitation Project Resettlement Action Plan

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Executive Summary

This Resettlement Action Plan (RAP) is an expanded version of the previously released Resettlement Action Policy Framework (RAPF) document as a result of field studies. This RAP covers the identification of Project Affected People (PAPs), the presentation of a socio-economic baseline for them, the identification of the Project's impacts on the livelihoods of PAPs as well as specific programs and assistance to restore livelihoods. Implementation arrangements including the LAP budget and specific timeline have also been presented. This RAP has been drawn up for the first part in accordance with the contract of the work. The remaining parts will be updated when land acquisition is complete.

As per the contract, the PAPs to be interviewed in the field and the parcels for which information will be gathered (including Treasury lands as well as commonly-used parcels) have been identified on the basis of the draft expropriation plans regarding the 1st part covering 92 km as specified in the terms of reference and prepared by HAPA firm. Accordingly, household socio-economic survey (SES) form and Mukhtar Survey form approved by DSI have been prepared.

During the field study conducted between October 15 and 23, 2019, in-depth interviews were conducted with 16 stakeholders from 12 institutions (10 public institutions, 1 municipality, 1 NGO). Household socio-economic surveys were conducted with 104 PAPs, 3 of whom were female users/owners; and information was received concerning 137 project-impacted parcels that were used and/or owned by them. Of the 137 parcels, 133 are privately owned, 3 parcels are Treasury land and 1 is not subject to registration (roadside). During the field work, the mukhtars of a total of 36 settlements within Ivriz Left Bank Water Users Association (WUA) were interviewed and Mukhtar's Surveys were conducted. Thereby, 27 of the interviewed mukhtars reside within the expropriation area of the project and 9 in the consolidation area.

The main livelihoods of the households within the project area are agriculture, bovine livestock and retirement pension, working as tradesmen, labor and rent income, respectively. The highest income comes from agriculture and livestock production. The income acquired from livestock production within the project area is higher than that from agriculture.

The number of people who submitted an irrigation notification to the Association for 2018 is 2,607. According to the WUA's records, the average parcel size of the irrigated lands in total is 17.6 decares (the area irrigated in 2018 was 60,991 da). The number of female water users submitting an irrigation notification to the WUA is 320. Its ratio in total water users is 16%. The average number of parcels per female water user is 1.1. Ratio of the parcels irrigated by female water users to the total irrigated area is 14%. The average size of irrigated parcels is 5 decares.

According to the draft expropriation plans covering 13 settlements affiliated to Ereğli district and prepared for the 1stSection (92 km), the number of project-impacted parcels is 641 and 572 of them (89%) are privately-owned lands. The area to be expropriated is 2,194 m² (2.2 decares), the area subject to permanent easement is 89,391 m² (89 decares) and temporary easement is 208,059 m² (208.1 decares). 69% of the impacted lands are temporary easement, 30% permanent easement and 1% expropriation areas.

The number of shareholders expected to be affected through privately-owned parcels during the first section land acquisition (permanent land acquisition + permanent easement + temporary easement) is 1,851 persons. When identified repeating names are removed, it is envisaged that 714 Project Affected Persons (PAPs) will be affected regarding privately-owned parcels, 2 PAPs Treasury lands, 1 PAP regarding the lands owned by legal entities, 4 PAPs regarding common public lands and 37 PAPs regarding the lands not subject to registration. The number of owners and/or users expected to be

affected by the project is **747** persons. In addition, there will be a second-section land acquisition and hence, information on the number of impacted people will be updated when updating the RAP. There will be two sections of land acquisition in total.

Size of the area affected by **permanent land acquisition (Ownership expropriation)** work varies between 0.7 and 60 m^2. The average expropriation area per the parcel of lands (Parcel / m^2) is 13 m^2 and is not large enough to negatively impact the livelihoods of households. As a matter of fact, the ratio of the area affected by expropriation in privately-owned parcels to the total size of parcels is 0.1%. The number of owners and/or users expected to be affected by expropriation (permanent land acquisition) work is 235 persons.

Size of the area affected by **permanent easement** work varies between 1m^2 and 2,484 m^2. The average permanent easement area per the parcel of lands is 164 m^2 and is not large enough to adversely impact the livelihoods of households. Ratio of the area affected by permanent easement in privately-owned parcels to the total size of parcels is 1%. The number of owners and/or users expected to be affected by permanent easement work is 682 persons.

Size of the area affected by **temporary easement** work varies between 1 and 6,138 m^2. The average temporary easement area per the parcel of lands is 385 m^2 and is not large enough to negatively impact the livelihoods of households. Ratio of the area affected by temporary easement in privately-owned parcels to the total size of parcels is 2%. The number of owners and/or users expected to be affected by temporary easement work is 672 persons.

When the ratio of the affected privately-owned area to total land assets is calculated based on the interview with the households, the ratio of the lands affected by expropriation, permanent easement and temporary easement to the total land used is 2%. Among the PAPs interviewed during the **field study no PAP was identified to have lands 20% or a larger portion of which were affected by permanent land acquisition**.

Land acquisition associated with the project is not expected to have a significant negative impact on agricultural activities because the average area affected by the project (permanent expropriation, permanent easement and temporary easement) is 225 m² in total for commonly-used areas, privately-owned lands and other lands and 207 m² for privately-owned parcels. Average irrigated agricultural land used by the interviewed PAPs within registered lands is 27.7 decares and the affected area corresponds to 1%. There is no unregistered land within the project area. 44 users were identified in commonly used lands.

The project is **not expected** to have any adverse impact on the livestock activities because the rate of Project-impacted pasture lands (common public property-CPP) is lower than even 1%. Within the first section , the area of ownership expropriation is 248 m², the area of temporary easement 25,333 m² and the area of permanent easement 10,441 m² for pasture lands while the total area of pasture lands is 7,925,148 m².

There is no residential building affected by the project. There are immovable properties (coop, wall, fence etc.) owned and used by a total of 144 persons in 97 privately-owned parcels within a total of 12 settlements.

There are affected immovable properties[1] in public or commonly used area parcels. There are affected immovable properties in 18 parcels within a total of 8 settlements. 5 of these parcels are public properties and 1 belongs to Konya Metropolitan Municipality while 12 are roadside lands not subject to

[1] Immovable properties include assets such as iron poles, concrete poles, wire mesh, wire fence etc. See 3.3.2 for details

registration. The total number of identified users is 13 while 12 are the users of the lands not subject to registration and 1 the use of a public land.

As for the vulnerable group, there is no landless PAP or, in other words, PAP without any private land. 2 of 104 household heads are unemployed in the interviewed households. The number of female water users submitting an irrigation notification to the WUA is 320. Of the 104 interviewed households, the number of households headed by a woman is 3. During the field study, no PAP was identified to have lands 20% or a larger portion of which were affected by land acquisition (ownership expropriation + permanent easement + temporary easement).

Trees were identified in 284 privately-owned parcels in a total of 13 settlements. Although the income to be acquired from trees varies by the species and age of the tree, the loss of trees is **not expected to** cause any significant loss of income for the households since there are 24 trees affected per owner.

The project has positive impacts. Thanks to the project, **the entire gross area of 15,280 ha** area can be irrigated by sprinkling/dripping through support from Ivriz dam + groundwater. This will increase yield in agricultural production in the region and prevent excessive irrigation.

Although the mitigation measures proposed under the RAP are specified in detail in the entitlement matrix; these measures can be summarized as follows **regarding land and immovable property acquisition:**

- Payment of a compensation covering the replacement value for lands and immovable property within registered lands
- Compensation payment for crops and tree
- Ensuring that land users who have the right to customary use in non-registered lands obtain a payment corresponding to their customary right and the payment of a compensation covering the replacement value for crops and trees
- Payment of permanent and temporary easement fees for immovable property
- Identification of land users and the payment of crop values to users or official tenants
- Not entering the land prior to payment of compensation values to the bank accounts
- Restoration of land and land exit at the end of the 3-year temporary easement period.

These measures can be summarized as follows regarding livelihoods and vulnerable groups:

- Organization of training events on irrigated agriculture, crop pattern, smart agricultural practices etc. by the relevant institutions,
- Organization of information sharing sessions with institutions such as the Ministry of Agriculture and Forestry, Konya Plain Project Regional Development Administration (KPP) and Mevlana Development Agency (MEVKA), on the agriculture and livestock production grant schemes offered by these institutions
- Organization of information sessions targeting vulnerable groups regarding İŞKUR (Turkish Employment Agency) and Social Assistance and Solidarity Foundation (SYDV) supports,
- Organization of various demonstrations for water users,
- Removal of concrete water channels and the opening of these areas to agriculture,
- Creation of passageways for the access of animals to pasture lands during construction activities,
- Compensation for the damages that may be caused by the contractor during construction by the firm .

Grievance Mechanism of the Project will be operated in accordance with the requirements of the World Bank policies. Accordingly, impacted persons or stakeholders will be able to submit their objections and complaints via e-mail/telephone, or through personal complaints via national complaint reporting mechanisms such as CIMER (Presidential Communication Center).

The External Stakeholder Engagement Plan which was drawn up for the project during the negotiation process for land acquisition and whose details are provided in Section 7.5 will also be implemented.

Land acquisition processes will be regularly monitored and followed through **semi-annual** monitoring and follow-up activities. Monitoring activities will be carried out under the supervision of DSI's Project and Construction Department and Real Estate and Expropriation Department and through the active monitoring of the relevant regional directorates. Land acquisition activities carried out by DSI will be monitored, and monitoring activities will be carried out through regular field trips and the reports prepared by the project's field team. If necessary, DSI may choose to hire a consultant for the implementation and monitoring of the RAP.

Following the completion of the RAP implementation, DSI will assign an independent consultant to evaluate the implementation of the land acquisition activities conducted thereby, and this consultant will be different from the monitoring and follow-up consultant.

Definitions

RAP (Resettlement Action Plan) refers to the procedures and actions to be put into practice in order to mitigate negative impacts, compensate for losses and offer development benefits for the individuals and communities impacted by a Project. This document has been prepared by taking into account the principles and objectives set out in the OP 4.12 Operational Policy of the World Bank and the Resettlement Action Policy Framework (RAPF), with due regard to the applicable legislation.

RAPF (Resettlement Action Policy Framework) refers to land acquisition principles, structural regulations and design criteria to be applied in the project implementation process.

Land refers to everything such as buildings and crops that grow on a land or are permanently dependent on a land.

Mitigation measure refers to the measures taken to minimize negative impacts on the livelihoods of the impacted people.

Economic displacement refers to the elimination of income or livelihoods due to land acquisition or the restriction of access to resources (land, water, etc.) as a result of the construction, operation and associated facilities and operations of a Project.

Cut-off date refers to a practice aimed at identifying PAPs, impacted lands, crops and immovable properties, conducting a full count for the identification of rights holders and preventing the persons settling, the buildings constructed and the crops cultivated in the project area following the count from making use of the applicable supports.

Physical displacement refers to the movement of PAPs from their houses, workplaces or business areas to another location as a result of the expropriation of their lands in association with the project, and thus the loss of housing and assets.

Restoration of livelihoods refers to any support and assistance intended for improving the livelihoods and living conditions of Project Impacted Persons (PAPs) that are physically or economically displaced or at least restoring them to the level before displacement or the project's implementation phase by considering which of these is better. A transition period will be identified for the support to be offered for the substitution of the livelihood and a reasonable period will be identified in this direction.

Involuntary resettlement refers to any case leading to a social or economic impact as a result of the seizure of lands or assets due to the implementation of the Project through a judicial process and without the consent or preference of their owners and accordingly, resettlement or loss of housing, access to asset or assets or income and livelihoods.

Vulnerable group refers to persons in need who receive aid-in-kind and/or cash assistance from the relevant public institutions, landless persons, the elderly, women, children and the persons who may be affected more negatively by displacement or have more limited capabilities of benefiting from and acquiring resettlement assistance and the relevant development benefits when compared to other persons due to gender, ethnicity, age, physical or mental disability, economic disadvantages or social status.

Replacement value refers to the method of valuation helping with the identification of the amount sufficient to substitute lost assets and compensate for transaction costs. This valuation method prescribes a value that is appropriate for the substitution of an equivalent one for buildings and assets. Efforts are made to provide access to equivalent and culturally acceptable resources and livelihoods for losses that are not easy to appraise or cannot be compensated in monetary terms (e.g. access to public

services, customers and suppliers or fishing areas etc.). For agricultural lands, this value refers to an amount that will be enough for the sum of the market price of a land that is close to the affected land, has an equivalent potential of yield or is equipped with equivalent characteristics in terms of use prior to the project or displacement (whichever is higher) as well as the costs intended for restoring the conditions of the said land to those of the affected land and title deed and transfer charges and taxes. For the areas located in urban areas, this value refers to an amount that will be enough for the sum of the market price of a land that is close and similar to the affected land or is equipped with improved public infrastructure facilities and services prior to displacement as well as title deed and transfer charges and taxes. For houses and other buildings, this value refers to an amount that will be enough for the sum of the market price of the materials required for the construction of an affected building with a substitute building that is similar or has a larger area and better characteristics than those of this building or the repair of a building that is partly affected as well as the cost of shipping these building materials to the construction site, workmanship and contracting expenses and title deed and transfer charges and taxes.

Unauthorized user refers to those who cannot have any legal right or demand over the land they occupy as a residence, workplace and/or for other reasons. Although they are not eligible for land compensation, such persons are entitled to claim compensation and temporary livelihood assistance for building, rehabilitation and crop losses.

Expropriation refers to the seizure or limitation of the right of ownership of a property in exchange for a compensation equivalent to the market value of that property.

Stakeholder refers to people, groups, institutions and organizations that are likely to be affected by or affect a project.

Project Turkey Irrigation Modernization Project including all its sub-projects (plans), components and phases.

Project Affected Person (PAP) refers to persons losing their right to wholly or partly own, use or benefit in other ways from an already-constructed building, land (residence, agriculture etc.), annual or perennial crops and trees or any other immovable or movable asset as a result of the implementation of the project.

Compensation refers to payments made by the persons causing the restriction of access to lands, water or other critical land, water or other critical natural resources and sources of income or the voluntary or involuntary damage of any and all personal or common assets of community members or the destruction of these assets to the victims of these incidents over identified and agreed losses.

Resettlement refers to all cases regarding land acquisition and the compensation of the loss of assets, regardless of whether there is actual relocation, land, house or asset loss, economic displacement or the deprivation of other livelihoods and compensation covers all measures taken to mitigate the negative impacts of the Project on PAPs' property and/or livelihood including relocation (if any) and/or livelihoods. Apart from physical relocation, the loss of crops and income is also among the impacts of resettlement.

Abbreviations

AETP	Agricultural Extension and Training Program
CCI	Chamber of Commerce and Industry
CIMER	Presidential Communication Center
CPP	Common Public Property
DSI	State Hydraulic Works
ESMP	Environmental and Social Management Plan
FFISIS	Flood, Fault and Intervention Spatial Information System
IFSIF	Irrigation Facilities Spatial Information System
İŞKUR	Turkish Employment Agency
ITC	Institutions to Cooperate
IWC	Ivriz Development Project Working Committee
KEIIP	Konya Ereğli-İvriz Left Bank Irrigation Renovation Project
KPP	Konya Plain Project
RAP	Land Acquisition Plan
RAPF	Land Acquisition Policy Framework
LCAP	Land Consolidation Action Plan
MEVKA	Mevlana Development Agency
NGO	Non-Governmental Organization
OP	Operational Policy
PAH	Project Affected Household
PAP	Project Affected Person
SES	Socio-Economic Survey
SODES	Social Support Program
SSI	Social Security Institution
SYDV	Social Assistance and Solidarity Fund
TIMP	Turkey Irrigation Modernization Project
UIW	Underground Irrigation Wells
USD	US Dollar
WB	World Bank
WUA	Water Users Association

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1. Introduction

This Land Acquisition Plan (RAP) has been drawn up for the land acquisition work to be carried out by the State Hydraulic Works (DSI) intended for Konya Ereğli-İvriz Left Bank Irrigation Renovation Project (KEIIP) planned under Turkey Irrigation Modernization Project. A Resettlement Action Policy Framework (RAPF) has already been prepared by DSI and the land acquisition principles, structural arrangements and design criteria to be applied have been identified in RAPF. RAP has identified project impacted persons and communities, developed measures to mitigate the potential negative impacts that may arise out of land acquisition and defines how to compensate for losses.

This RAP has been drawn up in line with the Turkish laws and regulations in particular as well as the principles and objectives set out in the World Bank's OP 4.12 Operational Policy and the RAPF.

1.1. Aims and Objectives of RAP

KEIIP requires temporary and permanent land acquisition. The project has developed measures to mitigate the negative impacts of land acquisition and prevented physical resettlement. Although land acquisition does not cause physical displacement, the Project is expected to have an impact regarding economic displacement. Aim of the RAP is:

- To prevent and minimize economic displacement associated with land acquisition as much as possible
- To identify the impact of the project on economic displacement
- To analyze the legislative approach to be followed during the acquisition of immovable properties
- To explain the procedures to be followed in the acquisition of lands and other assets
- To summarize institutional arrangements for land acquisition
- To define the socio-economic profile of PAPs through household surveys, in-depth interviews, direct observations and focus group meetings
- To identify the current and potential impacts and opportunities of the project for the restoration of income and livelihoods
- To present the entitlement matrix of the project
- To give information about attitudes towards the project and aid priorities
- To take measures so as to identify vulnerable groups and ensure that they are not adversely affected by land acquisition within the Project;
- To engage Stakeholders in the Project and convey the Stakeholder relations established by the Project for land acquisition;
- To present a detailed implementation program of the Project;
- To design a monitoring and evaluation framework for the purchase of assets and the restoration of income/livelihoods.
- To define grievance procedures
- To define and implement the consultation process subject to land acquisition
- Presenting the RAP budget.

This RAP is an expanded version of the previously released RAPF document as a result of field studies. This framework document has been enhanced to include a socio-economic baseline for Project Affected

Persons (PAP) categories, needs and impacts on livelihoods and specific programs and assistance to restore livelihoods. Implementation arrangements including the RAP budget and specific timeline have also been presented.

1.2. Project Introduction

The primary infrastructure investments to be financed under the Component 1 of Turkey Irrigation Modernization Project (TIMP) include the replacement of the existing open canal systems (canals and distributions structures) with closed and pressurized systems. This component will be implemented by DSI and the component will also include support for the development of operation, maintenance and the strengthening the capacity of water user associations' (WUAs). The project to be carried out within the scope of TIMP is the operation of the irrigation system through the construction works to be carried out within the scope of modernization of the existing Konya Ereğli İvriz Irrigation system.

Konya Ereğli İvriz Left Bank Irrigation project is still in operation, and the irrigation network consists of a combination of canalettes and conventional systems. Due to the drought in recent years, the plain is irrigated in a limited fashion through a combination of Ivriz dam and GW. Currently, 15,013 ha of gross area can be irrigated with the conventional + canalette system. Under this project, it is **planned to irrigate a** gross area of 15,280 ha under current conditions by converting the irrigation network into a high pressure piped system. If the high pressure piped system is installed, this entire area can be irrigated by sprinkling/dripping through support from Ivriz dam + GW.

Modernization efforts aim to sort out problems such as operational problems, problems in the network, operational and maintenance difficulties in the canals, water leakages caused by tear and deformation in the channels and the inability of water to reach the desired points. Under the construction works, the existing open canals will be replaced by dripping and sprinkling within the closed system (piped pressurized system).

Since the entire irrigation network is designed as a closed (pressurized piped) system, the land acquisition under the Project is not expected to have any physical resettlement impact.

The components to be included in the project are;

1. **Left bank main pipeline:** Its total length is 34,058 meters. It will cater for the irrigation of a gross area of 15,280 ha.
2. **Left bank irrigation network and structures**: The entire network has been designed for irrigation from Ivriz dam. Water will also be supplied from underground irrigation wells.
3. **Left bank UGI wells and collection network:** The water received through UGI wells and UGI pumps will be pumped into common collection lines and transmitted to the left bank pump station collection pool through these lines. UGI wells will be drilled at minimum intervals of 400 m. Where necessary, valve systems will be installed on UGI well lines and main collection lines.
4. **Left bank pumping station:** A pumping station will be installed.
5. **Left bank regulation reservoir:** It was designed as a truncated cone with a base area of ~ 3,830 m², an upper area of ~ 6,230 m² and a bank height of 4.80 m. Connection pipes are connected to the pump headline.
6. **Operation and maintenance routes:** Main pipelines will be laid in parallel to the existing main canals or existing roads. Likewise, backup pipelines will be laid on the side of the existing roads or in place of the existing canalette lines. Thus, the existing road network can be used, and expropriation will be kept at minimum level.
7. **Operation and maintenance buildings:** The existing operation buildings and other units will be kept and used as they are.

8. **Construction site facilities:** They will be established in a suitable place around Ereğli district.
9. **Borrow pits:** No decision has been made on the borrow pits to be used during construction, yet. In determining the borrow pits, the pits closest to the project areas will be investigated for the relevant purpose and will be determined in accordance with Ereğli Ivriz Environmental and Social Management Plan prepared by DSI within the framework of the World Bank's Environmental Policies.
10. **Other facilities and structures:** During the construction of the project, excavation storage areas may be needed to store excess materials that will be dug out of the canal excavations.

1.3. Introduction of the Left Bank Water Users Association

Ereğli-Ivriz Left Bank Irrigation Project is operated with the Left Bank Water Users Association (WUA) under the supervision of DSI. It has been accepted that it will be operated by WUA following the implementation of this project.

Commissioned in 1983 after constructed by the 4th Regional Directorate of DSI, Ivriz Left Bank Irrigation and Yıldızlı Irrigation Unit Facility has a net irrigation area of 12,542 ha as of the end of 208 and operation and maintenance activities were transferred to Ivriz Left Bank and Yıldızlı Water Users Association (WUA) on June 26, 1995.

The number of settlements within the WUA area is 37. According to the WUA's 2019 Neighborhoods Notification List, the number of parcels in the irrigation area is 4,013 and the irrigated area is 51,368 decares. Total number of water users and the members of the association is 2,659.

Table 1.1. Information on the WUA

WUA	Service Area (Ha)	Number of Water Users in 2019	Total Number of Parcels in the Irrigation Area in 2019
Ereğli-Ivriz	15,280	2,659	4,013

Source: RAPF, 2018

Assembly and management structures of WUAs were amended by the Law No. 7139 published in the Official Gazette of April 28, 2018 whereby the personnel assigned at DSI was appointed as the head of the WUA, the WUA assembly was abolished and the secretary general of the WUA was assigned as the Manager of the WUA.

Currently, head of the WUA is a DSI expert appointed by DSI, who is also the chairperson of the Right Bank WUA.

1.4. Project's Area of Influence and the Relevant Land Acquisition

The project area hosts Ereğli district center, villages/neighborhoods and Böğecik village affiliated to Ayrancı district of Karaman province. According to the Land Market Research Report prepared by HAPA firm in December 2019, the number of settlements affected by the project within the scope of Ereğli-Ivriz TIMP is 36 and 9 of them are subject to land consolidation. In the remaining **27 settlements**, land acquisition work will be conducted through expropriation.

RAPF lists an estimated total number of 3,600 parcels expected to be affected by the consolidation work initiated by GDAR and transferred to DSI. The work to be carried out under consolidation is not within the scope of RAP.

Settlements under RAP are limited to the settlements that will be subject to land acquisition through expropriation and accordingly, the project's area of influence covers these 27 settlements where expropriation will be conducted.

The list of settlements to be subject to land acquisition through expropriation and their positions based on Ereğli district center are shown below.

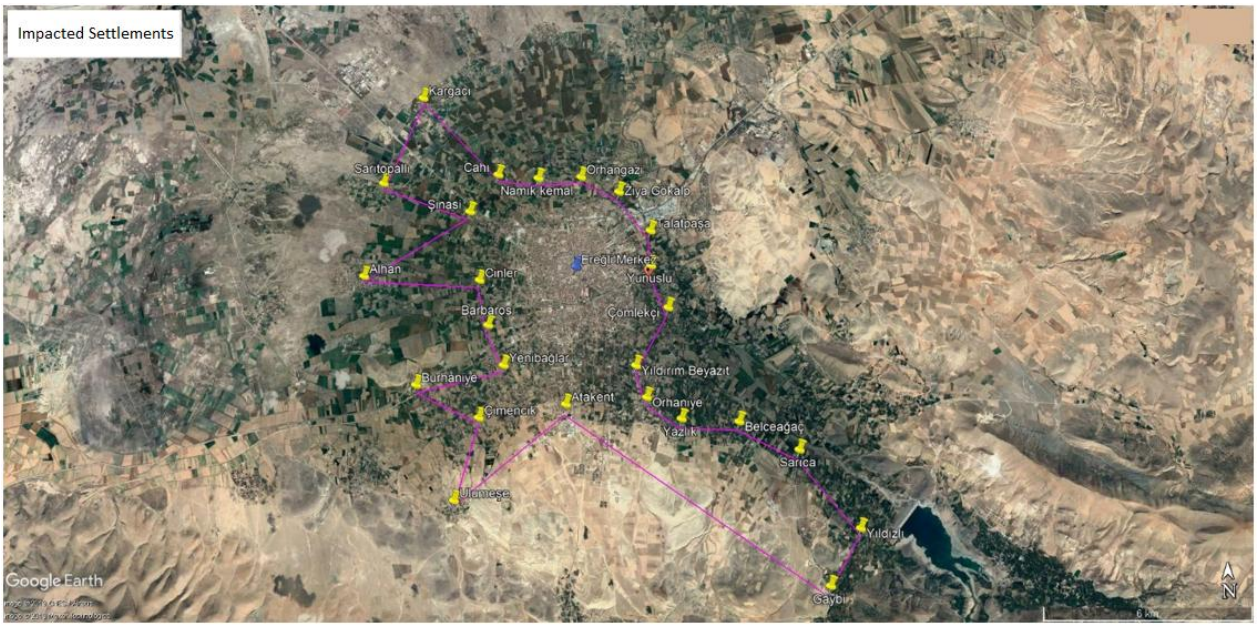


Figure 1.1. Position of Settlements Covered by the Project

Table 1.2. Settlements Affected by Land Acquisition

No.	Name of the Settlement	Expropriation status of the settlement
1	Alhan	Within the area of expropriation
2	Atakent	Within the area of expropriation
3	Barbaros	Within the area of expropriation
4	Belceağaç	Within the area of expropriation
5	Burhaniye	Within the area of expropriation
6	Cahi	Within the area of expropriation
7	Cinler	Within the area of expropriation
8	Çimencik	Within the area of expropriation
9	Çömlekçi	Within the area of expropriation
10	Gaybi	Within the area of expropriation
11	Kargacı	Within the area of expropriation
12	Namık Kemal	Within the area of expropriation
13	Orhangazi	Within the area of expropriation
14	Orhaniye	Within the area of expropriation
15	Sarıca	Within the area of expropriation
16	Sarıtopallı	Within the area of expropriation
17	Şinasi	Within the area of expropriation
18	Talatpaşa	Within the area of expropriation
19	Ulumeşe	Within the area of expropriation

20	Yazlık	Within the area of expropriation
21	Yenibağlar	Within the area of expropriation
22	Yıldırım Beyazıt	Within the area of expropriation
23	Yıldızlı	Within the area of expropriation
24	Yunuslu	Within the area of expropriation
25	Ziya Gökalp	Within the area of expropriation
26	Aydınlar	Within the area of expropriation
27	Merinos – (affiliated to Melicek)	Within the area of expropriation
28	Göktöme	Subject to consolidation
29	Adabağ	Subject to consolidation
30	Akhüyük	Subject to consolidation
31	Melicek	Subject to consolidation
32	Böğecik - Karaman	Subject to consolidation
33	Karaburun	Subject to consolidation
34	Selvili	Subject to consolidation
35	Taşağıl	Subject to consolidation
36	Türkmen	Subject to consolidation

Source: DSI, 2019

According to the expropriation plans prepared by HAPA firm and covering 13 settlements affiliated to Ereğli district for the 1st Part (92 km), the number of project impacted parcels is 641 and 572 of them (89%) are privately-owned lands. The proportion of affected areas in this part is as follows: expropriation: 0.8%, permanent easement: 29.8% and temporary easement: 69.4%. The area to be expropriated is 2,194 m² (2.2 decares), the area subject to permanent easement is 89,391 m² (89 decares) and temporary easement is 208,059 m² (208.1 decares).

Table 1.3. Breakdown of Ownership

Breakdown of Ownership	Number of Parcels	%	Number of Shareholders	Permanent Easement Area (m²)	Temporary Easement Area (m²)	Expropriation Area (m²)	Total Affected Area (m²)
Private Property	572	89%	1,851	74,202	174,732	1,852	250,787
Treasury	14	2%	-	2,762	5,518	88	8,368
Legal Entity	11	2%	-	637	1,237	6	1,237
Common Public Property	11	2%	-	10,441	25,333	248	36,023
Not Subject to Registration (Road encroachments etc.)	33	5%	-	1,348	1,239	0	2,587
Total	641	100%	1,851	89,391	208,059	2,194	299,002
Decare				89.4	208.1	2.2	299
%				29.8%	69.4%	0.8%	100%

Source: HAPA, 2019

53% of parcels and shareholders are affected by permanent easement + temporary easement. Total number of shareholders regarding the affected privately-owned parcels is 1,851 persons. Details are shown below.

Table 1.4. Breakdown of Privately-Owned Parcels

Breakdown of Privately-Owned Parcels	Number of Parcels	% of Parcels	Number of Shareholders	% of Shareholders
Only Permanent Easement	34	6%	119	6%
Only Temporary Easement	41	7%	143	8%

Only Expropriation	7	1%	16	1%
Permanent Easement +	305	53%	974	53%
Permanent Easement +	8	1%	10	1%
Temporary Easement +	2	0.3%	4	0.2%
Permanent Easement + Temporary Easement +	175	31%	585	32%
Grand Total	572	100%	1,851	100%

Source: HAPA, 2019

1/5,000-scaled layout plan prepared by HAPA firm for the first part covering 92 km is shown below.

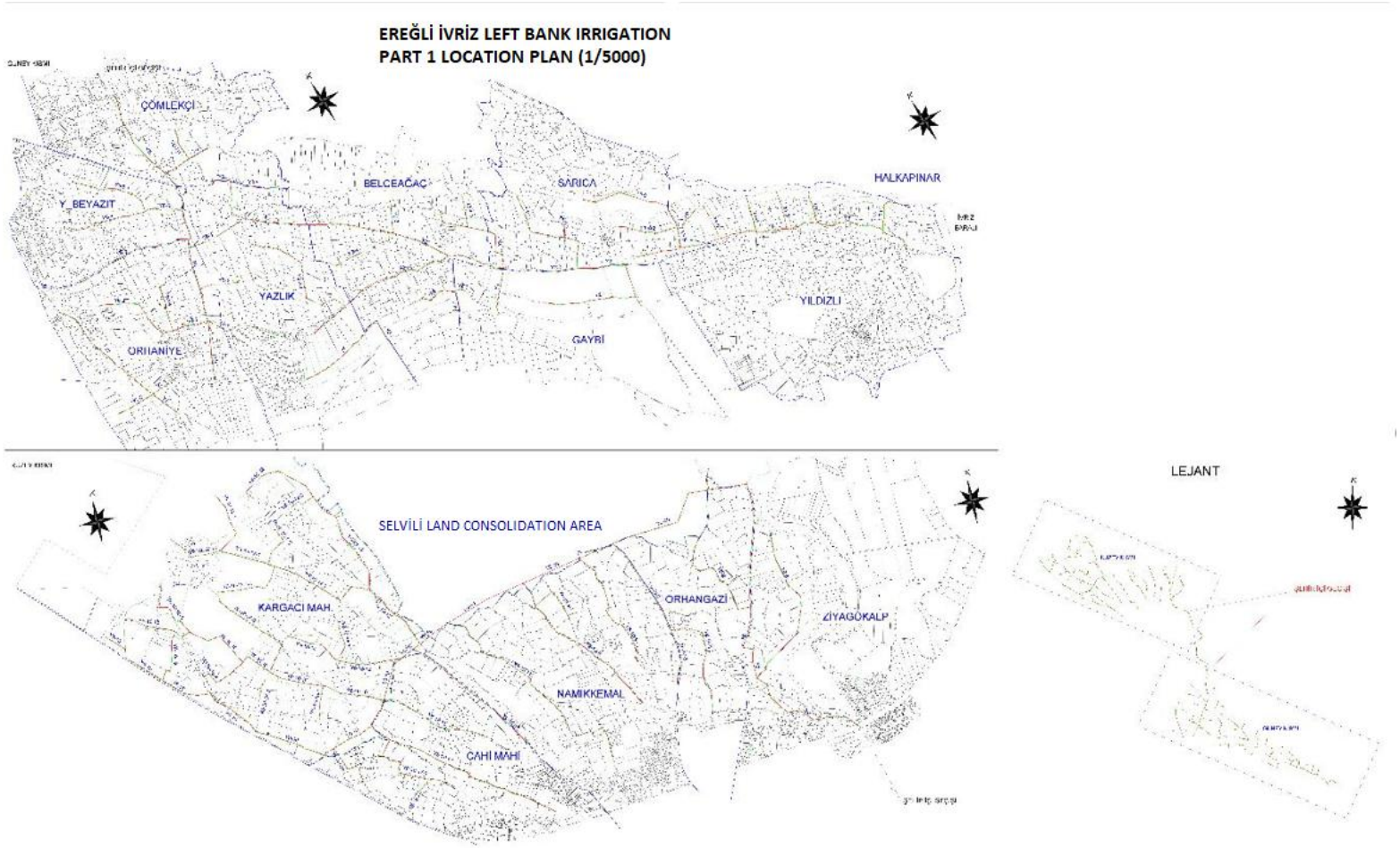


Figure 1.2. 1/5,000-scaled Layout Plan for the First Part Covering 92 km

1.5. Methodology

Desktop study and field study have been utilized while preparing RAP.

Desktop study

The PAPs to be interviewed in the field and the parcels for which information will be gathered (including Treasury lands as well as commonly-used parcels and so on) have been identified on the basis of the draft expropriation plans regarding the First Section covering 92 km as prepared by HAPA firm and a household socio-economic survey (SES) form and Mukhtar Survey form approved by DSI have been prepared.

Information regarding the affected settlements such as population, crop pattern, agricultural activities, livelihoods, etc. has also been examined during the desktop study.

Methodology Used for the Identification of the PAPs to be Interviewed

The PAPs to be interviewed have been chosen out of the lists of owners and users created by HAPA firm in 13 settlements covered by the draft expropriation plans for the First Section.

According to HAPA lists, the expropriation impact has not been accepted as an evaluation criterion by itself since the ratio of ownership expropriation to the total parcel size is 3% at most.

The number of parcels with immovable properties (wall, fence, pole, camellia, etc.) is 115 including 97 registered parcels and 18 non-privately-owned parcels (5 of which are common public property, 1 belongs to Konya Metropolitan Municipality, 12 are road-side lands not subject to registration). There is no residential house and/or building in the project impacted parcels. There is no parcel and user whose parcels are affected by permanent expropriation by 20% and a higher percentage. During the field study, no PAP was identified to use lands 20% or a larger portion of which were affected by (ownership expropriation + permanent easement + temporary easement).

The lists of owners and users were reviewed, and the names were confirmed with the WUA and the interviewed mukhtars. Besides, additional users were added into the lists.

The settlements were visited, and interviews were made with the PAPs that were accessible the respective settlements during the visit. Before visiting the settlements, the lists of names were sent to the mukhtars via WhatsApp and they were asked to inform PAPs. The lists of names were sent to the WUA water technicians in the settlements where such technicians were present, and they were asked to make announcements about the time of visits.

Contact information of the owners and users that were not accessible during the visits paid to the settlements was accessed from the WUA database and Ereğli Chamber of Agriculture. The PAPs, whose contact information was received, were called by phone 3 times and the visits were paid to where they were at the time or they were invited to the WUA building for interview based on their preference.

Accordingly, the stages of identifying the PAPs interviewed are shown below.

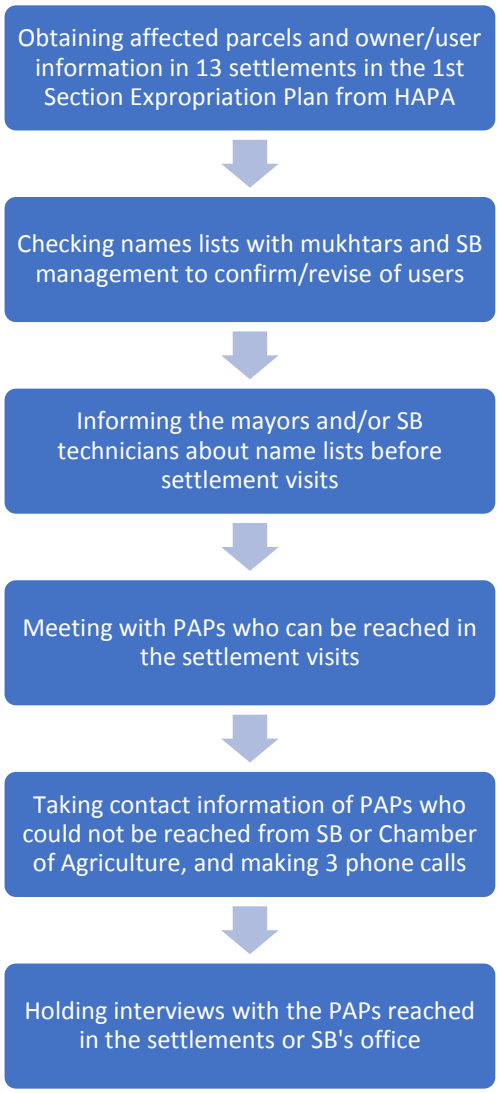


Figure 1.3. Methodology Used for the Identification of PAPs

Field study

4 experts from SRM Consulting attended the field study conducted between October 15 and 23, 2019. In addition, 4 surveyors conducted the household socio-economic survey.

During the field study, in-depth interviews were conducted with 16 stakeholders from a total of 12 institutions (10 public institutions, 1 municipality, 1 NGO). The table below shows the in-depth interviews.

Table 1.5. Stakeholders Interviewed During the Field Study

No.	Type of Stakeholder	Name of the Institution	Title	Date
1	Public institution	Ereğli-Ivriz Water Users Association	Chairperson	October 16, 2019
2	Public institution	DSI Ereğli Section Directorate	Director	October 16, 2019
3	Public institution	DSI Ereğli Section Directorate	Chief Engineer	October 16, 2019
4	Public institution	İvriz Left Bank Water Users Association	Director	October 16, 2019
5	Public institution	District Directorate of Agriculture	Director	October 16, 2019
6	Public institution	Ereğli Directorate of Cadastre	Chief of the Unit	October 17, 2019
7	Public institution	Ereğli National Property Directorate	Director	October 17, 2019
8	Public institution	Ereğli National Property Directorate	Expert	October 17, 2019
9	Public institution	Ereğli District Governorship	District Governor	October 18, 2019
10	Public institution	Ereğli SYDV	Director	October 18, 2019
11	Public institution	Konya Plain Development Department	Agricultural and Rural Development Coordinator	October 22, 2019
12	Public institution	Konya Plain Development Department	Investments Monitoring and Evaluation Coordinator	October 22, 2019
13	Public institution	Konya Plain Development Department	Planning and Project Development Coordinator	October 22, 2019
14	Public institution	Konya Provincial Directorate of Agriculture	Director of the Coordination and Agricultural Data Section	October 22, 2019
15	Municipality	Ereğli Municipality	Mayor	October 18, 2019
16	NGO	Ereğli Chamber of Agriculture	Chairperson	October 16, 2019

During the field work, the mukhtars of a total of 36 settlements within Ivriz Left Bank Water Users Association were interviewed and a survey was conducted. Relations of the interviewed mukhtars with the list of settlements and the project's expropriation area are shown in the table below. Thereby, 27 of the interviewed mukhtars reside within the expropriation area of the project and 9 in the consolidation area. The rationale for meeting with mukhtars outside the expropriation area is to monitor the impacts on the expropriation area and the land outside it during the monitoring activities to be performed in the future. Table 1.2 shows the settlements affected by expropriation and consolidation.

A household survey was carried out with a total of 104 PAPs, 3 of whom were female users/owners and information was received concerning 137 project-impacted parcels that were used and/or owned by them. 3 of the parcels in use are treasury lands, 1 is not subject to registration (roadside) and 133 are privately-owned parcels. The number of surveys conducted in the settlements where interviews were carried out is given below.

Table 1.6. Breakdown of Surveys by Settlements

No.	Settlement	Number of Surveys
1	Belceağaç	8
2	Cahı	7
3	Çömlekçi	1
4	Kargacı	22
5	Namık Kemal	12
6	Orhangazi	9
7	Orhaniye	11
8	Sarıca	4
9	Yazlık	2
10	Yıldırım Beyazıt	8
11	Yıldızlı	12
12	Ziya Gökalp	8
	Total	**104**

1.6. Constraints

The study is only limited to 13 settlements under the First Section covering 92 km. When the remaining expropriation plans of all impacted settlements are complete, the RAP needs to be updated.

In order for the RAP to be updated, DSI must create the lists of parcel users, differentiate them by gender and identify the status of being affected by the project (those who lost 20% and more than 20% of their total lands, etc.). According to this information, the RAP can be updated.

Apart from the privately-owned parcels whose users could not be identified and/or could not be found out during the study, the users of other impacted parcels will be identified during entry into the respective lands. Users will be identified based on the form created by DSI regarding this issue.

1.7. Land Acquisition Process

It has been decided to consolidate lands in appropriate settlements so as to minimize land acquisition requirements. However, in cases where it is impossible to acquire lands through land consolidation or lands are not technically suitable for land consolidation, the relevant lands are acquired through expropriation. Land acquisition through expropriation is one of the methods DSI uses in various investments, but DSI avoids involuntary physical resettlement as much as possible in the expropriation of public lands or privately-owned lands.

During the modernization of irrigation systems, DSI primarily chose to make use of public lands for the permanent land acquisition needs of the projects. The project design prescribes the monitoring of the existing irrigation system and the use of the existing roads as access roads. Route changes were made where necessary to minimize the acquisition of privately-owned lands for the purposes of reducing the level of affected privately-owned parcels and not causing any resettlement impact.

Lands will be acquired by expropriation during the land acquisition process. The land acquisition process to be followed is shown below.

1. 641 project-impacted parcels with different types of parcel and the status of impact were identified in the settlements under the First Section 92 km.
2. Based on these determinations, the Land Market Research Report was drawn up by HAPA firm for the land acquisitions to be conducted for approximately 4,000 parcels.
3. This reports defines the methodology that will be administered in determining the valuation of the lands and plots to be affected, the valuation of building on these lands and plots, temporary easement, permanent easement, replacement cost and tree prices and are compatible with international standards.
4. Expropriation plans regarding the remaining portions under the Second Section (nearly 114 km) will be prepared until July 2021.
5. Procedures regarding land acquisition through expropriation will be conducted by DSI.

The methodology to be used in land acquisition:

- Ownership expropriation for facilities such as valves, hydrants, etc.
- Permanent easement restricting the right to use for the places through which the pipeline is passing for 49-99 years (It is forbidden to construct buildings and/or cultivate plants such as trees over this pipeline and the vehicles heavier than 20 tonnes such as construction equipment or trucks are banned from passing over the pipeline.)
- There is also a temporary easement restricting the right to use (1 to 6 years) during the construction phase. This period can be extended if necessary.

RAPF states that the need for additional expropriation is not foreseen since the pumping building and power lines are already available. However, if needed, ownership expropriation will be performed for the pumping building and pole locations and easement will be established for the power transmission line. If additional expropriation is required, implementation will be carried out according to the methodology set out in the RAP.

Power transmission lines can be installed by DSI and transferred to the relevant electricity distribution institution while the relevant institutions can also be assigned for construction provided that the resulting expenses are covered by DSI through a protocol to be concluded between the two institutions.

The table below outlines the rights to be established for the components of the Irrigation Modernization Project.

Table 1.7. Types of Land acquisition

Project Component	Right to be Established	Duration
Construction route	Temporary easement	1-6 years
Irrigation pipeline	Permanent easement	49-99 years

Storage area/facility	Ownership	permanent
Pumping station	Ownership	permanent
Access roads	Ownership	permanent
Power transmission lines	Ownership for pole locations, easement for transmission lines	Permanent for pole locations 49 years

Source: RAPF, 2018

As the affected parcel areas prove to be very limited as a result of the expropriation map study for the First Section, it is foreseen that there will not be any case requiring the expropriation of the remaining parcels. However, there may occur new cases where the expropriation of parcels is necessary due to the construction of facilities that require more space. In cases where the remaining parcel area is too small to allow for cultivation, the geometric shape of the remaining parcel is not suitable for agricultural activities and access to the land does not exist anymore and so on, it may be necessary to expropriate the remaining parcel. **While updating the RAP, whether the remaining parcel will be expropriated will be evaluated and, if this is the case, each parcel will be separately evaluated for the expropriation of the remaining parcel.**

Along construction routes, the working corridor is mostly identified as 5 meters for temporary easement and the pipeline corridor is identified as 1 meter for permanent easement. In some places, temporary easement is 4 meters. The total area size affected by the easement during the study is generally 6 meters. Detailed information is provided on this issue in the Legal Framework, Valuation and Land Acquisition Process sections.

As for the projects holding "public interest" within the borders of Turkey, land acquisition procedures are "carried out on behalf of the State based on the Expropriation Law No. 2942 (Amended by the Law No. 4650)". All expropriation activities carried out by DSI are performed according to the Expropriation Law No. 2942. The expropriation decision related to the project was adopted on June 13, 2009. In cases where it is necessary to acquire privately-owned lands under a project, DSI primarily opts for purchasing the land through willing buyer - willing seller arrangements as per Article 8 of the Expropriation Law No. 2942.

As for the lands which cannot be purchased through willing buyer - willing seller arrangements or whose rights holders cannot be identified and whose ownership is disputed; a case is filed before the relevant civil court of first instance as per Article 10 of the Expropriation Law for valuation and registration. If the case filed for the valuation of the expropriation fee cannot be concluded within four months, a legal interest is applied to the valued fee following the end of this period. The expropriation fee set by the court as a result of the relevant case is Warehousesited into a bank account for payment to the owner of the expropriated immovable property. Expropriation fees of the immovable properties whose ownership is disputed or is the subject matter of a case are Warehousesited into a 3-month Warehousesit account and paid to their respective owners after they become certain.

Market prices of the immovable properties to be expropriated through willing buyer - willing seller arrangements or by way of resorting to a court are taken into consideration while valuing the land prices by also considering the replacement cost.

Expropriation fees are ascertained by considering all the factors affecting the value of the immovable property as per the criteria specified in Article 11 of the Expropriation Law.

Land acquisition through expropriation will be performed by the Section Directorate of Real Estate and Expropriation of the 4th Regional Directorate of DSI under the coordination of DSI's Department of Real Estate and Expropriation. Ownership of the lands subject to expropriation will be established by the Regional Directorate of DSI through land registry records, satellite photographs and other documents. Immovable properties that will be subject to expropriation will be determined together with the project and construction group over the as-built project. Article 27 (urgent expropriation) of the Expropriation Law will not be used for land acquisition. DSI will not enter into the lands without depositing full compensation to the bank accounts of right holders. For this reason, land acquisition planning will be made depending on the construction schedule so that expropriation procedures can be completed before entering into the lands.

2. Socio-Economic Baseline

A survey was conducted to determine the socio-economic status of the project-affected households (PAHs) in the settlements. Results of the information obtained from the desktop study and survey study are given in the following sections.

Since 27 settlements that will be affected by land acquisition through expropriation are located within the borders of Ereğli, the current state of the district in general is briefly mentioned in each section.

2.1. Demographics

Ereğli is a district whose population has increased by 8% and its urban population ration has increased from 70% to 75% in the last decade. Population density of the district is higher than the population density of Konya province to which it is affiliated. 50% of the population is women and 50% men. According to the population data for 2018, 67% of the district's population are aged between 15 and 64. Approximately 75% of the population live in the city center while 25% live in the countryside. Annual population growth rate of the district is 9.94%. Population density of the district is 62.35 people/km².

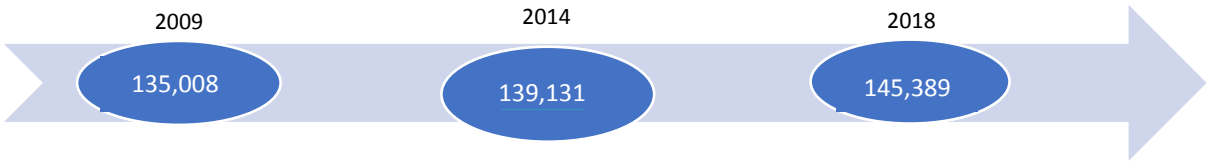


Figure 2.1. Population of Ereğli by Years

Neighborhoods in the project area are located in Ereğli district center or are very close to the center. In this regard, urban characteristics come to the forefront (its urban infrastructure is well-established) when compared to rural characteristics although its population is dense and people engage in agriculture.

In 2013, villages were transformed into neighborhoods with transition into the Metropolitan Municipality System. Prior to this amendment, 13 of the affected settlements were villages and 14 were neighborhoods. Therefore, the affected settlements are divided into two groups as rural and urban. Settlements that have urban characteristics are those that are closer to the district center.

Total population of 27 settlements affected by the Project constitutes 42% of Ereğli's population.

Table 2.1. Distribution of Population in the Project Area by Neighborhoods and Settlement Characteristics

Settlement	Settlement Characteristics	Population in 2018	Settlement	Settlement Characteristics	Population in 2018
Atakent	Urban	1,324	Çimencik	Rural	1,166
Barbaros	Urban	5,854	Gaybi	Rural	237

Cahı	Urban	5,389	Kargacı	Rural	605
Cinler	Urban	2,559	Orhaniye	Rural	3,523
Çömlekçi	Urban	3,683	Sarıca	Rural	275
Namık Kemal	Urban	5,009	Sarıtopallı	Rural	400
Orhangazi	Urban	4,427	Ulumeşe	Rural	235
Şinasi	Urban	3,403	Yazlık	Rural	701
Talat Paşa	Urban	2,211	Yıldızlı	Rural	340
Yeni Bağlar	Urban	2,001	Alhan	Rural	1,316
Yıldırım Beyazıt	Urban	1,464	Belceağaç	Rural	1,050
Yunuslu	Urban	5,551	Burhaniye	Rural	264
Aydınlar	Urban	4042	Ziya Gökalp	Urban	3,800
Merinos (affiliated to Melicek)	Rural	Not included in population as it is a sub-settlement.	**Total**	**-**	**60,289**

Source: TURKSTAT, 2019

In parallel with the above-mentioned elements, most of the households in the region are permanently residing in these settlements. Ereğli is the place of permanent residence for the households who attended the survey and stated that they seasonally resided in their houses in the Project area.

Table 2.2. Residence Status of Households

Residency Status of Households in the Settlements	Number of Households	%
Permanent	90	86.5
Seasonal	9	8.7
Rarely	1	1
Not Residing	4	3.8
Total	**104**	**100**

Source: Socio-Economic Household Survey, 2019

Demographic information of the household members is given in the table below. Accordingly, it is observed that young people are quite high in numbers within households, most of the household members are married, the majority of them are primary school graduates, most of the men are farmers and women are housewives and SSI and Bağkur (Social Security Organization for Artisans and the Self-Employed) insurance is quite common.

Based on the data provided in the table, one of the most remarkable points for the households is that the level of education is low in these households that are so close to the city center and have a dense young population.

Table 2.3. Demographic Information of Household Members

Demographic Indicators	Number of Household Members	%
Gender		
Male	203	51.1
Female	194	48.9
Total	**397**	**100**
Age		
18 and below	97	24.1
19-25	51	12.8
26-35	53	13.8
36-45	40	10.1
46-55	60	15.1
56-65	60	15.1
66-+	36	9
Total	**397**	**100**
Marital Status		
Married	233	558.7
Single	75	18.9
Widow/er	8	2
Divorced	3	0.07
Not Applicable	78	19.4
Total	**397**	**100**
Education		
Not in school age	6	2.1
Illiterate	11	3.8
Literate, not finished school	15	5.1
Primary School graduate	145	49.8
Middle School graduate	40	13.7
Vocational High School graduate	5	1.7
High School graduate	41	14.1
Higher School graduate	9	3.1

University graduate	19	6.5
Total	**291**	**100**
Employment Status		
Farmer	96	27.1
Self-employed	3	0.8
Worker	4	1.1
Daily/Seasonal Worker	3	0.8
Civil Servant	6	1.7
Housewife/House-daughter	106	30
Pensioner	21	6
Student	86	24.3
Unemployed	17	4.8
Other	12	3.4
Total	**354**	**100**
Student Status		
Primary School Student	28	32.6
Middle School graduate	15	17.4
Vocational High School	4	4.7
High School	18	20.9
University	21	24.4
Total	**86**	**100**
Social Security Status		
SSI	164	41.3
General Health Insurance	19	4.7
Bağkur	153	38.5
Private Insurance	5	1.3
None	42	10.5
Other	14	3.5
Total	**397**	**100**
Disability Status		
Yes	10 (physically disabled)	2.5
	3 (mentally disabled)	0.7

	18 (chronic health disorder)	4.5
No	366	92.2
Total	**397**	**100**

Source: Socio-Economic Household Survey, 2019

During the interviews, it was found out that 1 of the unemployed persons was a household head, 5 disabled individuals were household heads where 1 of them was physically disabled and 4 suffered from chronic health problems. One of these household heads receives a disability pension. 5 household heads do not have any social security.

Average household size is nearly the same with that of Turkey or, in other words, it is 3.99. The ratio of households with 5-6 members is 31.1%.

In parallel with the situation across Turkey, the majority of household heads are men in the households within the project area. One-to-one interviews and surveys carried out in the field reveal that male PAPs have more to say regarding both the agricultural activities of households and the Project as most of the landowners and the heads of households under the project are male.

Table 2.4. Breakdown of Gender for Household Heads

Breakdown of Gender for Household Heads	Number	%
Male	102	98.1
Female	2	1.9
Total	**104**	**100**

Source: Socio-Economic Household Survey, 2019

2.2. Sources of Income and Expenses

According to the Environmental and Social Management Plan (ESMP) prepared by DSI in October 2018 , agriculture and livestock production are the primary sources of income for the district. Ereğli Sugar Factory is the biggest industrial facility of the district. There are 2 cold stores, 5 milk collection centers, 2 dairy farms and 1 icehouse within the irrigation region while bulghur and feed factories are operating in the district center of Ereğli.

According to the Socio-Economic Indicators Report for Konya Plan Project Region prepared by Konya Plain Development Administration in April 2018, the district has 1 thermal power plant. The number of companies operating in the Ereğli Organized Industrial Zone is 66.

According to the 2014 Ereğli District Report prepared by Mevlana Development Agency (Mevka), milk and dairy production is the most important sector in the district. Apart from that, the sugar factory, fruit juice production and textile sectors are among the most important sectors. There are 1,198 members registered in Ereğli Chamber of Commerce and Industry (CCI) are operating in Ereğli district. Breakdown of these members by sectors is given below. Hence, it is understood that the enterprises engaging in production based on agriculture and livestock production lag behind compared to the companies engaged in retail or wholesale trade.

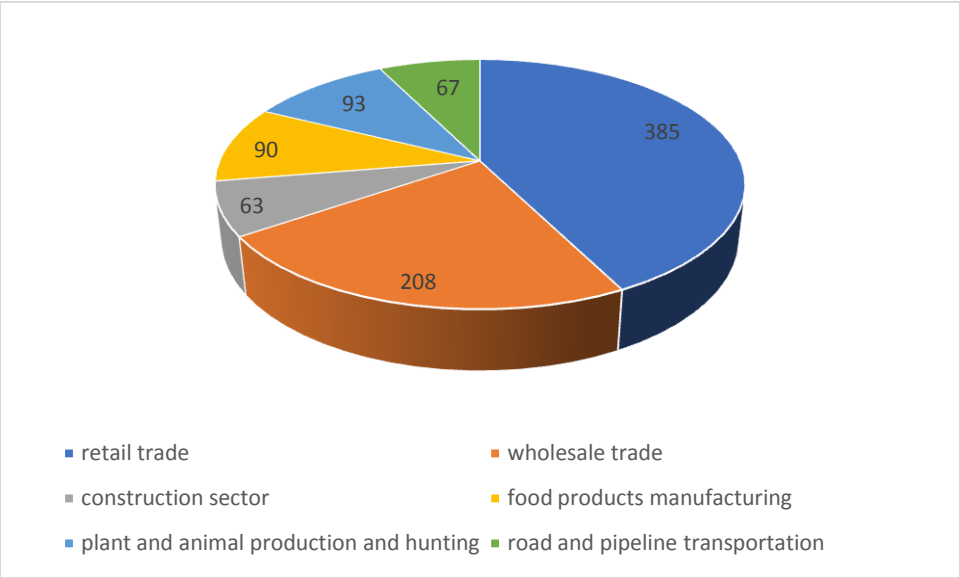


Figure 2.2. Breakdown of Ereğli CCI Members by Sectors

Detailed information on the income and expenses of the project-impacted households is given in the table below. Thereby;

- Average annual income of households is higher than their average annual expenditure.
- The vast majority of households are engaged in agriculture. Bovine breeding is more prominent in livestock production.
- Sources of income for households from the highest income to the lowest are livestock production, forage crop growing, plant production, field crop growing and fruit growing.

Table 2.5. Household Income

Indicator	Unit	Number of responding households	Value
Income-Expense			
Annual household income (TRY)	Average	103	320,445
	Median		92,000
	Minimum		9,800
	Maximum		4,637,600
Annual household expense (TRY)	Average	104	205,650
	Median		57,950
	Minimum		3,750

	Maximum		2,820,000
Debt ratio	29.8%	31	-
Economic Activity			
Households (hh) engaging in agriculture	94.2%	98	-
Number of bovine animals	Average (n)	53	49.5
Number of ovine animals	Average (n)	7	120.5
Plant production income (TRY)	Average	92	72,441
	Median		30,550
	Minimum		960
	Maximum		587,600
Plant production expense (TRY)	Average	58	56,962
	Median		15,500
	Minimum		600
	Maximum		1,000,000
Field crop income[2] (TRY)	Average	36	70,914
	Minimum		3,000
	Maximum		436,500
Forage crop[3] income (TRY)	Average	54	94,800
	Minimum		2,400
	Maximum		970,000
Fruit growing income (TRY)	Average	33	16,264
	Minimum		500
	Maximum		60,000

[2] Wheat, barley, rye, sugar beet, etc.

[3] Common vetch, trefoil, alfalfa, silage maize, etc.

Livestock production income (TRY)	Average	59	491,246
	Median		80,000
	Minimum		8,000
	Maximum		6,040,000
Livestock production expense (TRY)	Average	49	198,418
	Median		100,000
	Minimum		500
	Maximum		1,620,000
Living Standard			
Households considering their living as difficult	35%	36	-
Households considering their living as good	13.6%	14	-
Those considering their economic situation as worse when compared to 5 years ago	72.5%	74	-
Those considering their economic situation as better when compared to 5 years ago	10.8%	11	-
Those considering their economic situation as the same when compared to 5 years ago	15.7%	16	-

Source: Socio-Economic Household Survey, 2019

2.2.1. Sources of Income

According to the information received from the interviewed PAPs, the main livelihoods of the households within the project area are agriculture, bovine livestock and retirement pension, working as tradesmen, labor and rent income, respectively. The graph below reflects the share of agricultural income in the total income acquired by households as 35.1%, the share of bovine livestock as 21.4% and the share of pension as 21.4%.

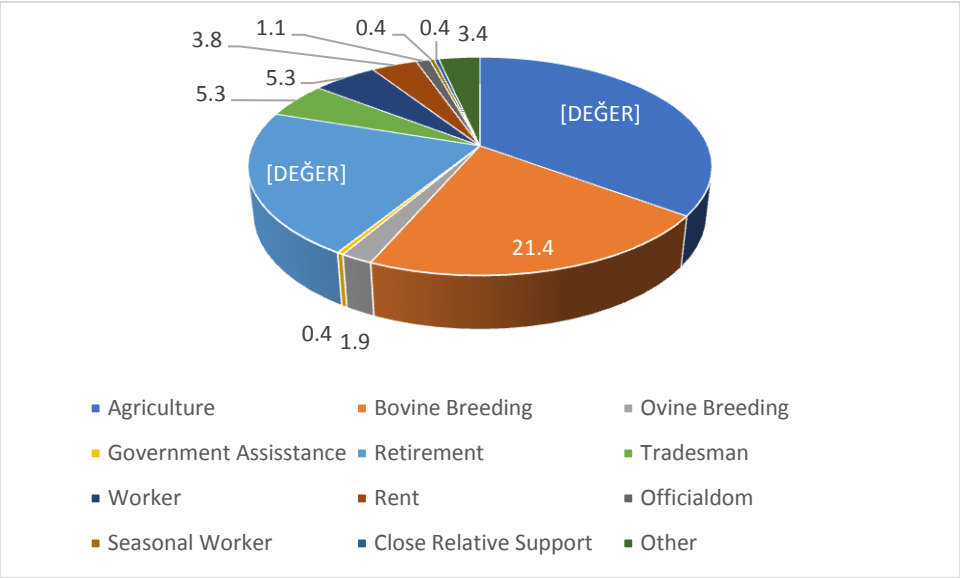


Figure 2.3. Breakdown of the Livelihoods of Households

Given the following which contains detailed information about the sources of income; it is observed that the highest average income is obtained from livestock production and agriculture while the lowest average income is obtained from the support of close relatives.

Many households have more than one source of income in the project-impacted settlements. The number of sources of income per household is 2.5.

Table 2.6. Information on the Income of Households

Source of Income	Number of Households	Average Income (TRY)	Min. Income	Max. Income	Median Income
Agriculture	92	72,441	960	587,600	30,550
Bovine Livestock	56	463,991	8,000	6,040,000	80,500
Ovine Livestock	5	48,000	10,000	170,000	20,000
State Aid	1	9,300	9,300	9,300	9,300
Pension	56	27,000	10,200	72,000	24,000
Working as a Tradesman	14	50,071	24,000	150,000	43,000
Working as a worker	14	31,500	18,000	100,000	25,500
Rent	10	17,510	2,500	5,400	14,000
Public Service	3	56,666	24,000	96,000	50,000
Seasonal Labor	1	1,000	1,000	1,000	1,000
Support from a Close Relative	1	500	500	500	500
Other	9	36,360	1,200	200,000	24,000
TOTAL	**262**				

Source: Socio-Economic Household Survey, 2019

Another conclusion is that the income acquired from livestock production within the project area is higher than that from agriculture. This was also expressed during the interviews made with institutions in the field, and it was also stated that there was an increase in the manufacturing of livestock products due to an increase in investments in livestock/dairy processing facilities in the region in recent years.

When the primary sources of income for the households are examined by top 5 sources of income as specified in the table below, it is seen that 29 out of 92 households with agricultural income indicate agriculture as their primary source of income. This number constitutes 31.5% of the households that acquire agricultural income. 51.8% of the households with bovine livestock income, 44.6% of the households with retirement income, 42.9% of the households earning income by working as a worker and 35.7% of the households earning income by working as a tradesmen indicate these items of income as their primary source of income.

Table 2.7. Prioritization of Sources of Income for Households

	Total number of households	Number of households with a primary source of income	%	Number of households with a secondary source of income	%
Agriculture	92	29	31.5	40	46.5
Bovine Livestock	56	29	51.8	17	33.3
Pension	56	25	44.6	17	32.7
Working as a worker	14	6	42.9	3	25
Working as a Tradesman	14	5	35.7	4	30.8

Source: Socio-Economic Household Survey, 2019

Similarly, according to the household surveys;

- 46 of 56 households engaged in bovine livestock, and all of 5 households engaged in ovine livestock also engage in agriculture.
- 47.5% of 40 households indicating agriculture as a secondary source of income stated that their primary source of income was bovine livestock.

When these two pieces of data are considered together with the tables above, it shows that agriculture and livestock production are performed in a way to complement each other in the majority of the households, and, as mentioned above, most of these households earn higher income from livestock production when compared to agriculture.

2.2.2. Expenses

Detailed information about the expenses of households is available in the table below.

Table 2.8. Expense Information of Households

Expenses	Number of Households	Average Expense (TRY)	Min. Expense (TRY)	Max. Expense (TRY)	Median Expense (TRY)
Infrastructure (Heating, electricity, water, telephone, etc.)	101	10,821	1,200	100,000	6,000
Kitchen	100	12,810	400	100,000	10,000
Clothing	50	4,912	300	40,000	2,500
Education	48	9,075	900	50,000	6,000
Health	22	3,985	150	20,000	1,500
Transportation	6	1,183	100	2,000	1,000
Fuel	71	22,140	1,250	150,000	10,000
Livestock Production	49	198,418	500	1,620,000	100,000
Agricultural	58	56,962	600	1,000,000	15,500
Debt/Loan	31	95,341	2,000	1,000,000	25,000
Other	1	3,000	3,000	3,000	3,000
Total	**537**				

Source: Socio-Economic Household Survey, 2019

As seen in the following figure created based on the data in the table, 4 top items in household expenditures are infrastructure, kitchen, fuel and agricultural expenses. On the other hand, highest average expenditurebelongs to livestock production expenses. This is followed by debt/loan repayments and agricultural expenses. Hence, it is understood that agriculture and livestock production expenses have an important place in the household expenditures of the vast majority of PAPs. The items for which households spend the least are transportation, health and clothing.

Other important information about household expenses can be summarized as follows:

- Of 104 households, 31 have debt/loan repayments and the households' debt ratio is 29.8%.
- The highest livestock production expense is 16 times higher than the highest infrastructure expense.
- Expense items with the highest difference between minimum and maximum expenses are also observed in livestock production and agriculture. Accordingly, although agriculture and livestock

production are common in most households, the income and expenses of households in these areas are not homogeneous and there are large differences among households.

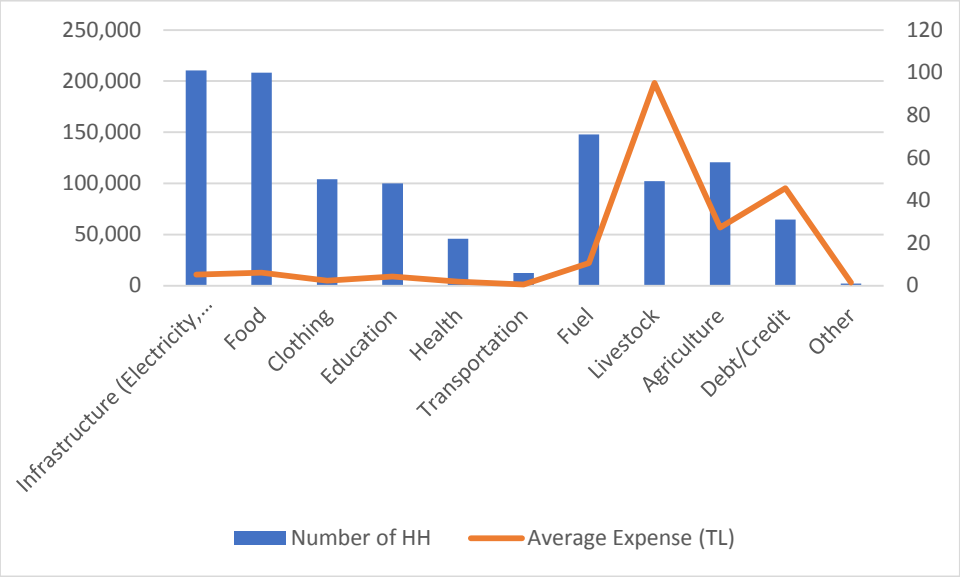


Figure 2.4. Expense Items of Households

When analyzed in terms of livestock production and agricultural expenses, which are the most important expense items for households, it is observed that the households engaged in livestock production are mostly concentrated in the annual expense range of TRY 10,000-200,000 TL while the households with agricultural expenses are mostly concentrated in the annual expense range of TRY 0-100,000. During the studies carried out in the field, it was frequently stated by PAPs that high livestock production costs constituted the most important obstacle to the spread of livestock production.

Table 2.9. Agriculture and Livestock Production Expenses of Households

Amount of Livestock Production Expenses	Number of Households	Amount of Agricultural Expenses	Number of Households
0-10,000	5	0-10,000	**25**
10,001-100,000	**22**	10,001-100,000	**27**
100,001-200,000	**10**	100,001-200,000	3
200,001-500,000	9	200,001-500,000	2
500,001+	3	500,001+	1
Total	**49**	**Total**	**58**

Source: Socio-Economic Household Survey, 2019

Responses of the households to questions concerning loan use and savings are shown below. This data is striking in the way that loan users prove to be more limited than those not using any loan in contrary to a gradual yearly rise in loan use ration in Turkey. The most commonly used types of loans in Turkey are personal loan, mortgage loan and car loan, respectively[4] while the ratio of housing loan is very low

[4] https://www.tbb.org.tr/Content/Upload/istatistikiraporlar/ekler/993/Tuketici_Kredileri_Raporu-Mart_2018.pdf

among the surveyed households. It is natural that the most common loan within the Project area, an agricultural region, is the agricultural loan. Saving rates in households are very low. The vast majority of households that make savings use their savings for purchasing immovable properties.

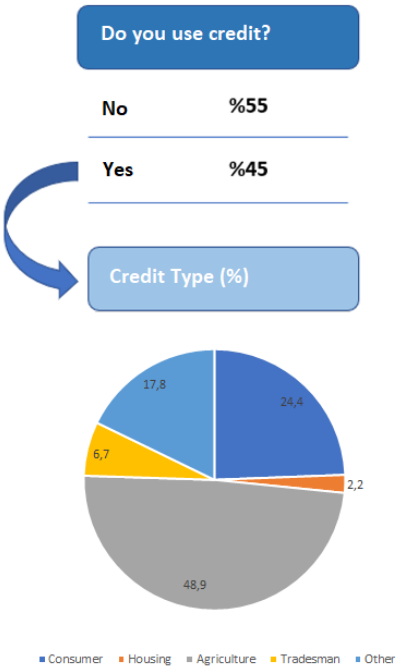


Figure 2.5. Loan Use for Households

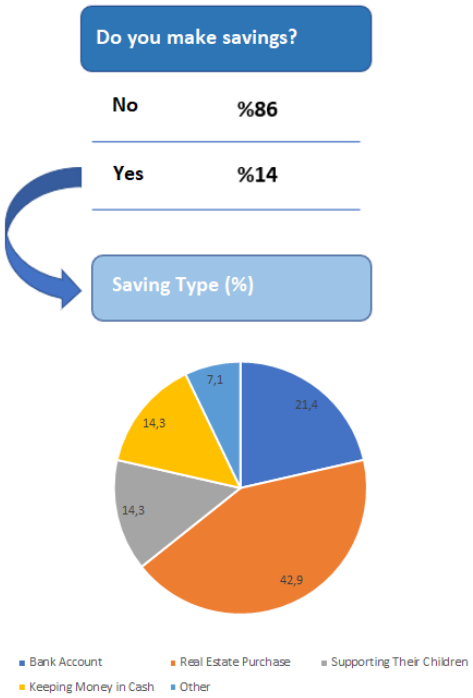


Figure 2.6. Status of Savings for Households

2.3. Agricultural Activities and Land Use

Economic structure of Ereğli district consists of agriculture and agriculture-based industrial facilities. More than 65% of the population is engaged in agriculture in the district. Total agricultural land area of Ereğli district is 1,252,391 decares and 600,000 decares of this area is irrigable land. The district is constantly developing in terms of fruit growing and livestock production.

In Ereğli, there has been a rise especially in the food industry and livestock production facilities in recent years. With the influence of companies coming from different cities and countries and investing in Ereğli, diversity has increased in crop pattern. Likewise, the increase in the number of livestock production facilities has led to an increase in income-generating activities for this purpose (cultivation of common vetch and silage maize, dairy farming). At the same time, various vegetables are cultivated as industrial raw materials. Vegetables are grown in large areas as field agriculture. Organic farming is not common in the region. A total of 7 farmers in Ereğli engage in organic farming over an area of 1,559 decares.

Use of agricultural lands throughout Ereğli is given in the table below. See Annex-11.1 for detailed information regarding cultivated field crops.

Table 2.10. Use of Agricultural Areas in Ereğli District

Year	**Area for Fruits,**	Fallow	Vegetable	**Area for Grains**	Total

	Beverage and Spice Plants (da)	Area (da)	Area (da)	and Other Crops (da)	Area (da)
2018	56,264	332,700	69,495	793,932	1,252,391

Source: TURKSTAT, 2013.

According to the results of the interviews conducted with PAPs and institutions in the field by both HAPA and SRM team, the main livelihoods of the settlements within Project area are agriculture and agriculture-based industry. Crop growing and livestock production are supportive of and complementary to each other within the agricultural activities in the region.

2.3.1. Agriculture

There is a total of 2,786 fragmented lands in 27 settlements affected by the Project. The graph below shows parcel sizes by neighborhoods. Thereby, 53% of the lands consist of lands of 0.6-10 decares.

Within the Project area, 90% of the lands consist of 30 lands of 30 decares and smaller size and the lands seem to be fragmented.

Unfragmented lands of 80-90 decares in size are only present in Alhan and Kargacı neighborhoods within the Project area. Lands are very fragmented. See Annex-11.1 for a detailed analysis.

The table below gives information about the existing lands of the surveyed households.

Table 2.11. Existing Lands of Households

Type		Household Number (n)	Household Number (%)	Average (decare)	Median (decare)	Min. (decare)	Max. (decare)
Vineyard		-	-	-	-	-	-
Field	Rainfed	2	2	18.2	18.2	14.7	21.7
	Irrigated	72	69.2	27.7	18	1.4	201.3
	Total	74	71.1	-	-	-	-
Orchard		37	35.6	11.9	7.3	1.5	104.1
Woodlot		1	1	10.1	10.1	10.1	10.1
Other		1	5.8	1.7	0.2	0.1	7.9
Total		187	-	-	-	-	-

Source: Socio-Economic Household Survey, 2019

Presence of fragmented lands explains why there is no household engaging in major agricultural production within the Project area. In terms of irrigation, the excessive number of fragmented lands decreases the rate and efficiency of irrigation.

An analysis of agricultural areas within the Project area as shown below reveals that there has been a rise in the total agricultural area in the last 4 years. Fallow is still a common practice in the region and the

areas allocated for growing fruits and vegetables have not increased remarkably while grain-growing areas have expanded much more.

Table 2.12. Use of Agricultural Areas in the Project Area by Years

Years	Area for Fruits, Beverage and Spice Plants (da)	Fallow Area (da)	Vegetable Area (da)	Area for Grains and Other Crops (da)	Total Area (da)
2015	40,510	210,710	47,595	636,245	935,060
2016	45,065	326,402	55,490	744,048	1,171,005
2017	57,204	261,000	69,690	751,634	1,139,528
2018	56,264	332,700	69,495	793,932	1,252,391

Source: Land Market Research Report, HAPA, 2019.

Field observations indicate that cereals (wheat, barley, rye, maize) and forage crops are the top crops cultivated by the interviewed households. Other cultivated crops are legumes, fruits such as apple and white cherry and tomato.

Total irrigable land area of the settlements in the project area is 32,962 decares. Breakdown of the crops cultivated in the irrigable lands of the entire Project area as shown below indicates that cereals are cultivated in 35% thereof, maize in 30% (as the cultivation of grain maize was indicated to be very low during the village visits, what is meant by corn growing is the cultivation of silage maize), fruits in 23%, forage crops in 6% (except for silage maize), chickpea in 2%, sugar beet in 1% and bean in 1%. See Annex-11.1 for some detailed information on the crops cultivated in the Project area by neighborhoods.

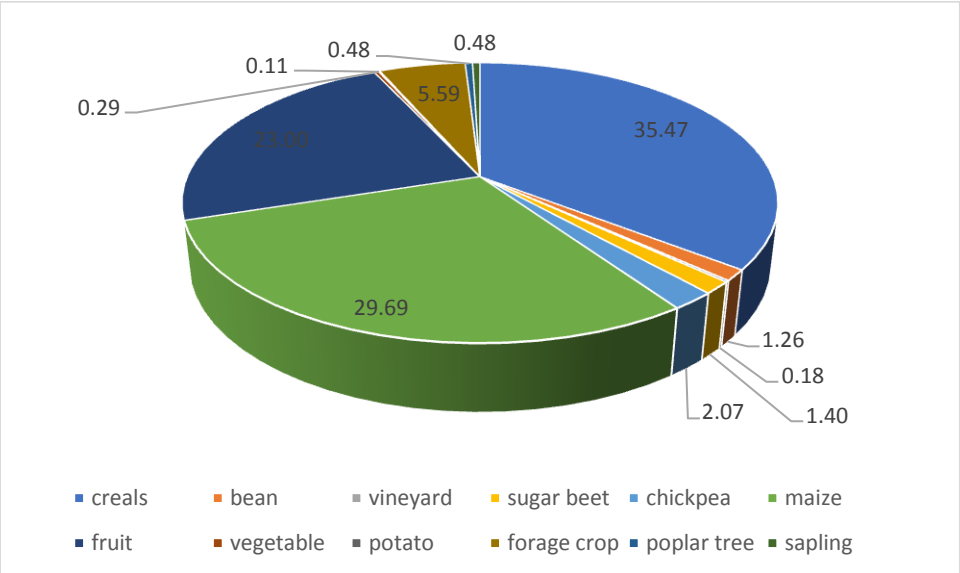


Figure 2.7. Breakdown of the Crops Cultivated in the Project Area

According to the following table which contains information about the most-cultivated crops in the surveyed households[5], the crop with the highest number of cultivating households and the highest income is silage maize. Households cultivating silage maize mostly use this corn as animal feed in their own households in order to reduce their own livestock production expenses. Therefore, sales income is lower than it should be. This also applies to all forage crops such as alfalfa and common vetch.

Table 2.13. Amount of Harvest and Income for Top Crops

Name of the crop	Amount of Harvest (Ton)	Annual Income	Number of Cultivating Households
Silage Maize	10,193	4,230,530	47
Apple	161.9	189,850	25
Alfalfa	692	600,172	23
Cherry	720.4	1,442,600	22
Wheat	360.7	455,310	21

Source: Socio-Economic Household Survey, 2019

Although it is cultivated by fewer households, cherry ranks the second in terms of income generated. According to the information received from the District Directorate of Agriculture and Forestry, the Directorate has carried out many activities in recent years especially in order to spread the cultivation of white cherry. Geographical indication was registered for white cherry in 2019 and it was turned into a crop exported by the food enterprises in the district. However, it is stated that the cultivation of white cherry has not become widespread due to the short shelf life. Another crop whose cultivation is promoted in the region is black carrot. Likewise, geographical indication was also registered for black carrot.

Currently, there are many food companies that buy crops authentic for Ereğli such as white cherry and black carrot from the farmers as raw materials and export them as confectionery, jam and juice. The District Directorate of Agriculture and Forestry also conducts demonstration activities for crops such as melon, watermelon, soybean, canola, Japanese pear as well as white cherry and black carrot for farmers in order to respond to the needs of the sector and diversify the crop pattern. Sufficient data could not be obtained since these crops were not cultivated by 104 households surveyed. However, as mentioned below, one of the most important contributions of the modernization project is expected to be an extended cultivation of these crops.

Interviews show that PAPs expect that the crop pattern will change following the modernization of the irrigation infrastructure. 56% of the survey respondents stated that the crops they would cultivate after the completion of the Project would be vegetables such as

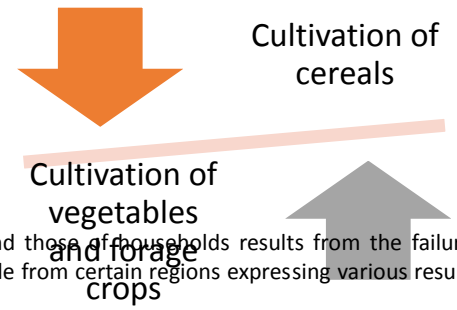


Figure 2.8. Impact of Irrigation Modernization on Crops

[5] Difference between the figures of production within the Project area and those of households results from the failure to conduct a survey in all neighborhoods within the Project area and the sample from certain regions expressing various results at certain points.

tomato and bean. Other frequently mentioned crops were onion, garlic, pepper, eggplant, potato, sunflower and lettuce. It is predicted that silage maize and alfalfa will be cultivated more and there will be a decline in the cultivation of wheat and barley.

95% of the surveyed households stated that they engaged in irrigated agriculture. The irrigation problems mentioned by these households engaged in irrigated agriculture are as follows:

- **Irrigation infrastructure:** Since the water canals (canalettes) and filters are broken and/or unclean, they get blocked from time to time and cause the released water to be wasted.
- **Water and electricity fee:** Since the water coming from the canal proves to be insufficient, individual wells are used for supporting irrigation, which leads to hefty electricity bills. At the same time, the water fees paid to the Water Users Association are also high. It is stated that water fees are paid 4 times a year, but most of the time, irrigation can be performed 3 times a year.
- **Water shortage:** The water coming from the canal does not come in time in general, and, when it comes, it is often insufficient. For this reason, there is unrest among the field owners about water. Flood irrigation also causes a decline in water. Especially during the summer, water is not sufficient and crops burn up.
- **Irrigation worker:** The labor force requirement is high as flood irrigation is performed. It is stated that labor fees are very high and the number of workers is low in the region.
- **Irrigation method:** Flood irrigation causes inefficient irrigation and also makes the job much more difficult. However, many people state that they continue to use this method since drip irrigation is very costly.

The general cultivation pattern for irrigable lands is Silage Maize for the first year and Wheat for the second. An analysis for farmers' preference in agricultural activities reveals that fruit growing has turned into the cultivation of annual field crops. The most important reason for this was said to be the development of dairy farming due to dairy farms.

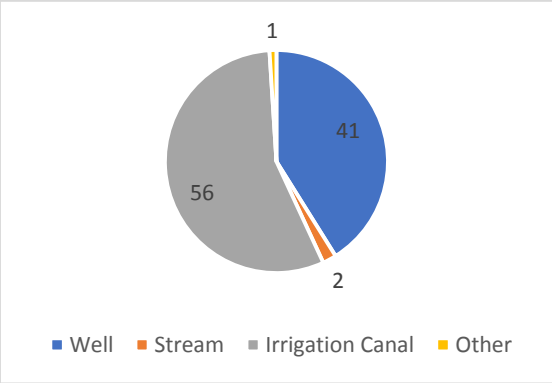


Figure 2.9. Breakdown of the Irrigation Resources of PAPs

Another important issue of the project area related to irrigation is the use of wells. As seen in the graph below, the well water use rate of PAPs comes the second after irrigation canal water use.

One of the most frequently asked questions by PAPs is whether they can continue to use the wells after the Project.

Proportion of the surveyed PAPs using the lands they do not own is approximately 31%. It is seen that most of these lands (in terms of the number of households and decares) are irrigated fields used by way of renting. Use of a treasury land for agricultural purposes comes the second.

Table 2.14. Use of the Lands Not Owned By PAPs

Non-registered land	Number of households	Average (decare)	Median (decare)	Minimum (Decare)	Maximum (Decare)
Rented rainfed field	3	31.3	40	14	40
Non-registered Treasury land	8	46.3	26	9	134
Those using irrigated fields of others without any contract	5	10.3	8	4	17.4
Rented irrigated field	20	90.5	47	15	700
Total	36	178.4	121	42	891.4

Source: Socio-Economic Household Survey, 2019

According to the following table which contains information about the tree species planted in the project area, top 3 tree species planted by the most households are apple, cherry and walnut, respectively. Given the number of trees planted, it is seen that the top tree is apple again, followed by cherry, cypress and sour cherry trees. There was no large fruit tree orchard in the surveyed neighborhoods while it was observed that there were few trees planted for household consumption in the gardens of houses.

Table 2.15. Species and Number of Trees Planted

Species of Tree	Number of Households	%	Number of Trees
Pear	8	4.3	61
White Cherry	4	2.2	333
Walnut	25	13.4	386
Mulberry	2	1.1	5
Apple	50	26.9	3,852
Plum	7	3.8	233
Hazelnut	1	0.5	1
Poplar	3	1.6	345
Apricot	16	8.6	192
Cherry	35	18.8	2,178
Cypress	5	2.7	1,195
Peach	11	5.9	210
Grape	2	1.1	9
Sour Cherry	18	9.7	728
TOTAL	**186**	**100**	**9,728**

Source: Socio-Economic Household Survey, 2019

It is common to hire seasonal workers in the project area. Majority of these workers come from Ereğli. Most of the surveyed households hire seasonal workers in small numbers and for a short period of time. Detailed information is shown in the figure below.

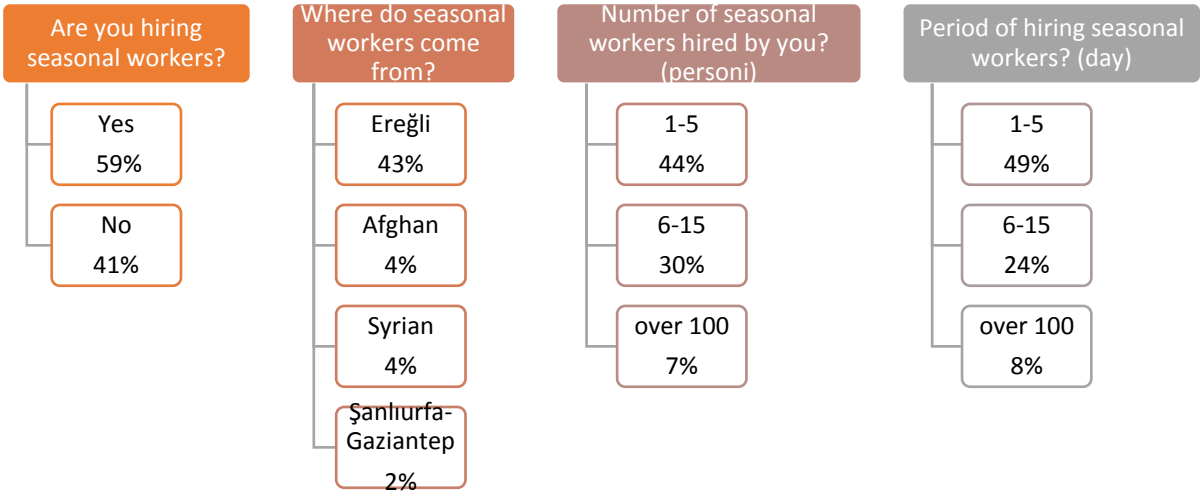


Figure 2.10. Use of Seasonal Workers

2.3.2. Livestock Production

As an activity supporting agriculture, livestock production is performed in a widespread way throughout Ereğli district. As mentioned above, the number of livestock enterprises in the district has been increasing rapidly in recent years. Breakdown of enterprises is given in the following figure.

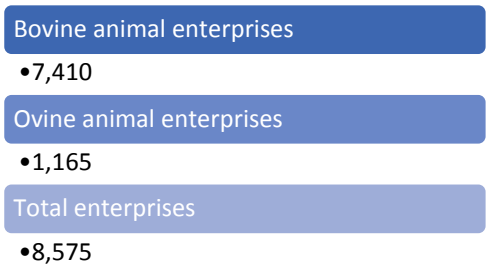


Figure 2.11. Ereğli Livestock Enterprises

There are 6 slaughtering and processing facilities in the district. Out of the enterprises operating in the region, Arvasi Meat has the capacity of slaughtering 200 bovine and 800 ovine animals; Cihangir Meat 50 bovine and 370 ovine animals and Akşeker 50 bovine and 300 ovine animals. There are 1,395 enterprises operating in the field of food and feed.

Livestock production is an important source of income in the Project area as in Ereğli. There are 107,288 heads of animals in total in the project-impacted settlements. 24.27% of these animals are ovine animals while 75.73% are bovine animals. (see Annex-6 for the breakdown of animals by neighborhoods).

Since the pastures in the region are few and insufficient in terms of grass quality, fattening is done by open cattle rearing. Majority of the animals raised are cattle. According to the interviews and surveys, the main income obtained from bovine breeding is through milk production and sales. PAPs stated that they mostly sold their milk to dairy

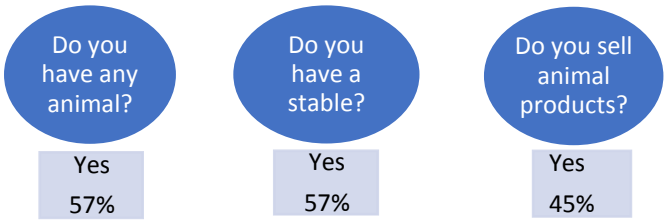


Figure 2.12. Livestock Production Information of Households

farms. Other prominent outlets are Breeder Unions/Farms and dairymen.

7 of the surveyed households stated that they were breeding ovine animals. 3 of them generate income from ovine breeding. Most of the households that raise sheep and all of those raising goats and chickens raise animals for household consumption. Therefore, it can be said that livestock production is not an income-generating activity for these households.

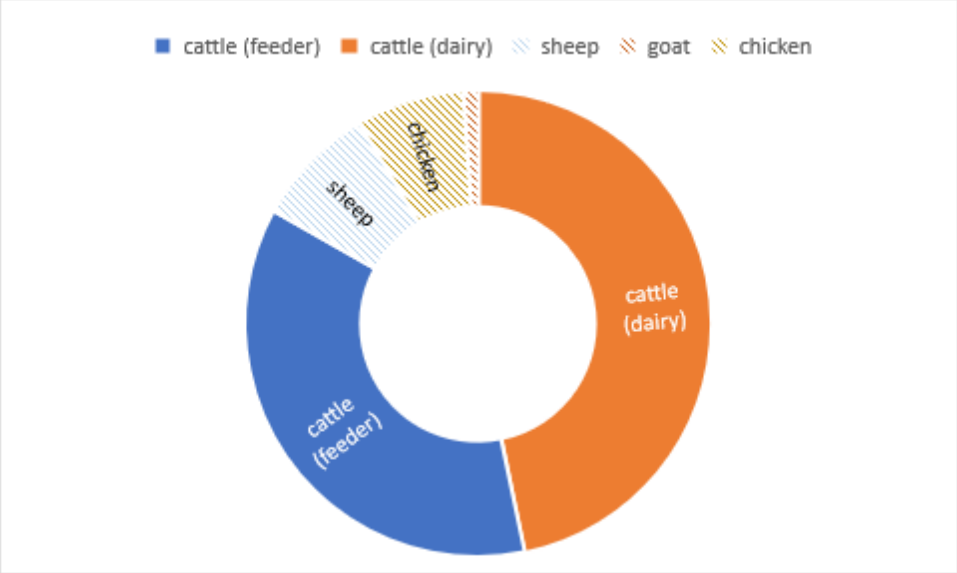


Figure 2.13. Breakdown of Livestock Production in Households and the Purpose of Livestock Production

The graph below shows the breakdown of the number of animals owned by the households. Accordingly, it is observed that the households that raise cattle for the purpose of milk production in the project area own 11-20 animals, the households that raise cattle for the purpose of animal sales or meat production own 6-10 animals and there are larger-scale households producing milk.

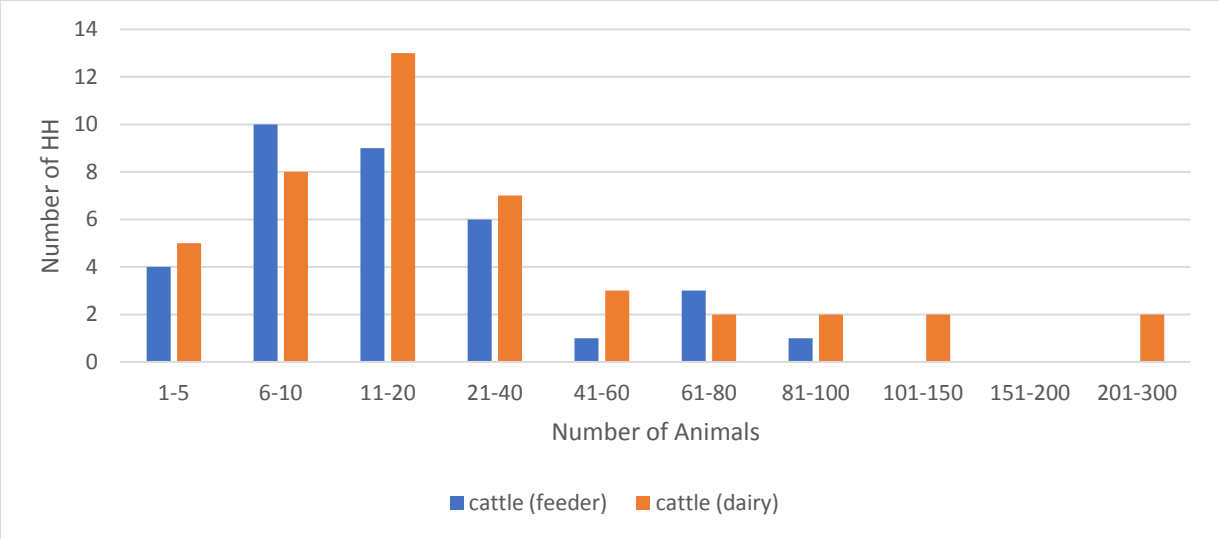


Figure 2.14. Breakdown of the Cattle Raised by Households

Reasons for the prevalence of bovine breeding instead of ovine breeding include, among others, the scarcity of pastures for ovine animals, the possibility of the local people engaged in agriculture to reduce

feed costs by growing forage crops such as silage maize and the bovine breeding products generating higher income under current market conditions.

84 of 104 households surveyed are engaged in farming. Of these 84 households, the total number of households that grow forage crops as primary and secondary crops is 74. The table below shows the breakdown of forage crops by intended purpose. Accordingly, the vast majority of the households consume the forage crops they grow for their livestock production activities and do not sell them. The ratios of the households only selling these crops and those both using these crops for household needs and selling them are close.

Table 2.16. Use of Forage Crops in Bovine Breeding

Cultivated Forage Crop	Number of households cultivating the crop as its primary or secondary crop	Intended Use		
		Subsistence	Cash	Subsistence and Cash
Silage Maize	41	25	7	9
Alfalfa	20	17	1	2
Mixed Bale (Common Vetch/Mixed Feed)	13	10	2	1
Total	74	52	10	12
Intended Use for Forage Crops (%)		70.3	13.5	16.2

Source: Socio-Economic Household Survey, 2019

However, 37% of the households buy mixed feed in addition to the forage crops they grow. Therefore, it can be said that the following forage crop growing level is insufficient to meet the feed needs. Therefore, it is commonly predicted by PAPs that silage maize and alfalfa will be cultivated more through the modernization of the irrigation infrastructure.

Shepherds are rarely preferred among PAPs since grazing is not administered for livestock production. Only 12% PAPs hire shepherds. In recent years, Afghan-origin shepherds have been employed all the year round as in across Turkey.

2.4. Organization

Membership information for agriculture and livestock production institutions across Ereğli is provided below. Thereby, the Sugar Beet Growers Cooperative has the highest number of members, followed by the Chamber of Agriculture. There is a total of 52 cooperatives and 2 producer associations operating in the field of animal production in the district. There is no women's cooperative in the district.

Konya comes the second among provinces in terms of the number of agricultural credit cooperatives throughout Turkey. 33 of the 61 agricultural credit cooperatives in Konya are located in Ereğli.

As 65% of its population engage in agriculture, the number of farmers registered in the Farmer Registry System (FRS) is 6,500 in Ereğli.

Table 2.17. Agricultural Organization Status in Ereğli

Agricultural Organization		Number	Number of members
Cooperatives	Agricultural Development	33	3,862
	Irrigation	18	2,028
	Beet Growers	1	31,869
	Total	**52**	**37,759**
Producer Associations	Animal Production	2	2,670
	Total	**2**	**2,670**
Breeder Associations	Association	2	4,454
	Total	**2**	**4,454**
Chamber of Agriculture	Chamber of Agriculture	1	29,117
	Total	**1**	**29,117**

Source: HAPA, 2019.

According to the ESMP prepared within the scope of the project, there are 4 agricultural development cooperatives, 1 agricultural credit cooperative and 3 irrigation cooperatives (total number of members: 150) that support agricultural production in the Project area.

According to household surveys, 43 of 84 household heads, who state that they are farmers, are registered with the Chamber of Agriculture. Number of members for agriculture and livestock production i id lo rm of 2.5 institutions on average. ic ar so e first, followed by Ereğli Cattle on ilk iat er with the highest number of members is Eregli Chamber of Agriculture while the cooperative with the highest number of members is Ereğli Beet Cooperative.

Producer Associations | Chambers | Cooperatives | Unions

136	44	31	2

Source: Socio-Economic Household Survey, 2019

Institutional memberships of PAPs interviewed match with their income-generating activities. It was observed that PAPs were mostly aware of the support provided by these institutions and the training events organized thereby, and they had relatively easy access to information related to their fields of activity. In this respect, it is possible to say that there is a good level of organization. On the other hand, only 8 people (out of 104) expressed a positive opinion on the question of whether they wanted support to establish a cooperative for the purpose of improving their livelihoods.

2.4.1. Water Users Association

According to the information from the Water Users Association (WUA)[6]:

[6] 2019 Neighborhoods Notification List of Ivriz Left Bank Water Users Association

- An area of 26,951 decares is irrigated in a total of 2,743 parcels within 27 project-impacted settlements.
- The ratio of irrigated area to the parcel area is 76%.
- The average size of irrigated parcels is 11 decares.
- No irrigation service is received from the WUA in 262 parcels. Rate of the parcels that are not irrigated is 10%.
- The average size of parcels irrigated per person is 13 decares. The average number of parcels irrigated per person is 1.
- The number of owners in the parcels is 1,868 persons. 74% of these owners are both owner and water user.
- 26% of water users are water users although they are not owners.

See Annex-11.1 for detailed information by neighborhoods.

PAPs were also asked about their WUA memberships. An analysis of responses strikingly reveals that its members view the Water Users Association as an institution of which they are obliged to become a member for irrigation rather than benefiting from the membership. The vast majority of the interviewed members consider the Association's services insufficient and view the subscription fee as high.

2.5. Vulnerable Groups and Social Assistance Supports

2.5.1. Vulnerable Groups

The vast majority of women in the project area are housewives. Although women constitute 49% of the household members of households included in the field study, the number of female landowners is almost non-existent among the PAPs interviewed. It was observed that women did not have enough say in agricultural activities.

According to the data from the Water Users Association:

- The number of female water users submitting an irrigation notification to the WUA is 320. Its ratio in total water users is 16%.
- The average number of parcels per female water user is 1.1. Ratio of the parcels irrigated by female water users to the total irrigated area is 14%.
- The average size of irrigated parcels is 5 decares.

According to the interviews made with PAPs, there is no landless PAP or, in other words, PAP without any private land.

1 out of every 5 persons and 2 of 104 household heads are unemployed in the interviewed households.

Approximately 11% of the household members have no social security.

Since the socio-economic survey and consequently the identification of vulnerable groups was performed based on sampling, not all vulnerable groups were identified during the survey. Therefore, vulnerable groups will be identified based on the forms specified in Annex 11 as a result of consultations and interviews to be made in settlements during the RAP implementation process and mitigation measures will be developed accordingly.

2.5.2. Social Assistance Supports

According to the information received from the Social Assistance and Solidarity Fund interviewed within the scope of the field study, details regarding the supports offered to the settlements covered by the Project are given below. Thereby, the first 3 types of support that these persons have benefited from most in these settlements are conditional education assistance, cash assistance and conditional health assistance, respectively.

Table 2.18. Social Assistance Supports Benefited by Households

Type of Support	Number of Persons*	Amount of Support	Description
Conditional Education Assistance	1,002	-	For students between the ages of 6-18 provided that their family is below the family's poverty threshold**
Conditional Health Assistance	439	-	For basic needs such as milk, baby food, diapers intended for the children between the ages of 0-6 provided that their family is below the family's poverty threshold
Disability Pension	410	TRY 500 for a disability ratio of 40-69% TRY 763 for a disability ratio of 70+%	
Pension for Relatives of the Disabled	48	TRY 763	For the children between the ages of 0-18 with a disability ratio higher than 69% provided that their parents have no social security and their family is below the family's poverty threshold
Conscription Salary	19	TRY 550 (Every 2 months)	In families whose income is below the poverty threshold, to his spouse if married or his parents if single provided that they have no social security and until the end of conscription
Widower's Pension	59	TRY 550 (Every 2 months)	For women whose husbands have demised provided that there is no person having any social security in the household
Assistance to Orphans	27	TRY 200 per child	

		(Every 2 months)	
Chronic Disease Assistance	3	1,384/month	3 persons suffering from tuberculosis
Old Age Pension	423	TRY 637	
Cash Assistance	961	Depending on the need	
House Construction/Repair/Furniture Assistance	115	Depending on the need	Repair assistance is provided only if there is a situation that threatens the safety of life. Repair assistance has not been provided in these neighborhoods, yet.

Source: Interview with Ereğli District SYDV, 2019.
*Total number of people who have received this assistance so far
**Families with per capita income below TRY 609

In the 104 households whose household information is obtained, a total of 4 people currently receive widower's pension, 2 people disability pension and 1 person pension for the care of the disabled. The total number of people living in these households is 195 and the proportion of vulnerable individuals receiving state support is 3.6%.

3. Potential Impacts

3.1. Identification of Project Impacts,

Land sizes, parcel types, the list of immovable properties and the number of trees that are foreseen to be affected by the project are explained in the relevant sections based on the expropriation map covering 92 km as prepared by HAPA firm. Evaluations of mukhtars and stakeholders were obtained regarding the project's potential impacts and were subjected to an analysis.

3.2. Land Acquisition Impact

The working corridor was set as 6 meters in affected parcels. The methods used by the project in land acquisition are shown below.

a. Ownership expropriation

Ownership expropriation: A change of ownership as a result of the expropriation work conducted by DSI for valves and hydrant locations in permanently affected parcels. As a result of expropriation, the ownership of these lands will be transferred to DSI.

During the first section expropriation work, size of the areas affected by ownership expropriation is quite small, the area of expropriation ranges between 0.7 and 60 m^2 but the area of influence area may be higher depending on the size of superstructure facilities as a result of the activities to be carried out for all affected parcels during the second section.

b. Permanent easement

Permanent easement: Restriction of the use of lands in the areas subject to permanent easement for a period of 49 years. Land users can continue to use their lands during this process, but they cannot plant any rooted plant such as trees, etc. and construct any structure such as shelter, vineyard house, etc.

Area width for permanent easement will be 1 meter and will be valid along the pipeline. When the works in the field are complete, the land will be restored and handed over.

A photo of the land will be taken before entry into the land. Entry into the land will be completed upon the signature of a minute by DSI and the contractor.

A photo of the land will be taken while leaving the land. The land will be left by receiving the signatures of DSI, the contractor and 2 members of the village council.

Size of the permanent easement area varies between 1 and 2,484 m^2. A decrease in land value may occur due to permanent easement. In the event of such circumstance, the negative impact that may occur due to “loss of value regarding permanent easement” can be eliminated.

c. Temporary easement

There is no permanent land acquisition under temporary easement. Its duration is 1-9 years, but this period can be extended if needed. This is valid for access to land, ownership expropriation and the establishment of permanent easement areas regarding pipeline construction works. Temporary easement area may vary between 1.3 and 6.138 m^2 for identified parcels.

When the period expires, the land will be restored and handed over if the construction work is complete.

A photo of the land will be taken before entry into the land. Entry into the land will be completed upon the signature of a minute by DSI and the contractor.

A photo of the land will be taken while leaving the land. The land will be left by receiving the signatures of DSI, the contractor and 2 members of the village council.

d. Temporary land acquisition, land rental

During construction, it may be necessary to rent lands for construction sites and construction works and/or temporarily acquire lands. This impact can be observed only after the construction works are underway. When the rental period expires, the land will be restored and handed over.

3.2.1. Affected Lands

As a result of the identification works carried out by HAPA firm, a total of 641 parcels were identified. 572 of these parcels are composed of privately-owned parcels, 14 are treasury parcels, 11 are common public property parcels, 11 belong to legal entities (5 to DSI , 3 to Ereğli Municipality, 1 to Konya Metropolitan Municipality, 1 to the Turkish Grain Board, 1 to Etibank) and 33 parcels belong to users that caused illegal road encroachments.

Table 3.1. Breakdown of Affected Parcels by Settlements

Name of the Neighborhood	Number of Privately-Owned Parcels	Number of Treasury Parcels	Number of Public Common Property Parcels	Legal Entities	As for the Lands Not Subject to Registration (Road encroachments etc.) Number of Parcels Owned by Users	Total Number of Parcels
Belceağaç	47	2	0	0	6	55
Cahı	48	0	0	1	2	51
Çömlekci	13	0	0	0	0	13
Gaybi	3	5	0	0	0	8
Kargacı	122	3	6	3	0	134
Namık Kemal	50	0	0	2	2	54
Orhangazi	36	0	0	0	0	36
Orhaniye	43	3	1	1	0	48
Sarıca	35	0	2	0	7	44
Yazlık	56	0	0	1	9	66
Yıldırım Beyazıt	34	0	0	2	4	40
Yıldızlı	54	1	2	0	0	57
Ziyagökalp	31	0	0	1	3	35
Total	572	14	11	11	33	641

Source: HAPA, 2019

69% of the impacted lands are temporary easement, 30% permanent easement and 1% expropriation areas.

The **total** number of owners and/or users expected to be affected by the first section of project is **747** persons. The number of shareholders expected to be affected due to privately-owned parcels is 1,851 persons. When identified repeating names are removed, it is envisaged that 714 persons will be affected regarding privately-owned parcels, 2 regarding treasury lands, 1 regarding the lands owned by legal entities, 4 regarding common public lands and 37 regarding the lands not subject to registration (Table 3.2).

Size of the area affected by **expropriation** work varies between 0.7 and 60 m^2. The average expropriation area per the parcel of lands (Parcel / m^2) is 13 m^2 and is not large enough to negatively affect the livelihoods of households. As a matter of fact, the ratio of the area affected by expropriation in privately-owned parcels to the total size of parcels is 0.1%. The number of owners and/or users expected to be affected by expropriation work is 235 persons.

Size of the area affected by **permanent easement** work varies between 1 and 2,484 m^2. The average permanent easement area per the parcel of lands is 164 m^2 and is not large enough to negatively affect the livelihoods of households. Ratio of the area affected by permanent easement in privately-owned parcels to the total size of parcels is 1%. The number of owners and/or users expected to be affected by permanent easement work is 682 persons.

Size of the area affected by **temporary easement** work varies between 1 and 6,138 m^2. The average temporary easement area per the parcel of lands is 385 m^2 and is not large enough to negatively affect the livelihoods of households. Ratio of the area affected by temporary easement in privately-owned parcels to the total size of parcels is 2%. The number of owners and/or users expected to be affected by temporary easement work is 672 persons.

Details on the aforementioned information is shown in the table below.

Table 3.2. Affected PAPs and Summary of Land Acquisition Impact

Breakdown of Ownership	Private Property	Treasury	Legal Entity	Common Public Property	Land Not Subject to Registration (Road encroachment)	Total	Land Acquisition Method %
Total Affected Area (m²)	250,787	8,368	1,237	36,023	2,587	297,765	100
Number of Parcels	572	14	11	11	33	641	
Number of Shareholders	1,851	-	-	-	-	1,851	
Number of Identified Users and/or Owners	714	2	1	4	37	747	
Total Area (m²)	7,563,524	767,942	231,163	7,925,148	Not Applicable (NA)	16,487,777	
Ratio of Affected Area to Total Land (%)	3%	1%	1%	0%	NA	2%	
Minimum Affected Area (m²)	0.7	7	2	8	2	0.7	
Maximum Affected Area (m²)	3,416	1,027	1,343	6,138	230	6,138	
Average Affected Area (m²)	207	218	163	1,240	65	225	

Source: HAPA and SRM, 2019

Details on the breakdown of the summary table by land acquisition are provided below.

Table 3.3. PAPs Affected by Land Acquisition and Impact

Breakdown of Ownership	Private Property	Treasury	Legal Entity	Common Public Property	Land Not Subject to Registration (Road encroachment)	Total	Land Acquisition Method %
Permanent Easement Area (m²)	**74,202**	**2,762**	**637**	**10,441**	**1,348**	**89,391**	30%
Number of Parcels	489	11	11	11	23	545	
Number of Shareholders	1,688	-	-	-	-	-	
Average Permanent Easement Area (Parcel/m²)	152	251	58	949	59	164	
Number of Identified Users and/or Owners	654	1	1	4	24	682	
Total Area (m²)	6,989,919	744,409	231,163	7,925,148	NA	15,890,639	
Ratio of Affected Area to Total Land (%)	1%	0.4%	0.3%	0.1%	NA	1%	
Minimum Affected Area (m²)	1	25	2	17	2	1	
Maximum Affected Area (m²)	2,123	506	691	2,484	193	2,484	

Average Affected Area (m²)	147	207	106	949	59	159	
Temporary Easement Area (m²)	**174,732**	**5,518**	**1,237**	**25,333**	**1,239**	**208,059**	69%
Number of Parcels	491	14	7	11	17	540	
Number of Shareholders	1,706	-	-	-	-	-	
Average Temporary Easement Area (Parcel/m²)	356	394	177	2,303	73	385	
Number of Identified Users and/or Owners	669	2	1	4	16	672	
Total Area (m²)	7,101,438	767,942	230,158	7,924,025	NA	16,023,563	
Ratio of Affected Area to Total Land (%)	2%	1%	1%	0.3%	NA	1%	
Minimum Affected Area (m²)	1	14	39	72	6	1	
Maximum Affected Area (m²)	3,416	1,027	1,343	6,138	230	6,138	
Average Affected Area (m²)	218	321	266	2,533	73	366	
Expropriation Area (m²)	**1,852**	**88**	**6**	**248**	**0**	**2,194**	1%
Number of Parcels	177	7	0	8	0	192	
Number of Shareholders	615	-	-	-	-	-	
Average Expropriation Area (Parcel/m²)	10	13	0	31	0	13	
Number of Identified Owners and Users	233	1	0	3	0	235	
Total Area (m²)	3,073,316	463,952	91,800	1,527,687	NA	5,156,755	
Ratio of Affected Area to Total Land (%)	0.1%	0.02%	0.3%	0.02%	NA	0.05%	
Minimum Affected Area (m²)	0.7	7	18	9	0	0.7	
Maximum Affected Area (m²)	41	21	18	60	0	60	
Average Affected Area (m²)	10	12	18	24	0	11	

Source: HAPA and SRM, 2019

3.2.2. Land Acquisition Impact According to Survey Results

During the interviews, it was found that the affected lands had a very low impact when compared to the ratio of the lands used by the PAPs. Details are shown below.

Users of privately-owned parcels

When the ratio of the affected area to total land assets is calculated based on the interview with the households, the ratio of the lands affected by expropriation, permanent easement and temporary easement to the total land used is 2%.

Table 3.4. Land Acquisition Impact for Privately-Owned Parcels

Total Land Assets of PAPs (Decare)	Expropriation + Permanent Easement (Decare)	Total Affected Area (Expropriation + Permanent + Temporary) (Decare)	Ratio of Total Expropriation + permanent easement land to the total land	Ratio of Total Affected Area to Owned Land
4,855	34	117	1%	1%

Source: HAPA and SRM, 2019

Users of common public property (CPP) lands

In Kargacı, one person uses a CPP land. Total affected land assets correspond to 2% of owned lands.

Users of treasury lands

In Kargacı, one person uses a treasury land. Total affected land assets correspond to 4% of owned lands.

Users of lands not subject to registration

In Ziya Gökalp, one person uses a land not subject to registration. Total affected land assets correspond to 15% of owned lands.

3.3. Affected Immovable Properties

3.3.1. Immovable Properties Affected in Privately-Owned Parcels

There is **no** residential building affected by the project. As a result of the draft expropriation map studies carried out by HAPA firm, immovable properties were detected on 97 parcels in a total of 12 settlements. The number of owners is 93 and the number of identified users is 74 in these parcels. The number of people identified as both owners and users are 23. Thereby, the total number of owners and users is 144 persons.

In general, affected immovable properties are:

- Poles (concrete, iron)
- Garden wall (stone, concrete)
- Hanger (wooden, iron)
- Wire fence
- Coop,
- Garden gate (iron, wooden)
- Pool (1)
- Water well (2).

The table below shows information on the affected immovable properties by the settlements.

Table 3.5. Immovable Properties Affected in Privately-Owned Parcels

Privately-Owned Parcels				
Number of Parcels with Immovable Properties	**Number of Owners**	**Number of Identified Users**	**Number of Persons Who Are Both Owners/Users**	**Affected Immovable Properties**
97	93	74	23	Garden wall, Concrete poles, Wire fence, Concrete wall, Garden wall, Iron gate, Wooden hanger, Iron hanger, Coops, Locked paving stone, Iron pole, Storeroom, Concrete trough, Iron feeding rack, Pool, Water well

Source: HAPA, 2019

3.3.2. Immovable Properties Affected in Non-Privately Owned Parcels

There are also affected immovable properties in the parcels that are not privately-owned. There are affected immovable properties in 18 parcels within a total of 8 settlements. 5 of these parcels are public properties and 1 belongs to Konya Metropolitan Municipality while 12 are roadside lands not subject to registration. The total number of identified users is 13 while 12 are the users of the lands not subject to registration and 1 the use of a public land.

In general, affected immovable properties are:

- Concrete, iron poles,
- Wire mesh
- Wire fence,
- Wooden hanger,
- Wooden, wire fence.

Details are provided in the table below.

Table 3.6. Immovable Properties Affected in Non-Privately Owned Parcels

Total	Common Public Property			Konya Metropolitan Municipality			Lands Not Subject to Registration (Roadsides)		
	Number of Parcels with Immovable Properties	Number of Identified Users	Affected Immovable Properties	Number of Parcels with Immovable Properties	Number of Identified Users	Affected Immovable Properties	Number of Parcels with Immovable Properties	Number of Identified Users	Affected Immovable Properties
Number of parcels: 18 **Number of users: 13**	5	1	Wooden storeroom, Coop, Concrete poles, Wire mesh, Iron pole, Camellia, Concrete floor	1	0	Concrete poles, Wire mesh	12	12	Concrete poles, Wire mesh, Iron gate, Wooden hanger, Locked paving stone, Wooden fence, Wire fence

Source: HAPA, 2019

3.4. Affected Trees

3.4.1. Trees Affected in Privately-Owned Parcels

As a result of the draft expropriation map studies carried out by HAPA firm, trees were detected on 284 privately-owned parcels in a total of 13 settlements. The number of trees detected is 6,552 and the most affected tree species are poplar (2,506), cherry (880), apple (746), sour cherry (738) and walnut (577), respectively.

Table 3.7. Number and Species of Trees Affected in Privately-Owned Parcels

Species	Number
Pear	75
Grapevine	222
Quince	22
Almond	1
Walnut	577
Bush Apple	98
Bush Plum	25
Bush Cherry	79
Bush Sour Cherry	55
Apple	746
Plum	182

Hazelnut	29
Poplar	2,506
Apricot	195
Cherry	880
Peach	122
Sour Cherry	738
Total	**6,552**

Source: HAPA, 2019

The number of owners in the affected parcels is 277, the number of identified users is 238, and the number of those who are both owners and users is 70. The average number of trees affected per owner is 24. Although the income to be acquired from trees varies by the species and age of the tree, the loss of trees is not expected to cause any significant loss of income for the households since there are 24 trees affected per owner. For example, 50 trees are planted per decare in semi-dwarf apple orchards.

Details are shown below.

Table 3.8. Number of Affected Trees, Owners and Users by Settlements

Settlements	Number of Parcels with Trees	Number of Trees	Number of Owners	Average Number of Trees Affected per Owner	Number of Identified Users	Persons Who Are Both Users/Owners
Belceağaç	29	1,116	28	40	33	7
Cahi	18	312	17	18	11	7
Çömlekçi	9	43	9	5	3	2
Gaybi	1	1	1	1	0	0
Kargacı	38	372	37	10	22	8
Namık Kemal	24	482	25	19	23	7
Orhangazi	17	146	15	10	10	4
Orhaniye	23	671	22	31	16	5
Sarıca	27	1,032	27	38	32	10
Yazlık	31	1,311	30	44	38	7
Yıldırım Beyazıt	12	178	12	15	8	1
Yıldızlı	44	746	43	17	34	8
Ziya Gökalp	11	142	11	13	8	4
Total/Average	284	6,552	277	24	238	70

Source: HAPA, 2019

3.4.2. Trees Affected in Non-Privately Owned Parcels

As a result of the draft expropriation map studies carried out by HAPA firm, the total number of trees to be affected by the project was determined to be 697 in the parcels owned by institutions (Municipality, DSI, etc.), the treasury (pasture, treasury, etc.), and the parcels not subject to registration while the number of users was identified as 42 persons. The number of parcels with trees is 42.

Table 3.9. Number and Species of Trees Affected in Non-Privately Owned Parcels

Species	Number
Pear	1
Grapevine	7
Quince	6
Walnut	79
Apple	64

Plum	23
Poplar	342
Apricot	28
Cherry	53
Peach	18
Sour Cherry	76
Total	**697**

Source: HAPA, 2019

Details by settlements are provided below.

Table 3.10. Number of Trees and Users Affected in the Lands Apart from Privately-Owned Parcels by Settlements

Description	Treasure Parcel	CPP	Parcels Used by Persons in Lands Not Subject to Registration (Road encroachment, etc.)	DSI	Total
Number of Parcels with Trees	3	5	31	3	42
Number of trees	117	256	304	20	697
Number of Users	0	11	30	1	42
Number of Owners	0	0	0	0	0

Source: HAPA, 2019

3.5. Notifications from Stakeholders

3.5.1. Mukhtars of the Project-Impacted Settlements

According to the interviews conducted with the mukhtars, prevention of the waste of water and efficient irrigation come the first among the most important benefits of the project. A boost in crop productivity as well as water supply whenever needed are among other beneficial aspects.

Table 3.11. Benefits of the Project According to Mukhtars

The Greatest Benefit of the Project	Number of Responding Mukhtars	%
Preventing the Waste of Water/Efficient Irrigation	15	60
Crops will be Harvested Twice a Year/ Efficiency will be on the Rise	3	12
Water Supply Whenever Needed	4	16
Removal of Canals	1	4
Increased Transition to Drip Irrigation	1	4
No Benefit At All	1	4

TOTAL	25	100

Source: Mukhtar Interview Form, 2019

The vast majority of the mukhtars (76%) agree that the project **will not** have any negative impact.

Table 3.12. Potential Negative Aspects of the Project According to Mukhtars

Negative Aspects of the Project	Number of Responding Mukhtars	%
No Damage	19	76
Reduction of Green Spaces	2	8
No Idea	1	4
Change of Zoning Areas	2	8
Insufficiency of Irrigation Water	1	4

Source: Mukhtar Interview Form, 2019

3.5.2. Interviewed PAPs

72% of the PAPs interviewed think **that the project will have very positive impacts**. The rate of PAPs who think there will only be negative impacts is 7%.

Table 3.13. Approaches of PAPs Towards the Project

Approach Towards the Project	Number of Responding PAPs	%
Very Negative	7	7%
Negative but There are Also Positive Aspects	1	1%
Positive and Negative Impacts are Equal	3	3%
There are Positive and Negative Aspects	11	11%
Very Positive	75	72%
No Idea	7	7%
TOTAL	**104**	**100%**

Source: Socio-Economic Household Survey, 2019

According to PAPs, the biggest benefit of the project will be the prevention of the waste of water and a boost in agricultural productivity.

Table 3.14. Benefits of the Project According to PAPs

Benefits of the Project According to PAPs	Number of Responding PAPs	%
Prevention of the waste of water, a rise in agricultural productivity,	81	78%
There will be a rise in agricultural production	11	11%

A change in the crop pattern, a rise in the number of income-generating annual crops	1	1%
It will balance the ecological structure.	1	1%
A decline in electricity costs	1	1%
A rise in income	1	1%
A rise in the value of lands	1	1%
No Idea	7	7%
TOTAL	**104**	**100%**

Source: Socio-Economic Household Survey, 2019

Potential negative impacts include damage to the lands, crops, immovable properties and water wells **during the construction period**, the rendering of the existing drip irrigation systems unusable, the restriction of land use due to the water pipeline and valve locations over the lands and the restriction of animals' access to water resources.

Table 3.15. Potential Negative Impacts of the Project According to PAPs

Potential Negative Impacts of the Project According to PAPs	Number of Responding PAPs	%
No negative aspect.	75	72%
Lands, crops, immovable properties may be damaged and the land may not be used during construction	8	8%
Restriction of land use as the lands will be divided, the pipeline will pass through the land and/or a valve will be installed in the land.	7	7%
Restriction of animals' access to water resources	3	3%
Increased irrigation costs	3	3%
Existing drip-irrigation systems may become unusable	2	2%
Water wells may become unusable	2	2%
Shrinkage of the agricultural production lands	2	2%
Green spaces and the trees outside irrigation area may be damaged as they will not benefit from irrigation	2	2%
TOTAL	**104**	100%

Source: Socio-Economic Household Survey, 2019

3.6. Impacts of the project and proposed measures

Potential impacts of the project on the livelihoods of PAPs are shown below.

a. Impacts on Agricultural Production

Land acquisition associated with the project is not expected to have any significant negative impact on agricultural activities because the average area affected by the project is 225 m² and this average value is 207 m² for privately-owned parcels. Average irrigated agricultural land used by the interviewed PAPs within registered lands is 27.7 decares and the affected area corresponds to 1%.

Agriculture is one of the primary livelihoods of the interviewed households. During the interviews made with the households, it was observed that they wanted to get information about the positive and possible negative impacts of the project during the construction and operation period.

Main measures proposed to minimize the negative impact of the project on agricultural production during the construction period are:

I. **According to the Project's External Stakeholder Engagement Plan**, continuous consultations to be made before and during construction will contribute to mitigating the impacts on the items listed below. Before any of these issues is conveyed to the grievance mechanism, opinions and suggestions of the public regarding these issues will be received at necessary intervals and times, and necessary information will be provided.

II. **Regular water supply: Water supply** during the construction period is among the most important issues for growers to sustain their agricultural activities. They stated that their crops were currently damaged because they could not supply water from the WUA in a timely manner and at desired level. Households that changed their crop patterns and gave up fruit growing to cultivate forage crops were identified due to the difficulties encountered in water supply. Therefore**, irrigation services must be offered by the WUA**, growers must be able to continue their irrigated agricultural activities and water must be supplied in a way that the crops will not be damaged during the construction period. Irrigation-related complaints will be followed and resolved during the construction period. A construction timeline will be created with the contractor in a way not to disrupt the irrigation service.

III. **Considering field integrity and field usage in determining the pipeline location and valve locations:** Where the pipeline will pass through the field and the locations of valves are also important considerations. If a land is divided because the pipeline and valves will be located in the middle of the field, it is likely that not only the land within the 6-meter working corridor, but also the entire parcel will become unusable. In this case, it may be necessary to compensate the lost crop fee not only for the affected area, but also for the entire parcel through the grievance mechanism. It is important to provide access to valve locations during the construction and operation period. If valve stations are located in a privately-owned parcel, it is possible that water users will damage the privately-owned parcel and cultivated crops while supplying water from here. In such cases, it is necessary to compensate for potential losses through the project's grievance mechanism. In determining valve locations during the construction phase, revisions will be made to adapt to the existing roads by taking these situations into consideration. If the valves end up in the middle of a parcel, they will be moved towards the borders of the parcel insofar as circumstances allow.

IV. **Use of the existing canalette areas for agriculture:** Currently, open canals pass through some privately-owned parcels. Agricultural producers will be positively affected if these canals are removed and these areas are used for agricultural activities. Obligations within the contract signed with the contractor include the removal of the existing canalettes. The average open canal width is 4 meters. If an open canal with a length of 100 km are removed, a total area of 400 decares will be used for agricultural purposes. However, the use of areas for installing pipes in the axis of open canal was restricted for the pipeline security. It was prevented to construct structures, plant trees and drive in these areas.

V. **Improving communication with the WUA:** There are mukhtars, water users and WUA members who are not satisfied with the services of the WUA as the existing WUA network is old and insufficient and there are water leaks. Only 2 of the interviewed mukhtars stated that they were satisfied with the services of the WUA. The vast majority of the interviewed WUA member PAPs consider the WUA's services insufficient and view the subscription fee as high. It is expected that the complaints of WUA members and water users regarding the irrigation service will be largely eliminated and their communication with the WUA will get more positive during the operation period. The project will work on IFSIF and the WUA will hold training events for the effective use of the new irrigation system.

VI. **Reducing the pressure on underground wells and water resources:** In the region, there are households that make use of underground irrigation by their own means because they do not

get enough water from the WUA. There is no official data on the number of users using groundwater and the number of wells, but 10 of the mukhtars interviewed from the settlements affected by expropriation stated that there were households irrigating with water wells. These persons also use electricity power to irrigate. During the interviews, institutions and affected households reported that there would be a decrease in the rate of water well use for the users who would have the opportunity to irrigate at the level and time they desire upon the completion of the project. In this way, the pressure on the groundwater resources will be reduced while there will also be a decrease in the electricity costs of households.

VII. **Failure to cultivate the remaining agricultural land because of construction**: As a result of the division of the agricultural land due to construction, small lands may arise that remain on one side and cannot be cultivated for economic reasons or due to construction. In the event of income losses to be incurred for this reason, the losses will be compensated upon the application of the respective rights holders.

b. Impacts on Livestock Production

The project is not expected to have any adverse impact on the livestock activities because the rate of project-impacted common public property pasture lands (CPP) is lower than even 1%.

Bovine breeding is amongst the primary sources of income for PAPs. Silage maize is one of the most-cultivated crops among forage crops. Irrigated agriculture is required to grow silage maize. Therefore, it **is essential to supply water** for animal breeders to keep their input costs low during the construction period.

There are large bovine breeders who make use of grazing. Measures intended for the construction period:

I. **Access to grazing areas:** It is possible that animals' access to grazing areas will be restricted due to construction works. Therefore, passageways must be left for animals related to this issue.

II. **Animal health:** It must be ensured that the Main Contractor will take necessary measures in order to prevent any harm to animal health from potential negative impacts associated with construction such as dust, pits and vehicle traffic.

c. Environmental Impacts

During the construction period, all PAPs may be adversely affected by the potential environmental negative impacts of the project. Examples of these impacts are traffic, dust, noise, etc. An ESMP has been created with regard to these impacts. Potential impacts, the measures to be taken and monitoring studies are defined in this ESMP. Environmental impacts of the project will be evaluated within the scope of the ESMP.

Impacts on Vulnerable Groups

a. Female Water Users

According to the data of the WUA, female water users in 27 affected settlements filed a water notification for vegetable gardens (vegetable species) in 56%, corn in %25 and cereals in 11% of cultivated areas. The dominant crop pattern is vegetables and is grown in 19 settlements. The average size of irrigated parcels is 6 decares.

Vegetable growing is important for women and it is necessary to supply water in an uninterrupted way for growing also during the construction period in order to prevent crop and income losses for female water users.

Through transition to the closed irrigation system, the crop patterns of female water users may change. In this regard, it is important to **organize training on irrigated agriculture for female water users**.

b. Land Users and Tenants of Common Areas

No landless PAP was identified during the interviews. The ratio of the surveyed PAPs using lands (privately-owned lands, treasury lands and the lands of third-party institutions) in addition to their own lands is approximately 31%. During the construction period, crops, immovable properties and tree assets over the lands used and/or rented by these persons may be damaged. Following the determination of ownership and use to be carried out by DSI, the damages to the crops, trees and immovable properties will be compensated within the scope of the project. In order to be compensated for the areas affected within the treasury lands or the lands owned by third-party institutions, a title deed must be issued for the relevant lands.

Information meetings will be held by DSI in the settlements for the determination of ownership. The process will proceed based on the consultations with citizens. Ownerships will be determined with the support of DSI and compensations will be paid.

Water supply during the construction period is of vital importance for this group as in all users.

c. Seasonal Workers

Seasonal workers are hired in all settlements. The interviewed mukhtars stated that the number of seasonal workers hired in the settlements varied from year to year. However, there were mukhtars reporting that the number of seasonal workers ranged between 30 (Atakent and Kargacı) and 1,000 (Gaybi). Seasonal workers are not only limited to harvest time but they are also hired for agricultural activity periods such as cultivation, irrigation, tillage, etc. but it was found out that there were changes in the number of seasonal agricultural workers hired in the settlements depending on the agricultural activity performed at the time. The vast majority of settlements supply seasonal workers from neighboring villages, neighborhoods, the district center and neighboring districts. In addition, 4 settlements (Burhaniye, Namık Kemal, Orhaniye, Yıldız) reported that they also supplied seasonal workers from the Southeast Anatolia Region.

If water is supplied to water users during the construction period, no major changes are expected in the existing crop pattern. If the crop pattern does not change, no change is expected in the number of seasonal workers.

Through transition to the closed and piped drip-irrigation system during the operation period, changes may occur regarding the crop pattern and, accordingly, the number of seasonal workers.

As water will be supplied during the construction period, no impact is expected regarding the crop pattern and irrigated area. Therefore, no change is expected in the number of seasonal workers. In this regard, information meetings will be held for the farmers hiring seasonal workers as well as the seasonal workers working in the region during the construction phase.

d. Vulnerable Groups in Need

There are vulnerable groups in need in the project's area of influence. If the livelihoods of this group are adversely affected due to the project, the impact will be significantly high. There are various support mechanisms for the vulnerable groups in this group under SYDV and İŞKUR supports. It is important to inform these groups so that they can benefit from these supports. Consultations to be made with vulnerable groups are detailed in Section 7.4.

During the interviews made with PAPs, 32% of them stated that there were household members who were available for employment during the construction phase of the project. It is important to make announcements in the region with regard to the employment activities to be carried out by the contractor and to supply the workforce, especially the unskilled workforce, from local communities and the region and especially the PAPs in the vulnerable group. Necessary activities will be carried out with the contractor regarding this issue.

Table 3.16. PAPs' Local Employment Demand

Households Who Are Eligible for Employment During Construction	Number of Responding PAPs	%
Yes	33	32%
No	71	68%
TOTAL	**104**	**100**

Source: Socio-Economic Household Survey, 2019

4. Legal Framework

This section deals with national legislation and regulations as well as international standards and requirements for the Project's land acquisition and land consolidation practices.

4.1. National Legislation

4.1.1. Applicable National Legislation on Land Acquisition

National legislation for land acquisition in Turkey is governed through several regulations among which are, but not limited to, the Turkish Constitution, Land Registry Law, Cadastral Law, Expropriation Law and the Settlement Law.

Article 46 of the Constitution of the Republic of Turkey provides that, when the public interest requires so, the State and public entities are entitled to completely or partly expropriate real estate under private ownership and establish administrative easement on them on the condition that their real value is paid in advance and in accordance with the principles and procedures set forth by law. While expropriation is compulsory, expropriation fee must be paid prior to land entry by law. Moreover, the owner and occupant of the immovable property subject to expropriation and other concerned parties may file actions against the expropriation procedure or appraised values and errors of fact before judicial courts.

Having entered into force on May 18, 2012 and amended by the Law No. 6302, the Land Registry Law No. 2644 is the main land title regulation. Land registration in Turkey is based on the Cadastre Law No. 3402. The Cadastre Law also defines the process for the identification of landowners with no registered title deed or in cases where there is confusion over land ownership.

DSI primarily makes use of the land consolidation method for the acquisition of the lands required for the proposed irrigation projects. Land consolidation is the preferred method as it offers many benefits to landowners. Land consolidation is an approach that generally minimizes field loss, decreases labor costs and increases land value depending on the field inputs and crop pattern while boosting crop productivity and income. The lands to be acquired through consolidation are beyond the scope of the RAP.

However, in cases where it is impossible to acquire lands through land consolidation or lands are not technically suitable for land consolidation, the relevant lands are acquired through expropriation.

All expropriation activities carried out by DSI are performed based on the Expropriation Law No. 2942.

Expropriation legislation in Turkey does not require the compensation of the tenants, croppers and illegal users of immovable properties who do not make any improvement concerning the respective lands (buildings and/or trees). However, payments can be made to those who prove their ownership through legal documents or courts. On the other hand, in the expropriation of lands that are registered in the name of another person, are abandoned and/or are not acquired by their respective possessors, the minimum supply cost of the buildings is paid to their possessors while the price of trees appraised within the framework of Article 11 of the Law is paid to their possessors.

If it is determined that an immovable property not registered in the title deed registry and decided to be expropriated as per Article 19 of the Expropriation Law is not one of the public properties listed in Article of the Cadastre Law No. 3402, a possessor is present for the immovable property and a claim of possession is filed, then an on-site examination is conducted through the experts chosen as per Article 9 for the collection of evidence and a minute is drafted. All documents which are prepared and collected by the administration as per Article 10 shall be submitted to the civil court of first instance and the court shall be asked to determine the expropriation price of the immovable property and to decide on the registry thereof in the name of the administration in return for the payment of this price. The court sets

the expropriation value of the immovable property in line with the procedure and time period stipulated in Article 10.

If the immovable properties required for the project belong to public institutions, the following methods are utilized for the acquisition of these immovable properties:

- Transfer as per Article 30 of the Expropriation Law,
- Exchange as per Article 26 of the Expropriation Law,
- Free transfer as per Article 45 of Law No. 5018,
- Allocation as per Article 47 of Law No. 5018.

The method to be administered out of the aforementioned methods is identified as per the negotiations and agreements concluded with the owner institution.

4.1.2. National Legislation Concerning Easement

Easement is defined as follows in Article 779 of the Turkish Civil Code:

"Easement in favor of an immovable property is a burden on one immovable property in favor of another immovable property whereby the owner of the burdened immovable property is forced to refrain from the exercise of some authorities granted by the ownership right or to tolerate the benefiting owner's use of the burdened immovable property in a certain way..."

The Expropriation Law No. 2942 provides that easement will be established within the framework of land acquisition. According to Article 4, "Instead of the ownership expropriation of an immovable property, easement may be established through expropriation over a certain section, height, depth or resource of an immovable property if it is sufficient for the intended purpose.

As for the expropriation procedures completed by way of establishing an easement, owner of the immovable property will be able to benefit from the immovable property and use the right to property insofar as the type and nature of the easement permits. The easement to be established on the immovable property can be established over a specific section, height, depth or resource of the immovable property.

It is necessary to appraise the expropriation price and easement fee based on the methods used for the expropriation of immovable goods or resources as specified in Article 11 of the Law No. 2942 amended by the Law No. 4650. As a matter of fact, the value of an immovable property will be appraised as if no easement has been established (according to the income method for lands and the market value for parcels) and then, the easement fee will be calculated as per Article 11 of the Law No. 2942.

Establishment of easement is divided into two depending on the use and need of an administration. These are vulnerable groups to be identified based on;

a) Establishment of temporary easement: Its duration is 1-10 years.

b) Establishment of permanent easement: Its duration is 11-99 years. It is generally established for 49-99 years.

If temporary easement is established, the loss of value is not calculated as if there is permanent easement over the entire immovable property. The incurred loss is calculated by considering the income or rental fee deprived during the easement.

Expropriation fee calculated for the establishment of easement cannot exceed 1/3 of the price determined for ownership expropriation for lands and ½ for plots. Case-law of the Court of Cassation provides that the loss of value incurred in lands due to easement may not exceed 35% of the ownership

value of the area affected by the easement in the absence of any special case significantly affecting the use of immovable property according to its intended purpose.

4.1.3. Applicable National Legislation Concerning Land Consolidation

DSI is the main institution assigned for land consolidation in Turkey. **The Implementing Regulation No. 30679 on Land Consolidation and On-Farm Development Services** drawn up based on Additional Article-9 of the Law No. 6200 on the Services Offered by the General Directorate of State Hydraulic Works, Article 6 of the Agricultural Reform Law on Land Arrangements for Irrigation Areas No. 3083 and Article 24 of the Law No. 5403 on Soil Conservation and Land Use constitutes the legal infrastructure of land consolidation. This regulation was published and entered into force on February 7, 2019. Prior to the entry into force of this regulation, consolidation procedures were executed by the Ministry of Food, Agriculture and Livestock. As per Article 2 of the Implementing Regulation No. 30679 on Land Consolidation and On-Farm Development Services, DSI is authorized to offer land consolidation and on-farm development services as the implementing institution.

Other laws directly or indirectly related to land consolidation are:

- The Law No. 6200 on the Organization and Duties of the General Directorate of State Hydraulic Works,
- The Agricultural Reform Law on Land Arrangements for Irrigation Areas No. 3083,
- The Law No. 5403 on Soil Conservation and Land Use,
- The Law No. 6172 on Water Users Associations,
- The Agriculture Law No. 5488,
- The Cadastre Law No. 3402,
- The Municipality Law No. 5393,
- The Special Provincial Administration Law No. 5302.

4.2. World Bank OP: 4.12

4.2.1. Operational Policy No. 4.12 of the World Bank on Involuntary Resettlement

Operational Policy No. 4.12 (OP 4.12) of the World Bank on Involuntary Resettlement deals with the risks that will arise out of involuntary or compulsory Resettlement under development projects, covers measures to mitigate such risks and is relevant to all involuntary or compulsory resettlement procedures.[7]

The overall objectives of the World Bank's policy on involuntary resettlement are the following:

Involuntary resettlement should be avoided where feasible, or minimized, exploring all viable alternative project designs.

Where it is not feasible to avoid resettlement, resettlement activities should be conceived and executed as sustainable development programs, providing sufficient investment resources to enable the persons displaced by the project to share in project benefits. Displaced persons should be meaningfully consulted and should have opportunities to participate in planning and implementing resettlement programs.

[7] For the full text of the policy document and its implementation guidelines, see https://policies.worldbank.org/sites/ppf3/PPFDocuments/090224b0822f89db.pdf

Displaced persons should be assisted in their efforts to improve their livelihoods and standards of living or at least to restore them, in real terms, to pre-displacement levels or to levels prevailing prior to the beginning of project implementation, whichever is higher.

OP 4.12 contains certain provisions complementary to the national legislation. These provisions can be outlined as follows:

- In accordance with the applicable legislation, the compensation to be paid to the owners for a property subject to land acquisition is calculated at amount that is sufficient for the purchase of an equivalent property in the same region,
- Costs of the fixtures and renovations of legal or illegal users which are affected by expropriation and the entitlement and ownership of which can be identified are compensated,
- An effort is made to create alternative livelihoods or support facilities for the persons who lose their livelihoods or whose livelihoods are restricted as a result of land acquisition or an assistance is offered to substitute the livelihoods and living standards of these persons,
- The public is regularly informed about the project and its impacts and consultation and engagement processes are included in the entire project process,
- Monitoring, grievance and demand mechanisms are created.

OP 4.12 requires that land acquisition not be carried out without compensating the damages of affected persons.

'Replacement cost' is the methodology used for the valuation of assets covered by OP 4.12: For agricultural lands, this cost refers to an amount that is equivalent to the sum of the market price of a land that is close to the affected land, has an equivalent potential of yield or use prior to the project or displacement as well as the costs intended for restoring the conditions of the said land to those of the affected land and title deed and transfer charges and taxes."

OP 4.12 also requires efforts to be made for offering access to equivalent or acceptable levels of resources and income opportunities under the Project by considering the difficulty of monetary compensation for losses on certain matters such as access to public services, customers and suppliers.

Although OP 4.12 covers all affected persons, it also envisages special attention to vulnerable people under the Project.

4.3. Gap Analysis and Measures for the Harmonization of the Turkish Legislation with the World Bank's OP 4.12 Operational Policy

National legislation and processes related to land acquisition in Turkey go back a long way. National legislation and processes have been updated in time to eliminate the problems encountered during the years of implementation and to meet certain requirements of international best practice examples. However, there are still some conflicts/loopholes between the Turkish legislation and OP 4.12. Deficiencies related to the Irrigation Modernization Project in Turkey are discussed in detail below. A summary of these deficiencies and the measures proposed against them are also shown in the table below.

Considering the land acquisition requirements under the Irrigation Modernization Project, there are some loopholes between the policies of the World Bank and the national legislation. These are as follows.

Resettlement Action Planning: There is no mandatory legal regulation for the preparation of a Resettlement Action Plan that covers all displaced persons and host communities. Therefore, a planning

is required based on Land Acquisition Plans. DSI will prepare a Land Acquisition Plan for the projects requiring land acquisition.

Identification of Project Affected Persons Including Vulnerable Groups: According to the Turkish legislation, only the legal owners of lands are considered as Project Affected Persons (PAPs). Therefore, the losses of PAPs such as those not holding any title deed, the users of treasury land, host community, seasonal workers/immigrants (making use of the project area) and the persons due to other or economic reasons are not taken into account and there is no effort to eliminate the negative impacts of projects on these persons. Most of these communities are not covered by the definition of PAP in the Turkish legislation.

Replacement Cost: In case of the loss of lands and other immovable properties in accordance with the Bank's policies, all replacement fees must be paid before construction begins. Although the 'land-for-land' method is an option for disposed lands, there is no area of implementation for this method in Turkey as the institution conducting expropriation within the legislation applicable in Turkey is not liable to find an alternative land that is equivalent to the land in question. Considering that a monetary payment equivalent to the replacement fee is a method of compensation, the losses of the legal owners of lands will be compensated, and tenants, public users and unauthorized users will be entitled to receive a compensation in proportion to their investment in the land in question. Although the Turkish legislation provides that only the legal owner of a land is entitled to compensation and the depreciation cost for expropriation will be deducted from this amount and prescribes that the expropriation fee will be lower than the replacement cost specified in OP 4.12, it is envisaged that a replacement cost that is sufficient to cover the compensation replacement cost calculated through the current practices will be compensated. Compensation for income losses, access to common properties or social losses are not covered by the Turkish legislation. Full replacement cost is intended for lost lands and structures. A number of remedial measures are specified in the Entitlement Matrix for PAPs that fall under the definition of OP 4.12.

Compensation for Legal/Unauthorized Land Users: According to the Bank's policies, both legal and unauthorized users of a land are covered by the PAP definition. Turkish legislation does not require the compensation of the tenants and unauthorized users of lands/properties[8]. However, all affected Persons are compensated for all types of structures, buildings, trees and field crops as per the Bank's operational policy. OP 4.12 also prescribes the substitution of the losses of income/livelihoods as a result of removing persons from the lands subject to acquisition where necessary. In this context, the compensation paid must restore the livelihoods of tenants and other unauthorized users of lands to the level prior to displacement. In addition to the legal compensation paid to the official owners of lands, assistance can be extended to unauthorized users not holding any legal right from the social assistance funds affiliated to municipalities and/or district governorship.

Restoration of Livelihoods: Improving livelihoods and support during the transition period are not regulated in the Turkish Expropriation Law. Turkish law does not cover any special regulation for vulnerable communities or significantly affected PAPs (those losing over 20% of their lands or sources of production). Expertise and resources are needed for livelihood restoration support, transition support and alternative income support. DSI will cooperate with other institutions/organizations at provincial level to restore livelihoods as much as possible.

[8] Article 19 of the Expropriation Law provides that the costs of trees and materials used for the buildings or other structures of those that have established/set up over the lands of others by way of spending money will be compensated at full price. Costs of the materials used for buildings/structures must be at an equivalent cost to purchase a similar structure in accordance with the Bank's social measure policies.

Public Information, Engagement and Consultation Process: Provisions in the Turkish legislation are limited as regards public information, engagement and consultation processes. According to the law, the institution carrying out the expropriation process is liable to notify PAPs of the decision of expropriation. Negotiation and asset valuation consultation processes are also carried out by the institution carrying out the expropriation. The law does not include any other consultation process. However, OP 4.12 requires a fully-fledged public sharing process for RAPF and project-based RAP. RAP of the project will be announced to the public on the official website of DSI and information will be offered in public places accessible to all PAPs including vulnerable communities. During expropriation and land consolidation processes, DSI ensures the continuity of the consultation process through its own staff and Water Users Associations. DSI informs other stakeholders including those who have invested in the treasury land or used the land without any legal right to do so and tenants as well as tenants in addition to legal rights holders via official correspondence and consultation as in the case of the owners of lands and properties. The said letter provides information on the impacts associated with sub-projects and the need for lands.

Notification of Complaints: Although provisions regarding the notification of complaints are covered by various pieces of legislation such as the Expropriation Law No. 2942, the Law No. 3017 on the Exercise of the Right to Petition and the Law No. 4982 on the Right to Information, these provisions prescribe relatively official and legal mechanisms. Currently, a four-stage Grievance Notification Mechanism is implemented within DSI. This mechanism is designed to collect project-specific grievance notifications. These project-based grievance notification mechanisms are complementary to official and legal mechanisms suitable for use by PAPs.

Monitoring and Evaluation: There is no specific practice for monitoring and evaluating land acquisitions performed through expropriation. DSI will carry out monitoring activities at regular intervals, which will be determined based on the size and impact of the project, by way of creating key performance indicators regarding monitoring.

Table 4.1. Gap Analysis and Measures to Eliminate Differences

No.	Gap/Deficiency	Legislation in Turkey	World Bank Policy Requirements	Measures to Eliminate Deficiencies
1	**Resettlement action planning**	There is no legal regulation for the preparation of a Resettlement Action Plan that covers all displaced persons and host communities.	The World Bank's policy requires the preparation of a Resettlement Action Plan.	Although the Project's activities do not require any physical resettlement, an economic displacement is expected in some irrigation projects due to partial expropriation (mostly due to easement). In this respect, a project-specific RAP was prepared by DSI.
2	**Valuation Method**	The legislation in force does not require that the institution conducting the expropriation process will conduct any research on alternative lands of equivalent value for disposed lands. In other words, the 'land-for-land' method is not implemented in Turkey. Compensation for buildings is offered over construction cost and depreciation is deducted. Construction cost is calculated over the approximate unit prices of the building. Lands with the quality of a plot are compensated over the market value. Incurred title deed and transaction costs are not covered.	The loss of lands, other similar fixed assets and immovable properties must be compensated over the pre-construction full replacement cost. The 'land-for-land' method is another option for disposed lands. No deduction is made regarding depreciation. Title deed and transaction costs of PAPs must also be covered.	Disposed lands and buildings will be compensated in a way to acquire an equivalent immovable property. Loss of value regarding immovable properties/lands due to permanent easement will be compensated. Crop prices on the lands will be added to the expropriation price. Valuation activities to be carried out for expropriation purposes will be conducted in accordance with the law and legislation and it will be demonstrated that the resulting amount includes the costs of title deed transactions. The expropriation price will be determined in a way to cover the replacement cost. Legal expenses incurred as a result of the agreements concluded with regard to expropriation procedures as per Article 8 of the Expropriation Law will be covered by DSI.
3	**Restoration of Livelihoods**	There is no provision in the Expropriation Law regarding the livelihood restoration and any assistance to be extended during the transition period.	If less than 20% of PAPs' lands are affected, a cash compensation is offered over their values in a way to cover the full replacement cost. If this level is 20% and higher, it is required to help displaced persons with their efforts to improve their	It is expected that impacts on livelihoods will be positive rather than negative. As a result of the first section expropriation work and field studies, there is no PAP losing 20% of their total land assets and more. Therefore, cash compensation will be utilized. In addition, cooperation programs will be organized with the

			former living standards, capacity of income generation and levels of production or, at least, restore them to their pre-Project levels.	relevant public institutions in order to improve the livelihoods of PAPs. If it is detected that the livelihoods are adversely affected: Mitigation measures will be taken within the scope of the project. Expertise and resources are needed for livelihood restoration support, transition support and alternative income-generation support. DSI will restore livelihoods as much as possible in line with the alternatives proposed in the Entitlement Matrix in cooperation with other public institutions at provincial level. Land entry will not be proceeded before expropriation fees are paid. Land Entry and Exit Protocols will be prepared during entrance to and exit from the land. The land in question will be made ready for use before it is handed over to its respective owner. Activities will be organized and training events will be held by the Ministry of Agriculture and Forestry in order to raise awareness of growers and water users on subjects such as the selection of appropriate irrigation methods, the planning of irrigation time, the correct implementation of crop rotation, water saving, modern irrigation methods, the reduction of water losses, water harvesting and plant pattern.
4	**Losses of occupant and unauthorized users including vulnerable communities.**	As per the legislation, PAPs are legal owners with land loss. Seasonal workers/immigrants or economically displaced persons do not fall under the definition of PIP. By law, the structures and crops of both legal owners and unauthorized users in the treasury lands are compensated. However, there is no compensation provision for unauthorized	Economically displaced persons, seasonal workers and other vulnerable communities must also be considered as PAPs. Regardless of their ownership status, all PAPs will be compensated for the losses they suffer.	Regardless of their ownership status, all PAPs will be identified within the framework of the project-specific Land Acquisition Plans (RAPs) and measures will be taken for compensating all land users. One or more of the following measures will be implemented by DSI in restoring livelihoods for all Affected Persons with the status of an unauthorized user.

		users on pasture lands and forestry lands. According to the amendment made in Article 19 of the Expropriation Law, compensation is paid to the persons spending money and constructing buildings or other structures on the lands of other persons over the full replacement cost for trees and over the costs of materials for buildings.		It will be ensured that land users who have the right of possession will receive the title deed of the land in question. A monetary compensation will be paid in a way to cover the replacement cost of affected crops and immovable properties if unauthorized users prove their right of possession as per Article 19 of the Expropriation Law, DSI will inform the relevant persons to make use of the available funds by applying to the district governorships, the Public Work Programs of İŞKUR or the relevant Social Assistance and Solidarity Funds. DSI will ensure that contractors prioritize unauthorized users within the scope of job/employment opportunities regarding the project.
5	**Consultation and Disclosure of Information**	Turkish legislation regarding land acquisition contains limited provisions regarding the public disclosure, the reception of public opinions and its engagement. The organization that carries out the expropriation process is obliged by law to inform PAPs of this expropriation decision. The organization carrying out the expropriation process also conducts negotiations and consultations and appraises assets. Since there is no obligation to prepare a Stakeholder Engagement Plan, no further consultation is required by law.	As per OP 4.12: •A project-specific RAP is fully disclosed to the public. •All stakeholders are provided with equal opportunities to access Project documents and to comment on these documents, and consultation meetings are held in a place accessible by anyone wishing to attend. •Consultations are also held with vulnerable groups.	RAP of the project will be announced to the public on the website of DSI and information will be offered in public places accessible to all Affected Persons including vulnerable communities. DSI will prepare an information brochure for land acquisition and expropriation payments and inform the PAPs. During expropriation processes, DSI will ensure the continuity of the consultation process through its own staff and the Water Users Association. DSI will inform other stakeholders including those who have invested in the treasury land or used the land without any legal right to do so and tenants as well as tenants in addition to legal rights holders via official correspondence and consultation as in the case of the owners of lands and properties. Information will be providing on the impacts associated with the relevant sub-projects and the need for lands. The RAP contains information on how DSI will engage stakeholders for the project. (For further information, see RAP, Section 7: Consultation and Engagement)

6	**Cut-off date**	Turkish law requires the preparation of an assets inventory Land acquisition through expropriation requires the preparation of a full count of project-impacted immovable assets and a 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 cut-off date.	A full count is performed for the identification of PAPs, affected lands, crops and immovable properties and the identification of rights holders.	A full count will be performed by DSI regarding PAPs and immovable properties. The RAP was prepared from a selected sample for the identification of rights holders. Information will be provided on the cut-off while announcing the RAP. 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. People who settle in the project area after the cut-off date cannot benefit from the compensation support. Fixed 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 on date, will not be compensated.
7	**Grievance Mechanism**	A national grievance mechanism has been introduced for the use of all Affected Persons.	A project-specific grievance notification mechanism is required.	Currently, a four-stage Grievance Mechanism is implemented within DSI (For more details, see RAP, Section 8: Grievance Mechanism). This mechanism will be developed taking into account the collection of project-specific objections and complaints. Although such grievance notification mechanisms are support components at Project-level, they cannot replace the legal mechanisms that are available for Affected Persons. PAPs will be informed about their legal rights regarding the impacts during the construction process as well as the introduced grievance mechanism. The contract to be signed with the contractor will include provisions as to the effect that the damages caused by the firm will be eliminated.

8	**Monitoring and evaluation**	There is no monitoring and evaluation practice regarding land acquisition under Turkish law.	Arrangements for monitoring, implementation and the evaluation of the impacts of RAPs must be prepared in accordance with the World Bank policy requirements.	RAP will be monitored and evaluated. Key performance indicators will be set by DSI for monitoring and internal and external monitoring activities will be performed at regular intervals (For more details, see RAP, Section 9: Monitoring and Evaluation).

In case of any conflict between national legislation/regulations and OP 4.12, this RAP harmonized with OP 4.12 will be valid within the scope of this project.

5. Implementation, Compensation and Other Supports

5.1. Land Acquisition Process

Land acquisition process will be carried out by DSI according to the Expropriation Law No. 2942. Accordingly, expropriation plans are prepared, the owners and possessors of immovable properties are identified, an expropriation decision is issued and notified to the Land Registry Directorate and an administrative annotation is affixed as per Article 7 of the Law. Estimated value of the immovable property is appraised by using scientific and objective data within the scope of Article 11 of the Law. First of all, land acquisition will be made through willing buyer - willing seller arrangements as per Article 8 of the Expropriation Law.

A memorandum of understanding is prepared in the event that an agreement is reached with the owners of immovable properties regarding the appraised value as the expropriation process starts with acquisitions and this memorandum constitutes the legal basis of the ex-officio registration of such immovable properties in the name of our administration (Article 8 of the Law).

If no agreement is reached with the owner of an immovable property, the expropriation price is set by the court as per Article 10 of the Law and paid to the owner thereof and the immovable property is registered in the name of the administration.

If the immovable property of another Public Entity is required, the provision stipulated in Article 30 of the Law applies. If no agreement can be reached with the administration that is the owner of the immovable property, this issue is finalized by the Court.

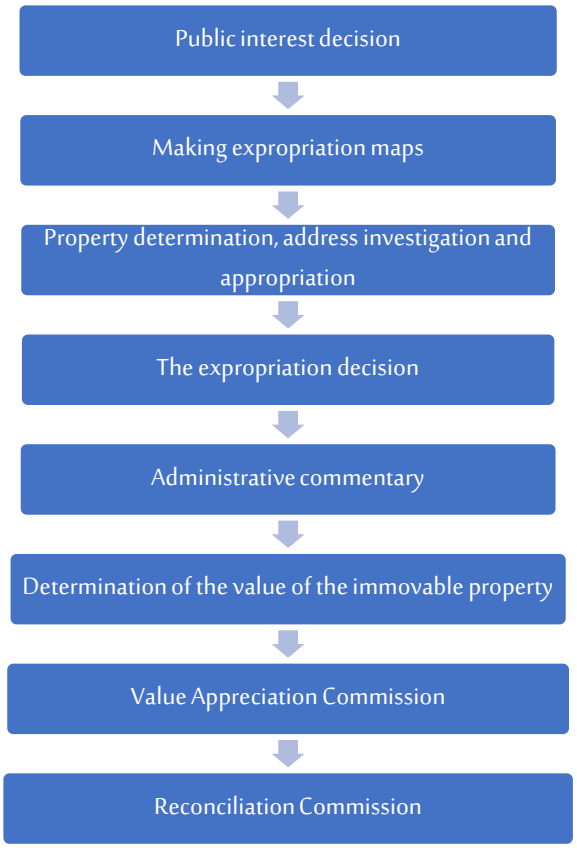


Figure 5.1. Expropriation Process

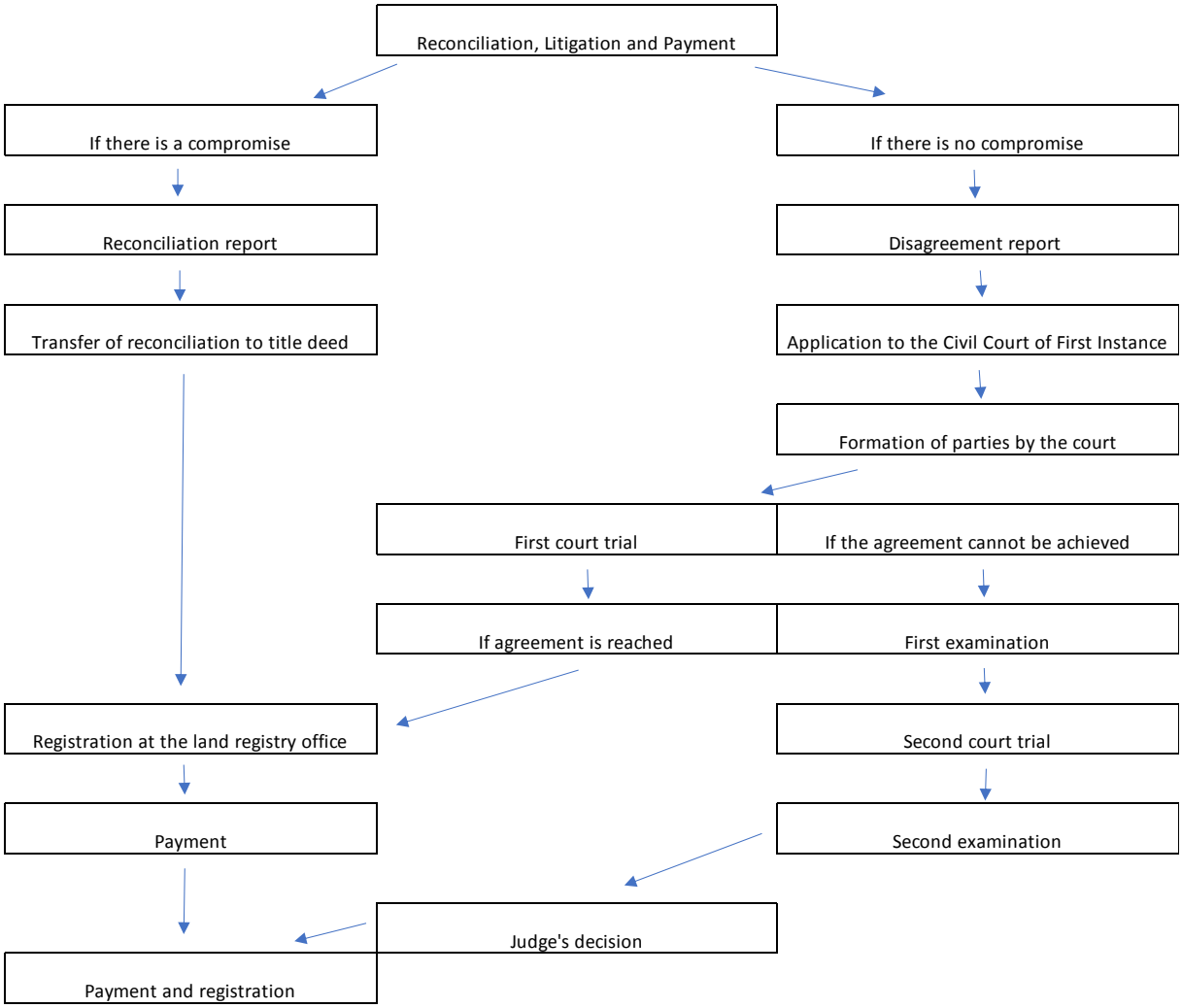


Figure 5.2. Reconciliation, Litigation and Payment Process

5.2. Identification of Rights Holders

Rights holders affected by the Project's land acquisition activities through ownership expropriation, permanent and temporary easement are;

- Landowners with a title deed and land users
- Land users whose rights can be legalized (Those who have the right of possession over the land),
- Owners and users of immovable properties (including unauthorized users),
- Crop owners with a land title deed,
- Official tenants (on privately-owned and public lands),
- Crop owners without any land title deed (including unauthorized users),
- Female farmers,
- Vulnerable groups,
- Animal owners grazing their animals in project-impacted lands,
- PAPs suffering damages during the construction phase of the project.

Payments can be made to those who prove their ownership through legal documents or courts. In the expropriation of lands that are registered in the name of another person, are abandoned and/or are not acquired by their respective possessors, the minimum supply cost of the buildings is paid to their possessors while the price of trees appraised within the framework of Article 11 of the Expropriation Law will be paid to their possessors. However, these prices will be compensated in accordance with the entitlement matrix of the current RAP.

The aforementioned individuals and groups will be able to benefit from the supports listed in the entitlement matrix.

5.3. Responsibilities of DSI for the implementation of RAP

Subjects for which DSI is responsible under RAP are summarized below.

- Performing land acquisition procedures through ownership expropriation, temporary and permanent easement,
- Conducting valuation procedures for all expropriation processes and affected assets
- Following and reporting on the land acquisition process,
- Establishing and operating a grievance mechanism related to the project and closing complaints and demands within 30 days,
- Organizing information meetings for all relevant stakeholders including vulnerable groups and holding an announcement and information meeting for RAP,
- Preparing and distributing leaflets, banners and posters that will introduce the rights defined in the RAP, eligible persons for the rights, the land acquisition process and the project-related grievance mechanism,
- Gathering the information (land users, vulnerable groups, the levels of impact, etc.) required for updating the RAP and updating it when necessary,
- Executing and reporting on the RAP monitoring and evaluation studies,
- Identifying and supervising the contractor that will execute construction activities,
- Informing the contractor about the international standards that must be complied with,
- Following the complaints to be received regarding the contractor and ensuring that any incurring loss out of its negligence is compensated by the contractor,
- Implementing and monitoring the ESMP for the construction period.

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

Table 5.1. Responsibilities of DSI Units

Relevant Institution	Unit/Department	Terms of Reference
DSI	Department of Real Estate and Expropriation	Supplying allocations for the places where expropriation is required, approving sub-contractors and coordination with the Regional Directorate, - Preparing and implementing the RAP - Submitting the RAP to the WB for preliminary assessment - Conducting the quality control and review of the RAP - Ensuring that regular monitoring activities are

		performed for the implementation of RAPs - Following and coordinating the preparation of RAP Reports. Coordinating the following activities to be performed by the Regional Directorate; - Executing land acquisition activities - Attending the information meetings - Following the land acquisition process - Following and closing complaints about land acquisition - Making payments to PAPs regarding expropriation and easement procedures - Preparing expropriation plans for the project-impacted parcels other than those covered by the first section - Setting the expropriation price as per Article 8 of the Expropriation Law and coordinating interviews with PAPs
DSI	Department of Operation and Maintenance	Executing the project
DSI	Department of Survey Planning and Allocations	Implementing, monitoring and reporting on the ESMP by ensuring coordination.
DSI	Department of Project and Construction	- Publishing the RAP on DSI's official website - Summarizing the environmental and social issues related to the project implementation to the WB via regular progress reports - Coordinating the WB inspections on the environmental and social protection policies of the project implementation and establishing contact in this regard Preparation of the modernization project. Informing the Department of Real Estate and Expropriation concerning the expropriation of the areas required based on the prepared projects or the acquisition thereof for land consolidation.
DSI	4th Regional Directorate of Konya	- Implementing and following the RAP - Executing land acquisition activities, - Attending the information meetings, - Following and closing complaints about land acquisition, - Making payments to PAPs regarding expropriation and easement procedures, - Preparing expropriation plans for the project-impacted parcels other than those covered by the

		first section, - Setting the expropriation price as per Article 8 of the Expropriation Law and conducting interviews with PAPs - Preparing the brochures and other information documents required for informing the public and the relevant stakeholders - Appointing a Public Relations and Environment Specialist who will work in the district to manage the impacts of the project, the construction plan, the rights and entitlements of the PAPs and the grievance mechanism at local level - Conducting inspections regarding the implementation of the RAP by the construction contractor, making recommendations and deciding whether additional measures are required or not - Ensuring that the contractor remedies complaints and damages arising therefrom - Operating the Grievance Mechanism - Coordinating with local and regional stakeholders to be collaborated, developing and implementing collaborations - Supporting DSI field staff and WUA representatives for the preparation of gender sensitivity training - Identifying the irrigation program to be introduced during construction works together with Water Users Associations - Ensuring that lands are restored and handed over to their respective rights holders Implementing, monitoring and reporting on the RAP and ESMP. - Providing up-to-date information to the Department of Real Estate and Expropriation and the Department of Operation and Maintenance about the existing irrigation systems and social structure by ensuring coordination with the relevant Water Users Association.
DSI	DSI Ereğli Section Directorate	- Implementing the RAP - Holding public consultation meetings - Distributing the brochures and other information documents required for informing the public and the relevant stakeholders - Informing the employees of the Water Users Association about the Grievance Mechanism - Operating the Grievance Mechanism

		- Drawing up land entry and exit protocols - Identifying PAPs in the field (User, level of impact, etc.) - Regularly informing the Water Users Association and PAPs about developments on the project - Following the canalettes, etc. to be removed under the Project with Ereğli Left Bank Water Users Association
DSI	Ereğli Left Bank Water Users Association	- Informing PAPs about the project - Creating a database regarding the Grievance Mechanism, conveying incoming complaints to DSI - Distributing the brochures and other information documents required for informing the public and the relevant stakeholders - Supplying water to PAPs and making the relevant planning during the construction period and informing PAPs - Examine the damages that may arise from the contractor on site and reporting them to DSI - Following the canalettes to be removed under the Project

5.4. Studies of Other Relevant Institutions in the Region and Cooperation Opportunities

a. Ivriz Development Project Working Committee (IWC)

In order to develop measures for the irrigation project by analyzing potential problems during the construction and operation periods, a working committee composed of the representatives from the relevant public institutions was established under the coordination of the Provincial Directorate of Agriculture and Forestry. Name of the Committee is Ivriz Development Project Committee and its approval was obtained from the Governorship in September 2018.

The IWC aims to ensure the preparation of an Ivriz Development Action Plan (IDAP) that can be implemented by the relevant stakeholders within the IWC for the identification of potential problematic areas regarding irrigation during the construction and operation periods in an inclusive way (area, crop pattern, the number of growers, soil structure, the status of machinery and equipment, etc.) and for the development of suggestions for solutions.

The activities carried out by the IWC until now are:

- Consultations were presided by the District Governor in Ereğli District on October 3, 2017 in an environment where all public institutions, farmer associations and NGO representatives were present so as to identify the development strategy for Ivriz irrigation scheme.
- Face-to-face meetings were held with the Director of Operation and Maintenance Section of the 4th Regional Directorate of DSI and its technical team, the Director of the Soil, Water and Desertification Control Research Institute, the Secretary General of Mevlana Development Agency, the Director of Bahri DAĞDAŞ International Agricultural Research Institute and the Head of Konya Plain Project Regional Development Administration.

- The IWC held its first meeting in Ereğli district on January 10, 2018, finalized its terms of reference/plan and organized its first workshop.
- In line with the decisions issued during the meeting held on January 10, 2018, opinions were received for Ivriz Development Project at Konya Provincial Directorate of Agriculture and Forestry on March 5, 2018 with the participation of the staff of the directorate.
- Opinions were received for Ivriz Development Project on March 29, 2018 at Ereğli District Directorate of Agriculture and Forestry with the participation of the staff of the directorate.

IDAP preparation process is going on.

The list of IWC member organizations is shown below:

1. Selçuk University Faculty of Agriculture
2. Necmettin Erbakan University Faculty of Engineering and Natural Sciences
3. Food and Agriculture University
4. Konya Plain Project Regional Development Administration
5. Bahri DAĞDAŞ International Agricultural Research Institute
6. Soil, Water and Desertification Control Research Institute
7. MEVKA
8. 4th Regional Directorate of DSI
9. Metropolitan Municipality
10. Ereğli District Directorate of Agriculture and Forestry
11. Ereğli Chamber of Agriculture
12. Personnel from the Right Bank Water Users Association
13. Left Bank and Yıldızlı Water Users Association
14. Akhüyük Çiller Water Users Association
15. Ereğli Chamber of Commerce
16. Ereğli Commodity Exchange
17. Ereğli Sugar Beet Growers Cooperative
18. Ereğli Agricultural Credit Cooperative
19. Ereğli 43rd Section of DSI
20. Ereğli Municipality
21. Ereğli Ziraat Bank
22. Ereğli Cattle Breeders' Association
23. Ereğli Milk Association
24. Ereğli Forest Nursery Section

b. Konya Plain Development Administration

Project activities and expected outcomes directly affect Konya Plain Project due to various benefits of the project such as the prevention of excessive irrigation, the effective use of water resources, a rise in agricultural production and productivity, an increase in irrigable areas, etc. Investment activities are monitored by Konya Plain Project as it is an investment made within the area of Konya Plain Project. Konya Plain Project has determined fruit growing, ovine breeding and agricultural projects as the axes of development for Ereğli district. The project affects fruit growing and agriculture out of these areas of development.

There are various grant and support schemes implemented by Konya Plain Project. Applications are received through district directorates of agriculture. In addition, it organizes training events on irrigated agriculture under the Agricultural Extension and Training Program (TEYAP).

Potential areas of cooperation include informing PAPs about support and grant schemes and organizing training events on the application of eligible applicants to the relevant schemes, irrigated agriculture and water use under TEYAP and appropriate crop pattern.

c. Mevlana Development Agency (MEVKA)

2013-2023 Strategic Development Report of the Ereğli District prepared by MEVKA covers the aims of preventing water losses by transferring Ivriz dam water to the underground and by switching to the drip and sprinkler irrigation system, using irrigation water more efficiently in agriculture and immediately introducing the project for transferring Ivriz Dam water to the underground.

In addition, various grant schemes are launched by MEVKA every year. Social Support Programme (SODES) can be introduced for vulnerable groups. Apart from this, eligible applicant PAPs can benefit from other grant schemes to be launched by MEVKA.

d. Konya Metropolitan Municipality (KMM)

KMM offers agricultural services on rural development. Name of the department offering services on rural development and agricultural services is the Department of Agricultural Services and Coordination. Affiliated sections are Mukhtar Affairs, Agricultural Supports and Agricultural Education. KMM offers 50%-grant schemes regarding sour cherry, apple and cherry growing. It also works on agricultural training. It is possible for PAPs that grow fruits and want to get information on irrigated agriculture to benefit from the supports of KMM.

e. Provincial and District Directorates of Agriculture and Forestry

Within the scope of the project for the development of crop production, the Provincial Directorate of Agriculture and Forestry sets up demonstration orchards for drupes and offers supports on female farmers, agricultural extension and training.

Agricultural irrigation support (supporting individual irrigation systems) is offered by the Ministry of Agriculture to eligible applicants every year as 50% grants.

In addition, eligible applicants are offered agricultural and livestock support by the Ministry of Agriculture within the scope of the Young Farmer Support Scheme.

Currently, 29 agricultural engineers, 24 veterinarians and 4 veterinary technicians are working at Ereğli District Directorate of Agriculture and Forestry. Due to the size of its staff, the District Directorate of Agriculture has a capacity of offering consultancy services to PAPs.

Apart from agricultural consultancy, various demonstration activities are carried out by the District Directorate for new crops. Grown in the last two years, Japanese pear can be given as an example for this activity.

f. Turkish Employment Agency (İŞKUR)

Public work programs and entrepreneurship training events are offered by Konya İŞKUR Directorate. It is possible to contribute to the support of interested PAPs by informing them about İŞKUR programs.

In addition, it is possible that unemployed PAPs, especially those in the vulnerable group, can be employed through İŞKUR.

g. Social Assistance and Solidarity Fund (SYDV)

SYDV provides various in-kind and cash supports for vulnerable groups. Apart from the aforementioned supports, there are "Income-Generating Project" supports offered to poor individuals or households to set up business that would bring about livelihoods for them and to sustain such businesses for a long time. These supports have an upper limit of TRY 15,000 for

individual projects subject to a long-term repayment plan, TRY 50,000 for sheep breeding and TRY 150,000 for dairy cattle breeding in group projects.

PAPs that meet the criteria required by SYDV for application and are covered by vulnerable groups can benefit from SYDV supports.

5.5. Mitigation Measures

According to the field study, there is no PAP losing 20% of his/her parcel due to expropriation. Sizes of the expropriated privately-owned parcels vary between 0.7 and 41 m².

There are 3 privately-owned parcels 20% and more of which are affected by permanent easement. During the field study conducted by HAPA firm, it was determined that these parcels were empty lands and were not used for agricultural purposes. Sizes of these parcels vary between 307 and 2,123 m².

There are 6 privately-owned parcels 20% and more of which are affected by temporary easement. Sizes of these parcels vary between 117 and 1,168 m².

In addition, the field study found out **there was no PAP whose total lands (used and/or owned) were affected by 20% and higher.** Therefore, there will be no need to implement mitigation measures in these areas.

For this reason, no agriculture and livestock production programme has been designed for income-generating mitigation measures under the RAP. However, if different findings result from the studies to be carried out by DSI depending on the update of the RAP, it may be necessary to develop income-generating programmes.

Although the mitigation measures proposed under the RAP are specified in detail in the entitlement matrix; these measures can be summarized as follows:

The following measures can be summarized regarding land and immovable property acquisition:

- Identification of the prices of lands and immovable properties within registered lands covering the replacement value thereof
- Payment of crop and tree values
- Ensuring that land users who have the right to customary use in non-registered lands obtain a payment corresponding to their customary right and the calculation of lands and immovable properties over the replacement value and the payment of crops and tree prices
- Payment of a compensation as an expropriation price that will cover the replacement value
- Payment of permanent and temporary easement fees for immovable properties
- Identification of land users and the payment of crop values to users or official tenants.
- Not entering into the lands without Warehousesiting the expropriation values to the bank
- Restoration and delivery of lands at the end of the 3-year temporary easement period.

These measures can be summarized as follows regarding livelihoods and vulnerable groups:

- Organization of training events on irrigated agriculture, crop pattern, smart agricultural practices etc. by the relevant institutions,
- Organization of information events on the agriculture and livestock production grant schemes introduced by institutions such as the Ministry of Agriculture and Forestry, Konya Plain Project and MEVKA,
- Organization of information events for vulnerable groups regarding İŞKUR and SYDV supports,
- Organization of various demonstrations for water users,

- Removal of concrete water channels and the opening of these areas to agriculture,
- Creation of passageways for the access of animals to pasture lands during construction activities,
- Compensation by the firm the damages that may be caused by the contractor during construction.

5.6. 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.

The cut-off date for the first section is 12.12.2019, the date when census of the land and the inventory of assets was delivered to DSI.

The cut-off date for the second section will be based on census completion prior to expropriation. The second cut-off date will be announced before census for asset inventory commences, and completion of census date will be the cut-off date for the second section..

5.7. Entitlement Matrix

The entitlement matrix created within the framework of the relevant studies is shown below. If necessary, the matrix will be updated depending on the impacts to be identified and the measures to be taken while updating the RAP.

Table 5.2. Entitlement Matrix

Subject of Replaced Entitlement/Impact Subject to Compensation	Project-Impacted Persons/Communities	Method of Compensation	Implementing Agency	Additional Provisions
Land				
1. Permanent ownership acquisition	1.1. Registered Privately-Owned Landowners	• A cash compensation at replacement value for immovable property • A Land Entry Protocol will be prepared for the parcels, whose owners can be reached, and which are requested, and land entries will be made accordingly. The protocol will be announced at mukhtar's offices. • Land entry will not be proceed before the expropriation fee is deposited into the bank accounts. • Information will be provided on land acquisition, expropriation process, legal rights, valuation and appraisal. • Unpaid crop prices, if any, will be paid before entering the land.	DSI	The land is acquired permanently, and its ownership is registered in the name of DSI. Expropriation actions and procedures will be carried out in accordance with the Turkish legislation. Lands and fixed assets are compensated atreplacement cost (to be valued on the date of commencement of the project) and in a way to allow Affected Persons to acquire equivalent assets. Lands are valued by the experts designated by DSI in line with the procedures stipulated in laws. Lands are value through the capitalization of annual net income. "Konya Ereğli Ivriz Left Bank Irrigation Renovation Project Land Market Research Report" is taken into consideration in determining the compensation fees to be paid for the lands. Legal expenses incurred as a result of the agreements concluded with regard to expropriation procedures as per Article 8 of the Expropriation Law will be covered by DSI. PAPs will be informed about land acquisition. PAPs will be informed about their legal rights regarding the impacts during the construction process as well as the introduced grievance mechanism. If additional land acquisition is required, the rules specified in the RAP apply.
	1.2. Land users whose rights can be legalized (Users entitled to customary right over treasury lands, the lands not	• The legal process will be operated for the lands relevant to customary right as per the provisions of the Expropriation Law. In case of temporary losses in such lands, the following compensation method will be valid: • A cash compensation that will be sufficient for the acquisition of an equivalent immovable property will be extended • A Land Entry Protocol will be prepared for the parcels, whose owners can be reached and which are requested, and land entries will be made accordingly. The protocol will be announced at mukhtar's offices. • Land entry will not be proceed before the	DSI	

	subject registration and the lands owned by institutions)	expropriation fee is deposited into the bank accounts. • Information will be provided on land acquisition, expropriation process, legal rights, valuation and appraisal. • Unpaid crop prices, if any, are paid before entering the land.		
2. Acquisition of permanent easement	2.1. Registered Privately-Owned Landowners/Users	• The easement price prescribed by the Law regarding lands will be compensated to registered owners and land users. • A Land Entry Protocol will be prepared for the parcels, whose owners can be reached and which are requested, and land entries will be made accordingly. The protocol will be announced at mukhtar's offices. • Land entry will not proceedbefore easement fees are paid. • A Land Exit Protocol will be prepared and implemented for the owners or users who file such a request or are accessible for the approval of the landowner and/or user. The protocol will be executed with the signatures of DSI, the Contractor and two members from the village council. • Unpaid crop prices, if any, are paid before entering the land.	DSI	DSI is entitled to use the land during construction. However, its ownership continues to be registered in the name of the landowner/owners. When the construction is complete, the land is handed over to the landowner. Landowners and/or users cannot build any structure or fixture or plant any tree over the pipeline. The land in question will be made ready for use before it is handed over to its respective owner. PAPs will be informed about land acquisition.
	2.2. Land users whose rights can be legalized (for example, those who have the	It will be ensured that land users who have the right of possession will receive the title deed of the land in question. In case of temporary losses in such lands whose title deed is acquired, the following compensation method will be valid: • The easement price will be compensated for the land as per Article 19 of the Expropriation Law. • A Land Entry Protocol will be prepared for the parcels, whose owners can be reached and which are requested, and land entries will be made	DSI	The land in question will be made ready for use before it is handed over to its respective owner.

	right of possession over the land)	accordingly. The protocol will be announced at mukhtar's offices. • Land entry will not proceed before easement fees regarding the right of possession are paid. • A Land Exit Protocol will be prepared and implemented for the owners or users who file such a request or are accessible for the approval of the landowner and/or user. The protocol will be executed with the signatures of DSI, the Contractor and two members from the village council. • Unpaid crop prices, if any, are paid before entering the land.		
3. Temporary land loss (establishment of easement and land restrictions) (corridor)	3.1. Registered Privately-Owned Landowners/Users	• The easement price prescribed by the Law regarding lands will be compensated. • A Land Entry Protocol will be prepared for the parcels, whose owners can be reached and which are requested, and land entries will be made accordingly. The protocol will be announced at mukhtar's offices. • Land entry will not proceed before easement fees are paid. • A Land Exit Protocol will be prepared and implemented for the owners or users who file such a request or are accessible for the approval of the landowner and/or user. The protocol will be executed with the signatures of DSI, the Contractor and two members from the village council. • Unpaid crop prices, if any, are paid before entering the land.	DSI	DSI is entitled to use the land during construction. However, its ownership continues to be registered in the name of the landowner/owners. When the construction is complete, the land is handed over to the landowner. Landowners/users can use their lands following construction without any restriction of use. The land in question will be made ready for use before it is handed over to its respective owner. PAPs will be informed about land acquisition.
	3.2. Land users whose rights can be	• The easement price will be compensated for the land as per Article 19 of the Expropriation Law. • A Land Entry Protocol will be prepared for the parcels, whose owners can be reached and which are requested, and land entries will be made	DSI	The land in question will be made ready for use before it is handed over to its respective owner.

	legalized (for example, those who have the right of possession over the land)	accordingly. The protocol will be announced at mukhtar's offices. • Land entry will not proceed before easement fees regarding the right of possession are paid. • A Land Exit Protocol will be prepared and implemented for the owners or users who file such a request or are accessible for the approval of the landowner and/or user. The protocol will be executed with the signatures of DSI, the Contractor and two members from the village council. • Unpaid crop prices, if any, are paid before entering the land.		
4. Right to Temporary Use (Temporary facilities, camps, construction sites, stockpiling areas, etc.)	4.1. Registered privately-owned parcels and/or public lands	• Lands are rented under the terms and prices agreed upon with the respective landowners. Upon the expiry of the contract concluded by the contractor, the lands are restored and handed over to their owners. • Lands are used in accordance with the conditions stipulated in the rental contracts concluded with their respective owners and upon the completion of the work, they are restored and handed over to their owners. • An equitable rental fee will be paid by the contractor for temporary rental arrangements and the contractor will get the opinion of DSI in this matter.	DSI and the Contractor	The land in question will be made ready for use before it is handed over to its respective owner. Records of such temporary rental contracts will be kept by DSI.
Structures/Trees and Cultivated Crops				
5. Non-residential buildings (Stables, irrigation structures, water wells, fences, coops, etc.)	5.1. Owners and users of immovable properties (including unauthoriz	• A compensation for the replacement cost will be paid as per the legislation. • A compensation will be paid in a way to cover the replacement cost if unauthorized users prove their right of possession as per Article 19 of the Expropriation Law,	DSI	Excavation or remaining materials will be given to rights holders following the demolition of buildings if requested by the right holders.

	ed users)			
6. Trees	6.1. Owners and users of immovable properties	• A compensation will be paid for trees of economic value over the net present value (by considering the species, age, economic life, etc. of trees). • The ownership of affected persons for affected trees in common lands (treasury, etc.) will be identified with the support of DSI and they will be compensated. • Tree prices will be paid to their possessors as per Article 19 of the Expropriation Law.	DSI	Cut-down trees will be given to their rights holders if requested so.
7. Cultivated crops	7.1. Crop owners with a land title deed	• They will be compensated in cash over the sales price acquired by growers at the time of harvest by considering the costs associated with expected yield.	DSI	Where applicable, it will be necessary to wait until the time of harvest for preventing crop losses.
	7.2. Official tenants (on privately-owned and public lands)	• Official tenants of lands will be compensated in cash over the sales price acquired by growers at the time of harvest by considering the costs associated with expected yield.	DSI	Where applicable, it will be necessary to wait until the time of harvest for preventing crop losses.
	7.3. Crop owners without any land title deed (including unauthorized users)	• They will be compensated in cash over the sales price acquired by growers at the time of harvest by considering the costs associated with expected yield. Ownerships will be determined with the support of DSI and compensated.	DSI	Where applicable, it will be necessary to wait until the time of harvest for preventing crop losses.
Livelihoods, Vulnerable Groups, Quality of Life				

8. Land-based livelihood losses	8.1. Landowners (who lost more than 20% of their lands) 8.2. Female farmers 8.3. Vulnerable communities (the elderly, women, seasonal workers) 8.4. All other rights holders and the relevant local stakeholders	DSI will offer one or more of the opportunities listed below to restore livelihoods: • It will provide information on the agriculture and livestock production supports that can be offered by institutions. • Information, capacity building, agricultural consultancy and training services will be offered on irrigated agriculture. • Water users will be informed about smart irrigation systems/smart farming practices. • It will be ensured that female farmers and vulnerable groups benefit from the services of the WUA offered with DSI (on-farm water management) and the Ministry of Agriculture and Forestry such as agricultural consultancy/training. • During the construction period, water users will be able to benefit from the irrigation service of the WUA. • Open reinforced concrete canals that will become dysfunctional during the construction period will be removed. • Information will be provided regarding the grant schemes for supporting individual irrigation systems under rural development supports and assistance will be offered in relation to project preparation. • The water valves to be provided to users within	DSI Institutions to Cooperate (ITC) (Provincial-District Directorate of Agriculture and Forestry, Konya MM, Konya Plain Project Administration, Ivriz Development Project Working Committee (IWC), SYDV, İŞKUR, Water Users Association Contractor	During the modernization of irrigation systems, DSI primarily chose to make use of public lands for the permanent land acquisition needs of the projects. Wherever possible, permanent land acquisition needs will be assessed as part of the 10% development readjustment share deduction subject to land consolidation and expropriation will be avoided. Additional consultations will be held with vulnerable communities regarding their rights concerning livelihood losses. PAPs will be informed about their legal rights regarding the impacts during the construction process as well as the introduced grievance mechanism. If appropriate, DSI's IFSIF practice will allow the collection of gender-disaggregated data. Cooperation will be established with the relevant institutions (the Provincial/District Directorate of Agriculture and Forestry, the Metropolitan Municipality's Departments of Agricultural Services and Coordination and Agricultural Supports and Training, Konya Plain Project Administration, the Development Agency, the IWC). Activities will be organized and training events will be held by the Ministry of Agriculture and

	the project will be placed in common use areas as much as possible, and it will be avoided to place valves in privately-owned fields as much as possible. If deemed necessary, changes will be made concerning valve locations. • The area to be made available for irrigation and irrigated agriculture will be increased. • An irrigation programme will be prepared for farmers. Demonstration programmes will be developed for pilot farmers by the District Directorate of Agriculture and Forestry. • DSI guarantees that contractors will prioritize unauthorized users and/or the families of vulnerable communities with regard to the need for labor force regarding potential temporary or permanent job opportunities associated with the project. • DSI guarantees that contractors will prioritize the procurement of services and goods from local suppliers. • Support will be offered to vulnerable communities and PAPs on SYDV and İŞKUR programmes. • Vulnerable communities will be informed about the project.	Forestry in order to raise awareness of growers and water users on subjects such as the selection of appropriate irrigation methods, the planning of irrigation time, the correct implementation of crop rotation, water saving, modern irrigation methods, the reduction of water losses, water harvesting and plant pattern. Training activities will be carried out in a planned and continuous manner by the Ministry of Agriculture and Forestry. Efficiency of the training events will be annually evaluated by the Ministry of Agriculture and Forestry, and a certificate or a document of attendance will be issued to water users and growers. Agricultural extension training will be offered to interested water users within the scope of Konya Plain Project TEYAP.

9. Restriction of access to livelihoods due to the lack of any passageway for animals and persons	9.1. Farmers, animal owners	• During the construction period, passageways will be created to provide access to grazing areas and water resources for bovine and ovine animals. • Upon request, troughs and/or water pools will be created for animals by Municipalities where they can meet their drinking water needs. • Information will be shared on the periods of access restriction and alternatives in a timely manner prior to such periods.	DSI, Municipality and Contractor	Complaints and requests from PAPs on this issue will be recorded and they will be informed about the practices to be introduced and the measures taken.
10a. Damage to buildings, roads, houses and crops during construction	10.1 All other PAPs	• In case of losses and damages caused by the contractor, the construction contractor will make the investigation and evaluation required for compensating and remedying the losses incurred. In cases where losses and damages cannot be remedied, the damaged buildings will be compensated by the contractor in accordance with the RAP. • In case of encroachments from the corridor other than technical necessities during the construction process, the incurred damages will be covered by the contractor in an equitable way. In such cases, lands will be left in a usable condition.	DSI and the Contractor	PAPs will be informed about their legal rights regarding the impacts during the construction process as well as the introduced grievance mechanism. DSI will appoint a Public Relations Specialist (or specialists) to disseminate information about the GM. Complaints will be handled at four levels within the scope of the project (Settlements, the Provincial Directorate, Regional and National level). Local institutions and stakeholders will be regularly informed about prospective activities. The contract to be signed with the contractor will include provisions as to the effect that the damages caused by the firm will be eliminated.
10b. Damage to infrastructure and superstructure during construction		• Damage to the existing infrastructures and superstructures (telecommunication lines, bridges, high-voltage lines, irrigation systems, etc.) will be avoided as much as possible. Apart from technical necessities, damages will be compensated by the contractor in accordance with the RAP upon the approval of DSI. • The relevant institutions will be regularly informed about the project route within the scope of stakeholder engagement.	DSI and the Contractor	

11. Protection of the quality of life and public health during construction	11.1 PAPs	• ESMP measures will be implemented for the construction period.	DSI and the Contractor	The measures specified in the ESMP will be implemented and monitored (Grievance mechanism, dust, noise, traffic, waste management, hazardous waste, etc.).

6. Method of Valuation

The method of valuation proposed for affected assets is provided in detail in the Land Market Research report drawn up by HAPA firm.

6.1. Valuation in Lands

Immovable properties to be expropriated are valued according to the capitalization of income by considering their market values and using the capitalization ratio to be calculated. Lands to be expropriated in Turkey are valued based on the criteria set in Article 11 of the Expropriation Lay and by considering all factors that will affect the value of immovable properties. So much so that valuation is performed through a reasoned valuation report based on the immovable property's:

a. Type and kind,

b. Area,

c. All qualities and elements which may affect its value and separate value of each element,

d. Tax return, if any,

e. Valuations performed by public authorities as of the date of expropriation,

f. As for lands, net revenue to be generated by immovable property and resource depending on its location and conditions and if it is used as it is,

g. As for plots, sales price when compared to similar general sales prior to the date of expropriation,

h. As for buildings, official unit prices and construction cost calculations,

ı. Other objective criteria which may affect the valuation.

Hence, 4 important criteria are used in calculating the expropriation value of an immovable property.

A. Net income: A land is affected by many factors such as dry or irrigated agriculture, slope, crop productivity and crop sales price.

B. Capitalization ratio: It is calculated by dividing the average net income of the land by the actual sales prices (market values). Capitalization ratio is affected by many factors.

6.2. Valuation in Plots

Plots can be valued over 3 different criteria such as market price, conversion price and complementary value. It is compulsory by law to perform valuation as per the criterion of market price as regards the valuation of plots for expropriation.

In practice, a plot is usually valued through direct comparison with similar plots whose actual selling price is known. Therefore, it is necessary to know the actual selling prices of plots that are similar to the valued plot in terms of various characteristics and to calculate the average m² price over these prices.

6.3. Valuation of Buildings on Lands and Plots

If there is a building on the areas to be expropriated, first of all, the square meters, classes and ages of these buildings are identified. The building unit prices annually announced by the Ministry of Environment and Urbanization are taken into consideration while unit price analyses are considered for the specially constructed buildings with no unit price and the building costs as of the time of expropriation are identified. Depreciations set by the class and age of buildings in Amended Article 23 of the By-Law on the Valuation of Tax Values as a Basis for Real Estate Tax as enforced through the Resolution of the Council of Ministers and published in the Official Gazette of December 2, 1982 are deducted from this building value and its expropriation price is calculated based on the cost

criterion. In addition, the lack or excess of some elements of the building decreases or increases the unit square meter values for the buildings of the same class. Even a change of the quality of the materials used in buildings with the same properties changes the value of the building. In this case, what needs to be done is to calculate the costs of deficiencies or excesses of the building with an available inventory and deduct them from the building value or add them to the building value.

Within the scope of the RAP, a compensation fee will be paid to cover the full replacement cost for buildings. In this project, there is no building (residential, houses, etc.) that may be subject to depreciation according to the land identification activities for the first section.

6.4. Debris Value

In the event that the debris is kept by the owner, the calculated debris price must be deducted from the total price. However, the costs of demolition and haulage must also be calculated and paid to the owner.

6.5. Precedent Value Comparison for Easement

In order to calculate the price of easement to be established over a plot, the selling prices of the plots that will set a precedent for the said plot are identified. Then, an analysis is performed as to the prospective value of the entire plot following the establishment of easement and the difference between these two values will be the easement price.

When calculating the easement price for lands, the difference between the values of the immovable property before and after easement to be calculated based on the selling prices of precedent immovable properties prior to the date of expropriation will be the easement price.

When calculating the post-easement immovable property for plots, it will be necessary to consider the restrictions imposed on the use of the immovable property (whether or not to allow construction and, if yes, what will be the upper floor limit and the restrictions on green spaces must be identified). In the establishment of easement, the valuation commission and the expert must determine the following matters.

1. Value of the land expropriated due to the passage of watercourse, high-voltage line, natural gas and oil pipeline over or under the land,
2. Value of the damage incurred due to this transition or partial utilization.

The expropriated land is valued according to the methods used in full expropriation. The loss suffered by the landowner is calculated according to the net income method. In this respect, the land's pre and post-easement values are calculated. The difference between them gives the land's easement price.

The following criteria will be considered for determining the loss of value due to easement for the immovable properties over which easement is established:

- Area of the immovable property,
- Geometric condition of the immovable property,
- Kind of the immovable property (such as plot, land and building)
- Type of use for the immovable property (type of use if it is a building)
- Direction of the section and immovable property over which easement is established
- Quality of the public service subject to the establishment of easement, etc.

Many factors such as the width of the area over which easement is established, the share of the immovable property within the area, perceived/known health risks, terrorism and accident risks must be taken into consideration. Rate of the loss of value cannot be increased or decreased due to any potential fault in the future depending on the kind of the facility, which is the subject matter of easement. Other potential loses may only be subject to compensation under general provisions.

Easement may be established over orchards or woodlots without any fruit and some or all of the trees may be cut down. In this case, it will be necessary to calculate the easement price based on the criterion of income capitalization. The difference between the price to be calculated depending on the income to be obtained according to the pre-easement land use and the post-easement land price will give the easement price. Price of the cut-down fruit trees is calculated and paid. The calculation is made by also taking into account the level of impact for the bare land.

6.6. Temporary Easement Price

Easement is established for a period of 1-10 years or, in other words, (n) years. If it is temporary easement, then the net income loss to be incurred over the easement area in (n) years is accumulated to the date on which easement is established.

If temporary easement is established, the loss of value is not calculated as if there is permanent easement over the entire immovable property. The incurred loss is calculated by considering the income or rental fee deprived during the easement

6.7. Permanent Easement Price

If the duration of easement is long, it is defined as an indefinite easement such as 49-99 years. The difference between the pre-easement land value and post-easement land value or, in brief, the loss of value concerning the land value is the easement price.

1. Calculating the loss of income to be incurred to due to net income loss (decrease in productivity or increase in costs)
2. Change in the capitalization interest rate
3. Net income loss can be calculated by considering the change in the capitalization interest rate.

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

Easement is calculated by proportioning the difference between the pre-easement net income and the post-easement net income to the capitalization interest rate. While calculating the post-easement net income;

- Kind of the immovable property,
- Its type of use,
- Its size,
- Location of the area over which easement is established,
- Its area,
- Its geometric condition is taken into consideration and the amount of decline in productivity or the change in costs are identified.

Regarding long-term easement arrangements, prices of the parcels cannot exceed 35% of the value of the land affected by easement in terms of the amount of compensation. It cannot exceed 50% for plots. This ratio refers to the maximum amount set by the Court of Cassation as per Turkish laws. There is no change in the ownership of lands and these restrictions disappear when the use of lands comes to an end.

6.8. Calculation of the Loss of Value from Permanent Easement

As per the Expropriation Law and the case-law of the Court of Cassation, the loss of value to be incurred regarding immovable properties due to expropriation is considered as the expropriation price in the establishment of easement and this price is valued by considering the kind of the immovable property (a plot or land), its type of use, size, location of the area over which easement is established, its area, geometric condition and the nature and route of easement.

6.9. Replacement Cost

In line with the legislation of the World Bank, it is mandatory to pay a replacement cost for the persons losing their lands permanently due to the respective public service within the framework of international standards. Items of replacement cost that must be paid to those losing their lands due to expropriation within Ereğli Ivriz Left Bank Irrigation Renovation activities are:

- Charges of buying and selling at the land registry administration,
- Revolving fund fee of the land registry administration,
- Transportation costs.

Pursuant to the land registry legislation in force, each and every one of those who will buy and sell their properties (buyer-seller) at a land registry administration must pay a 2% title deed fee over the selling price declared at the land registry administration. In addition, it is necessary to pay the revolving fund fee set for each district. Furthermore, transportation costs regarding this transaction may be incurred.

In this case, an additional 2.19% replacement cost must be added to the unit expropriation values. Since the replacement cost payment will be covered by the expropriation price, there will be no addition to the price, and the expropriation price to be paid to those losing all or a part of their lands will also include the replacement cost.

6.10. Calculation of the Tree Price

After determining the bare soil value of the land covered with fruit-bearing or fruitless trees, the following formula is used to calculate the price based on the age of each tree.

$$D_{t=} D_0.1/ (1+f)^{n-t} + \sum R$$

In the formula above; D_0, which is the bare soil value of the woodlot land at the beginning of its life, is multiplied by $1/ (1+f)^{n-t}$ and brought to t year. Then, the value of a t-year-old woodlot is calculated by the reduction to today of total net income from n year, the end of economic life, to t year and the addition thereof to the value brought to t year. In the study, the value of a fruit-bearing or fruitless tree of a certain t age is calculated by dividing the difference between D_0 and D_t to the number of trees per decare. In addition to the age of trees, their care and productivity are also taken into consideration for their value.

After the value of a woodlot land of a certain t age is calculated within the study, value of the trees can also be calculated based on their age. Consequently, such value is calculated by dividing the difference between the value of a fruit-bearing tree of a certain t age and that of a fruitless tree of a certain t age to the number of trees per decare. Tree Value = (Dt-D0) / Number of Trees per Decare

7. Consultation and Engagement

OP 4.12 requires preliminary consultation with PAPs within the projects financed by the World Bank. In this context, DSI will hold consultation meetings with the Water Users Associations and local communities that remain within the project's area of influence before the beginning of modernization works and also document these meetings. Overall information on the project will be shared at consultation meetings, including the rationale of the project and its land requirements and impacts, the legal rights of those likely to be affected and the work schedule. Contact information of the project officer, who is assigned to be contacted for questions and problems about land acquisition and other construction impacts, and the hours for access to him/her will be shared with all local stakeholders. The Stakeholder Engagement Plan, which includes different messages to be conveyed during the meetings to be held by DSI with different groups of stakeholders as well as the methods of engagement is provided in this section. DSI will ensure that issues related to land acquisition are addressed during these meetings. Similarly, the Grievance Mechanism to be established by DSI will be open to objections and complaints regarding land acquisition. DSI will try to resolve these feedbacks and complaints as much as possible within the framework of irrigation modernization activities.

DSI will assign a project unit for the project. The project communication officer to be appointed for the project will record the major questions and problems raised at the meetings as well as the steps taken to resolve them. S/he will also proactively explain the issues that are important for the people attending the meetings organized within the scope of the project and endeavor to inform all stakeholders within the project process. During consultation activities, DSI will keep a record of all objections and complaints received and resolved through the Grievance Notification Mechanism and semi-annual monitoring reports.

7.1. Stakeholder Engagement Activities

A public engagement meeting was held in Ereğli Ivriz on July 17, 2018 to introduce the ESMF, RAPF and Ivriz-Ereğli ESMP and to get the opinions of the public thereon. The meeting was held with 305 participants, 96 of whom were women, with the participation of DSI officials, district administration officials, farmers, workers and local people.

Ereğli District Governor and Mayor, District Director of Agriculture and Forestry and Deputy Regional Director attended the meeting from the district administration. On the other hand, the representatives from DSI included, among others, the Director of the Survey and Evaluation Section, the Director of the Irrigation and Drainage Section, a Survey Engineer, an Agricultural Engineer, the Director of the Project and Construction Section, the Director of the Project Section, the Deputy Director of the Operation and Maintenance Section, the Deputy Director of the Real Estate and Expropriation Section and the Director of Ereğli Section. President of Ivriz Water Users Association and the Manager of the Association attended the meeting.

Following the opening speeches of DSI officials, the District Director of Agriculture and Forestry and the Mayor, DSI delivered presentations on overall information about the project, its benefits to farmers and the region, the technical details of the project, sources of financing, land acquisition and consolidation. Participants of the meeting asked questions about land acquisition, consolidation and the relevant technical details.

Questions were asked by the female farmers declaring that they were from Akhüyük and Kargacı settlements as to whether their settlements were located within the land consolidation area and whether all immovable properties would be concentrated in a single center through land consolidation and officials from the administration answered their questions.

In general, the meeting revealed that the need for the project was very high and the engagement and support of the public for the renovation project was high in the evidence of the fact that their complaints and demands concentrated on the lack of irrigation water due to water losses.

7.2. Field Findings on Stakeholder Engagement

The household survey and mukhtar interviews conducted within the field work intended for the RAP included questions to assess the Project's stakeholder engagement practices and grievance and demand mechanism. PAPs and mukhtars were posed a range of questions including main source of information, trusted parties for information sharing, usage of grievance mechanism, and further information about the Project.

During the interviews with the mukhtars of the settlements within the expropriation area, 80% of them stated that they were aware of the irrigation project, but did not have sufficient information, and 20% stated that they had sufficient information about the project. In addition, it was found out that the mukhtars received information about the project mostly from the members of the parliament (28%) followed by the Water Users Association (24%) and the Municipality (16%). The figure below shows details regarding the sources of the information received by the mukhtars about the project.

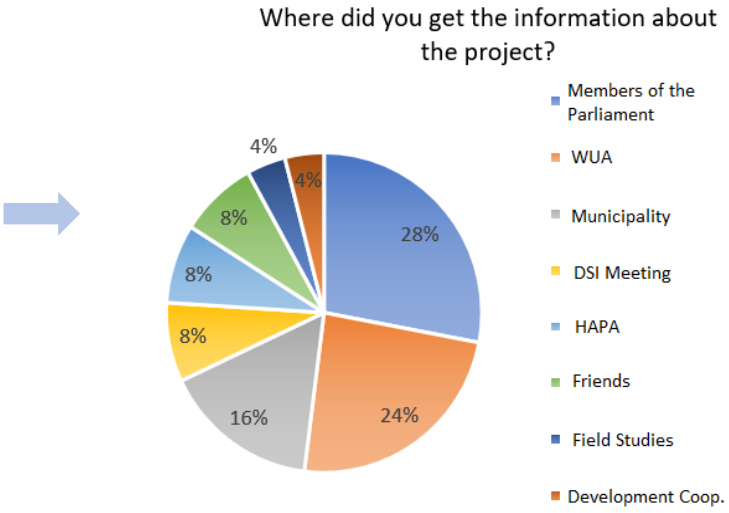


Figure 7.1. PAPs' Channels of Information about the Project

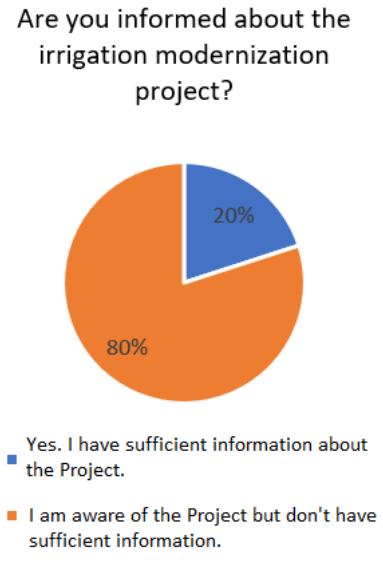


Figure 7.2. PAPs' Information on the Project

Details of the topics that the mukhtars want to know about the project are shown below. 40% of the mukhtars stated that they wanted to be informed as to when the construction activities regarding the project would take place, 16% as to the benefits and harms of the project and 12% as to the location of the new pipeline to be built. The table below shows the topics that the mukhtars wanted to be informed about the project the most.

Table 7.1. Subjects About Which PAPs Would Like to Be Informed

Subject About Which Information is Requested	Number of Responses	%
When Will the Construction Work Begin and End?	10	40%
What Will Be Its Benefits and Harms?	4	16%
Will irrigation be provided while the construction is going on?	3	12%
Where Will the Pipeline Go Through?	2	8%
How will the Expropriation Prices be Calculated?	2	8%
When Will the Expropriation Begin?	2	8%
Will Technical Information be Provided About the Project?	2	8%
Total	25	100%

Source: Socio-Economic Household Survey, 2019

During the interviews with PAPs, 84.6% stated that they were aware of the project, and 15.4% stated that they were not aware of the project. The main source of information for the PAPs about the project is the Water Users Association (26%) followed by mukhtars (14%) and neighbors (13%). While the main responsibility rests with the Water Users Association for informing the stakeholders, it is seen that informing the mukhtars correctly will also affect the provision of information to the PAPs.

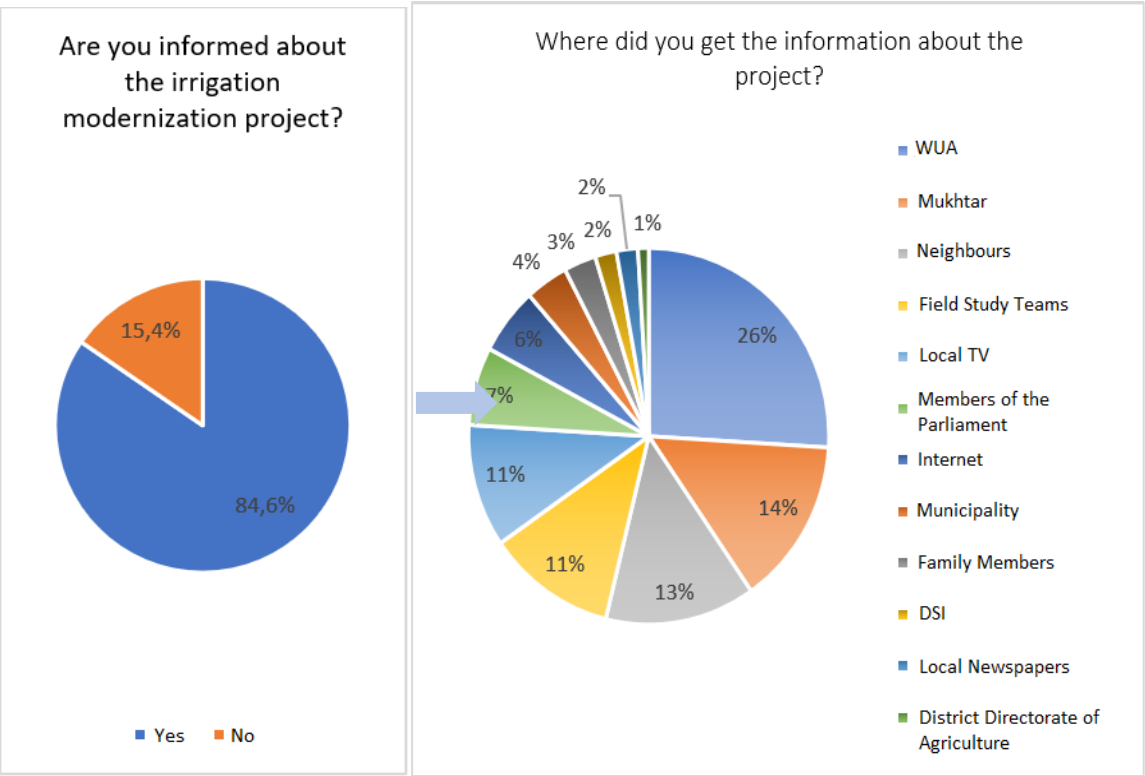


Figure 7.3. PAPs' Awareness of the Project and Sources of Information

Only 9 of the PAPs interviewed stated that they attended the information meeting, and 91.3% declared that they did not attend the information meeting.

Table 7.2. Attendance in the information meeting

Attendance in the information meeting	S	%
Yes	9	8.7%
No	95	91.3%
TOTAL	104	100.0%

Source: Socio-Economic Household Survey, 2019

74% of the PAPs interviewed stated that they did not have sufficient information about the project and 70% wanted to get more information about the project. This underlines the importance of the information activities that the project will carry out within the scope of stakeholder engagement activities.

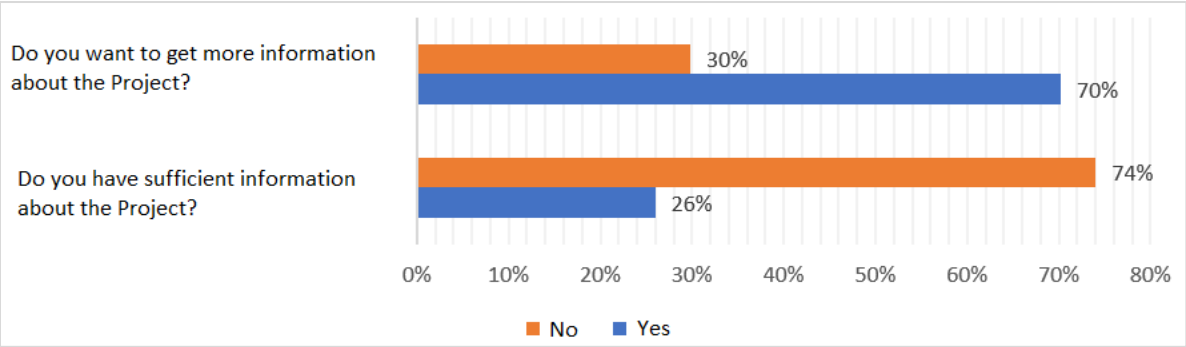


Figure 7.4. PAPs' Level of Information About the Project

In parallel with the breakdown of the topics that the mukhtars want to receive information about the project, the multiple responses provided by the PAPs interviewed show that 42.2% of them want to be informed about the details of the project (benefits, losses, the beginning and completion dates of construction, etc.), 24.4% about the way water will be supplied after the completion of the project and 16.8% about how the expropriation will be performed. The table below shows other subjects that the stakeholders want to be informed about.

Table 7.3. Subjects About Which the Stakeholders Would Like to Be Informed

Subjects about which the stakeholders would like to be informed	Number of Responses	%
Project details (Benefits, losses, the beginning and completion dates of construction, etc.)	68	42.2%
How and how much water will be supplied during the operation phase?	39	24.2%
How will the expropriation be performed?	27	16.8%
How lands will be affected (The area to be affected, valve and pipe locations, land division, route, vegetable gardens and orchards, etc.)	17	10.6%
Will the houses be affected?	3	1.9%
Will the immovable properties (vineyard houses, water wells, etc.) on the parcels be affected?	3	1.9%
Will the existing drip-irrigation equipment be suitable for use in the new system?	2	1.2%
Can a building be constructed over the pipeline? Can a tree be planted?	1	0.6%
How will animals have access to water?	1	0.6%
TOTAL	161	100.0%

Source: Socio-Economic Household Survey, 2019

7.3. Announcement and disclosure process of the project

The RAP wasapproved by the Government of the Republic of Turkey and the World Bank, published on the websites of the World Bank and DSI both in Turkish and English and announced to the stakeholders and PAPs at local level in the second quarter of 2020 prior to implementation. The RAP

was updated in July 2020 in line with the feedbacks received. This section 7.3. was revised and updated according to the results of the consultation and disclosure RAP. Revised version of RAP will be published on the official website of DSI.

After Covid-19 pandemic is over, works related with the second section will be updated and added to this RAP document. Thereafter, DSI will re-publish and disclose the RAP document in line withWB OP 4.12.

The changes to be made to the RAP during the implementation of the Project will be announced to the stakeholders in the same way upon the review and update of this document and other project documents that may be relevant. The flowchart of announcement process of RAP is shown below.

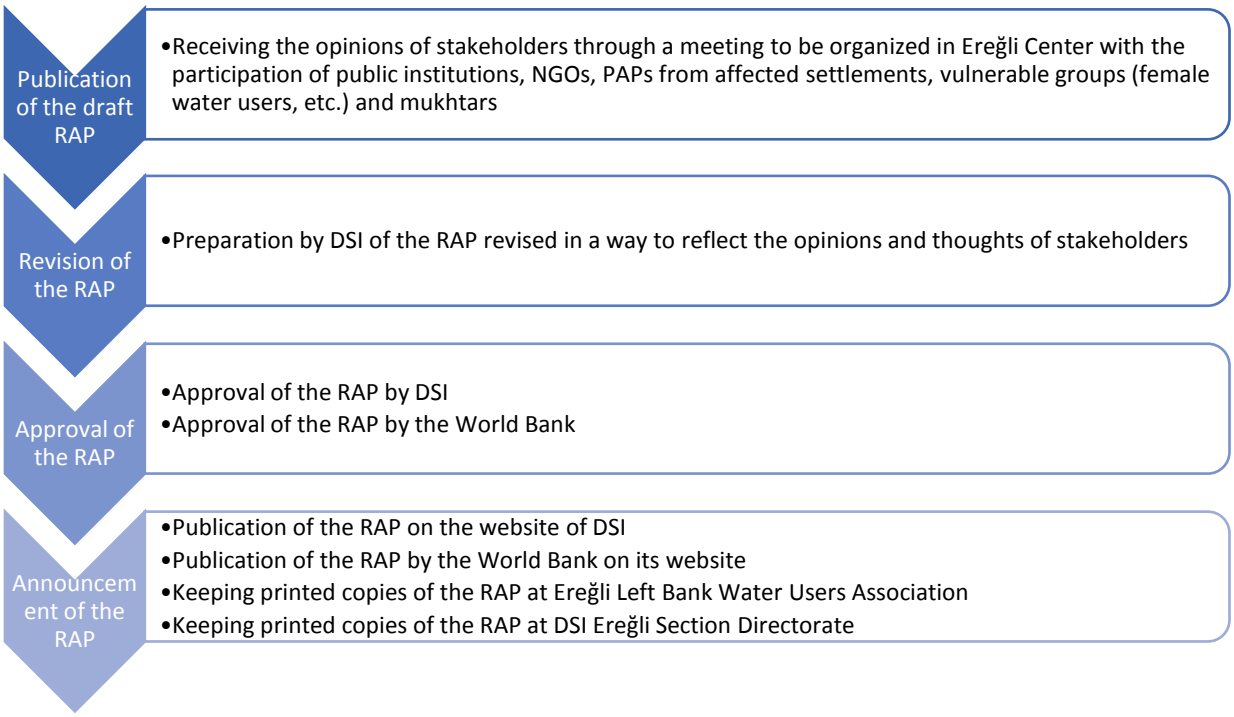


Figure 7.5. RAP Approval and Announcement Process

7.3.1. AEP Announcement, Consultation and Feedback Process

In accordance with the legally defined restrictions for consultation studies that correspond to the Covid-19 pandemic, DSI carried out the consultation process by sharing information about the Project and documents with the stakeholders using online and electronic engagement methods in accordance with the requirements and communication infrastructure of the Project area. For this purpose, particularly this RAP and the other information documents produced within the scope of RAP was published on DSI's official website, and necessary announcements were conductedthrough e-mail, SMS, mail and social media tools, and feedbacks were received from DSI phone lines, online forms and other written platforms. In line with the feedbacks received, there were not any changes to the entitlement matrix, land acquisition impacts of the Project and/or mitigations to be implemented.Therefore, only the results of announcement, consultation and feedback process section of RAP was revised.

A. RAP Disclosure Process

RAP document, summary, brochure, summary video, presentation, explanations related with RAP and grievance channels were published on the link below.

http://www.dsi.gov.tr/faaliyetler/dünya-bankası-türkiye-sulama-modernizasyonu-projesi/arazi-edinim-planı

Table 7-1. RAP Documents Published on DSI Website

No	Document	Link	Date
1	RAP Summary Video	http://www.dsi.gov.tr/docs/tsmp-arazi-edinimi/konya-eregli-ivriz-aep-%c3%b6zet-videosu267A967BC45C.wmv?sfvrsn=2	17.06.2020
2	RAPBrochure	http://www.dsi.gov.tr/docs/tsmp-arazi-edinimi/konya-ere%c4%9fli-ivriz-sol-sahil-sulama-yenilemesi-projesi-arazi-edinim-plan%c4%b1-tan%c4%b1t%c4%b1m-bro%c5%9f%c3%bcr%c3%bc202B9CDECCF6.pdf?sfvrsn=2	10.06.2020
3	RAP Summary	http://www.dsi.gov.tr/docs/tsmp-arazi-edinimi/konya-ere%c4%9fli-ivriz-sol-sahil-sulama-yenilemesi-projesi-arazi-edinim-plan%c4%b1-%c3%b6zeti87C645D759E7.pdf?sfvrsn=2	10.06.2020
4	RAP Presentation	http://www.dsi.gov.tr/docs/tsmp-arazi-edinimi/(sunum)-konya-ere%c4%9fli-ivriz-sol-sahil-sulama-yenilemesi-projesi-kamula%c5%9ft%c4%b1rma-plan%c4%b1-ve-arazi-edinim-plan%c4%b1-may%c4%b1s-20202F79E7A1F623.pdf?sfvrsn=2	10.06.2020
5	Explanations	http://www.dsi.gov.tr/faaliyetler/dünya-bankası-türkiye-sulama-modernizasyonu-projesi/arazi-edinim-planı	10.06.2020

Due to Covid-19 measures, meetings to be organized for RAP disclosure and distribution of materials such as brochures were cancelled. All explanatory materials were sent by DSI Regional Directorate to all mukhtars in Ereğli and 1 settlement (Böğecik) from Karaman province. In this way, a total of 37 mukhtars were informed.

RAP also was sent to Ereğli Municipality and Ereğli District Governorate by official letters. The District Governorate distributed the documents to the relevant public institutions in the district, primarily the District Directorate of Agriculture.

İvriz Water Users Association has sent SMS to nearly 2,000 members regarding DSI website regarding RAP information and consultation/disclosure process. Below is an example of an SMS sent by the Association.

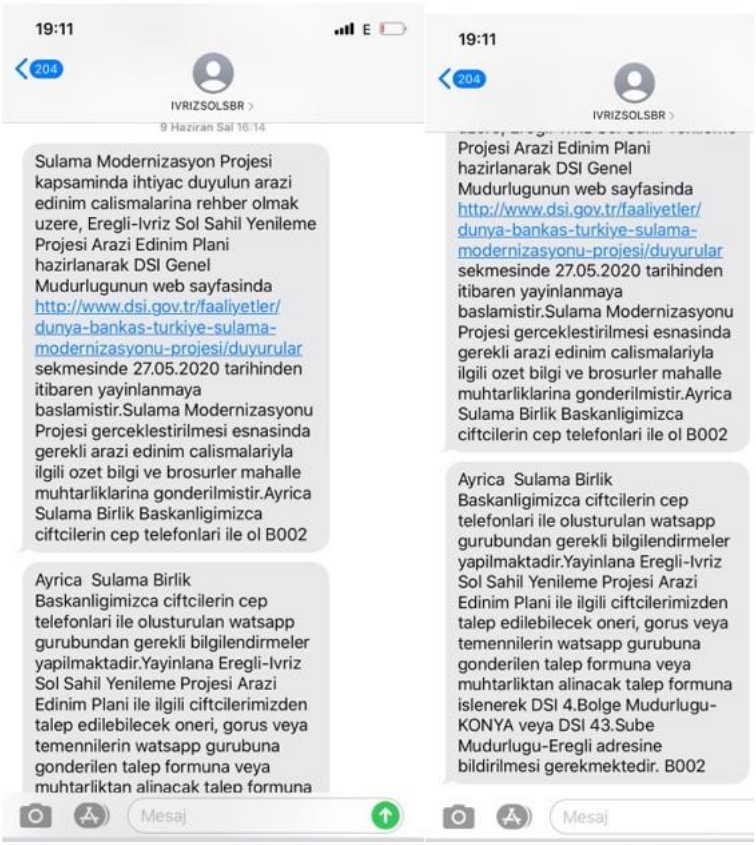


Figure 7-1. SMS Sample Sent to the Water Association Members

AEP announcement, summary and information about the brochure were also shared in the WhatsApp group of Association which has about 2,000 members there. Below is an example of a message sent by the Association to the WhatsApp group members.

Figure 7-2. Message Sample Sent to the Association Members through WhatsApp

B. Disclosure Comments and Feedbacks Received

A total of 24 comments/feedbacks have been received since the RAP was published on the DSI website (http://www.dsi.gov.tr/faaliyetler/dünya-bankası-türkiye-sulama-modernizasyonu-projesi/dokümanlar) on 27.05.2020. 20 of the feedbacks were received from the Water Users Association, 2 from the DSI Branch Directorate and 2 from the DSI Regional Directorate.

In the official letter sent by the District Directorate of Agriculture and Forestry to the DSI Regional Directorate on 01.07.2020, the opinions and evaluations of the institution regarding the Project were included in the report and opinions were expressed as to the completion of the Project as soon as possible.

Mukhtars of Böğecik, Gaybi and Yıldızlı settlements, whose lands are outside the Project area, have requested the expansion of the irrigaton area of the Project in order to include their of land that cannot benefit from irrigation under current plan. The official letter sent by the DSI Regional Directorate on 22.07.2020 stated thatwater supply will not be sufficient for expansion of the Project area to ensure irrigation, therefore these requests could not be accommodated.

Feedback was received from 20 farmers in a total of 8 settlements. The distribution of farmers by settlements is; Adabağ 2, Aydınlar 1, Böğecik 9, Burhaniye 1, Çimencik 1, Karaburun 4, Kargacı 1 and Yıldızlı 1.

Feedbacks received according to their subjects are as follows: 4 requests for information regarding the operational period (when to start operation, drip irrigation activities, how irrigation services will be etc.), 1 request for information on expropriation (when expropriation will start, expropriation fee etc.), 12 of them demand for expansion of the Project irrigation area, 2 are for information on how to supply water from the valve-hydrant locations, and 1 is for the replacement of the valve-hydrant location in his land. The summary table of the feedbacks/notifications received is given below.

Table 7-2. Summary Table of the Feedbacks Received

Stakeholder Type	Settlement	Number	Notification Type	Explanation
Farmer	Aydınlar	1	Demand	Information on when to start operation, drip irrigation activities
Farmer	Çimencik	1	Demand	Information on when to start operation, drip irrigation activities
Farmer	Karaburun	1	Demand	Information on when to start operation, drip irrigation activities
Farmer	Karaburun	1	Demand	Information on when to start operation, drip irrigation activities
Farmer	Burhaniye	1	Demand	Information on the expropriation process and land cost
Public Inst.	Ereğli	1	Other	Positive feedback about the Project
Farmer	Adabağ	2	Demand	Expansion of the Project irrigation area
Farmer	Böğecik	7	Demand	Expansion of the Project irrigation area
Farmer	Yıldızlı	1	Demand	Expansion of the Project irrigation area
Farmer	Karaburun	2	Demand	Expansion of the Project irrigation area
Mukhtar	Böğecik	1	Demand	Expansion of the Project irrigation area
Mukhtar	Gaybi	1	Demand	Expansion of the Project irrigation area
Mukhtar	Yıldızlı	1	Demand	Expansion of the Project irrigation area
Farmer	Kargacı	1	Grievance	Replacement of the valve-hydrant location in his land
Farmer	Böğecik	2	Demand	Information on how to supply water from the valve-hydrant locations

The summary of the responses given by the DSI Regional Directorate regarding the feedbacks/notifications received is as follows.

- It was stated in the official letters sent by DSI Regional Directorate on 20.07.2020 for information requests regarding the operational period that the total duration of the work is 1,825 days and construction will start with the end of 2020 irrigation season. It is also stated that irrigation water is planned to be distributed with preloaded counters and farmers can irrigate their lands with the drip irrigation systems to be installed in their parcels.
- For the demand for information regarding expropriation, information about the Expropriation Law and the RAP implementation was provided in the official letter sent by the DSI Regional Directorate on 22.07.2020.
- In the official letters sent by the DSI Regional Directorate for information requests to expand the irrigation area of the Project, it has been stated that it is not possible to meet this request since the Project was planned according to availability of water supply in the planned scheme.
- In the official letters sent on 20.07.2020 for information requests about where the valve-hydrant locations will be, it was stated that farmers can drip-irrigate in their lands with the transmission lines that they will pull from the valve-hydrant locations.
- DSI Regional Directorate stated in the official letter sent on 20.07.2020 to the complainant that if the request for location change for valve-hydrant in his parcel approved, the Project will be revised during the construction phase.

7.4. RAP Stakeholder Engagement Responsibilities of Internal Stakeholders

Table 7.4. RAP Stakeholder Engagement Responsibilities of Internal Stakeholders

Internal Stakeholder	Responsibilities
World Bank	- Reviewing and approving the RAP and disclosing it to the public on the WB's official website - Supporting DSI field staff and WUA representatives for the preparation of gender sensitivity training
DSI	
Department of Real Estate and Expropriation	- Ensuring that information meetings are held - Following the closure of complaints about land acquisition - Ensuring that the expropriation price is set as per Article 8 of the Expropriation Law in a way to cover the replacement cost and the PAPs are interviewed - In the absence of any agreement, filing lawsuits as per Article 10 and performing expropriation procedures in favor of the project - Managing monitoring and evaluation activities regarding the RAP
Department of Project and Construction	- Publishing the RAP on DSI's official website - Ensuring that regular monitoring activities are performed for the implementation of RAPs
4th Regional Directorate of Konya	- Preparing the brochures and other information documents required for informing the public and the relevant stakeholders - Appointing a Public Relations and Environment Specialist who will work in the district

	to manage the impacts of the project, the construction plan, the rights and entitlements of the PAPs and the grievance mechanism at local level - Conducting inspections regarding the implementation of the RAP by the construction contractor, making recommendations and deciding whether additional measures are required or not - Ensuring that the contractor remedies complaints and damages arising therefrom - Operating the Grievance Mechanism - Coordinating with local and regional stakeholders to be collaborated, developing and implementing collaborations - Supporting DSI field staff and WUA representatives for the preparation of gender-associated training - Bearing responsibility for monitoring and evaluation activities regarding the RAP - Preparing documents regarding land restrictions and executing the relevant information activities Following and closing complaints about land acquisition - Setting the expropriation price as per Article 8 of the Expropriation Law in a way to cover the replacement cost and conducting interviews with the PAPs
DSI Ereğli Section Directorate	- Holding public consultation meetings - Distributing the brochures and other information documents required for informing the public and the relevant stakeholders - Informing the employees of the Water Users Association about the Grievance Mechanism - Operating the Grievance Mechanism - Identifying PAPs in the field (User, level of impact, etc.) - Regularly informing the Water Users Association and PAPs about developments on the project
Ereğli Left Bank Water Users Association	- Informing PAPs about the project - Creating a database regarding the Grievance Mechanism, conveying incoming complaints to DSI - Distributing the brochures and other information documents required for informing the public and the relevant stakeholders - Examine the damages that may arise from the contractor on site and reporting them to DSI
Contractor	- Managing the Grievance Mechanism at the contractor level and submitting incoming complaints to DSI at regular intervals - Monitoring field activities regularly (daily, weekly and monthly, etc.) - Ensuring that the damage regarding the construction work is remedied or repaired as specified in the RAP (for example, damage to the crops or infrastructure)

7.5. RAP External Stakeholder Engagement Plan

Table 7.5. RAP External Stakeholder Engagement Plan

No.	Subject of Engagement	Details of Engagement	Procedure of Engagement	Targeted Stakeholders	Frequency (recommended)
1	Information Meetings for Ereğli Ivriz Left Bank Water Users Association Project (the beginning and completion dates of construction, design, implementation, investment programme, etc.)	The PAPs interviewed and the mukhtars of the affected settlements stated that they wanted to be informed about the project details and the subject that they wanted to get the most information about was the details of the project. Accordingly, DSI and the Water Users Association will inform them about the project's beginning and completion dates, the project's technical design, its potential benefits/harms, tender processes, construction phases and expected outputs. More information will be shared concerning the Project due to the meetings to be held at Ereğli Ivriz Left Bank Water Users Association and the affected settlements, etc. Information activities will continue to be performed regularly during the construction phase of the project. Communication will be established by DSI between the contractor and the Water Users Association concerning the implementation of the project.	Information Meetings Brochures and Posters Sharing the project reports Press Releases DSI Website	Members of the Water Users Association	Every 6 months
				Those Who Are Not the Members of the Water Users Association	Every 6 months
				Vulnerable groups	Every 6 months
				Konya Governorship	Once a year
				Konya Metropolitan Municipality	Once a year
				Ereğli District Governorship	Every 6 months
				Ereğli SYDV	Every 6 months
				Ereğli Municipality	Every 6 months
				Ereğli District Directorate of Agriculture	Every 6 months
				Konya Provincial Directorate of Agriculture	Every 6 months
				Ereğli Chamber of Agriculture	Once a year
				Mukhtars	Every 6 months
				Ivriz Working Committee (IWC)	Every 6 months
				KPP	Every 6 months
				MEVKA	Every 6 months
				İŞKUR	Once a year
				Selçuk University	Once a year
				Necmettin Erbakan University	Once a year

				Agricultural workers (Seasonal, etc.)	As needed
				Ivriz HEPP	Once a year
2	Grievance Mechanism	The Project's Official Grievance Mechanism and Registration System will be introduced and the stakeholders will be informed on this matter. The grievance mechanism and notification channels will be open to anyone with requests and concerns regarding the project. The project's grievance system and communication channels through which PAPs can report their complaints and requests will be shared both through printed materials such as posters and brochures and verbally during stakeholder engagement meetings. Stakeholders will be informed by DSI about the resolution processes of their complaints and requests.	Meetings Brochures and Posters DSI Website Reports Press Releases Grievance Forms	Members of the Water Users Association	Every 6 months
				Those Who Are Not the Members of the Water Users Association	Every 6 months
				Ereğli District Governorship	Every 6 months
				Ereğli Municipality	Every 6 months
				Agricultural workers	As needed
				Mukhtars	Every 6 months
				Ereğli District Directorate of Agriculture	Every 6 months
				Ereğli Chamber of Agriculture	Once a year
3	Land Acquisition (expropriation, permanent and temporary easement)	PAPs will be informed about their land acquisition rights and potential land use restrictions. PAPs will be regularly informed about the land acquisition activities carried out by DSI. PAPs will be informed in detail about the stages of land acquisition. Complaints and requests regarding land acquisition will be recorded and resolved within the scope of the project's grievance and demand system and the stakeholders will be informed in this matter. Interviews will be conducted with the PAPs regarding the expropriation price set as per Article 8 of the Expropriation Law. A Land Acquisition Information Guide will be prepared and shared with the PAPs. A brochure will be prepared on land use restrictions and shared with the PAPs.	Information Meetings Legal documents (notices, new subdivision plans, etc.) DSI Website E-mail Phone	Project-Impacted Members of the Water Users Association	Once a year
				Project-Impacted Persons Who Are Not the Members of the Water Users Association	Once a year
				Ereğli District Governorship	Once a year
				Ereğli Municipality	Once a year
				Ereğli District Directorate of Agriculture	Once a year
				Mukhtars	Every 6 months
				PAPs affected by land acquisition (legal owners and possessors)	During the land acquisition process
4	Acquisition of	PAPs will be informed about their rights regarding the acquisition of	Information	PAPs affected by the	During the

	Immovable Properties (water well, shelter, tree, etc.)	immovable properties. PAPs whose immovable properties are affected will be regularly informed about the immovable property acquisition activities carried out by DSI. Complaints and requests regarding the acquisition of immovable properties will be recorded and resolved within the scope of the project's grievance and demand system and the stakeholders will be informed in this matter.	Meetings DSI Website	acquisition of immovable properties (legal owners and possessors)	acquisition of immovable properties
5	Groundwater users	Information will be provided on how the water wells used for irrigation will be affected by the project during its construction and operation periods as well as their rights and restrictions of use.	Information Meetings	Users irrigating through a water well	Once a year
				Mukhtars	Once a year
6	Update and introduction of the RAP	After the announcement of the RAP, it will be updated with the opinions of stakeholders and announced again. If deemed necessary as a result of the activities to be performed for the acquisition of remaining lands, the RAP will be updated and the PAPs and mukhtars will be informed in this matter.	Information Meetings DSI Website	Members of the Water Users Association	As needed
				Those Who Are Not the Members of the Water Users Association	As needed
				Vulnerable groups	As needed
				PAPs affected by land acquisition	As needed
				Mukhtars	As needed
7	Removal of canalettes and making open canal areas available for agriculture	PAPs will be informed by DSI and the Water Users Association about the removal of canalettes and making open canal areas available for agriculture during the construction process.	Information Meetings DSI Website Brochure/poster	Members of the Water Users Association	Once a year
				Those Who Are Not the Members of the Water Users Association	Once a year
				Mukhtars	Once a year
8	Ensuring access to fields and grazing areas	Crossing points will be created where necessary in order to provide the PAPs with access to the fields and to allow animals to pass to the grazing areas during the construction phase of the project and the PAPs will be informed in this regard. Complaints about this issue will be followed up and resolved.	Information Meetings DSI Website Brochure/poster	Members of the Water Users Association	Once a year
				Those Who Are Not the Members of the Water Users Association	Once a year
				Mukhtars	Once a year
9	Water supply during the construction process	PAPs will be informed by the Water Users Association and DSI about how to supply water during construction, the relevant water planning and water quantities.	Meetings DSI Website	Members of the Water Users Association	Once a year
				Those Who Are Not the Members of the Water Users Association	Once a year

				Mukhtars	Once a year
10	Female water users	Meetings will be held to improve the knowledge of women on the project. Information meetings will be organized by DSI for female water users with regard to the features of the new irrigation system, alternative farming methods and capacity building and improvement for registration in Water Users Associations. Gender equality will be observed during such meetings and the meetings will be organized prior to the irrigation season. (The women that will attend the training events will need to be chosen while the venue of training will be selected by considering the needs of women. Timing of the training must also be identified outside the busy seasons for agricultural activities and the times during which women are working in their fields.)	Information Meetings Brochures and Posters DSI Website Field Visits Monitoring and evaluation Reports Grievance Forms	Female members of the Water Users Association	Once a year
				Female water users who are not the members of the Water Users Association	Once a year
11	Irrigation Methods and Techniques (drip irrigation, sprinkler, etc.)	Upon the completion of the construction phase of the project, information will be provided on the irrigation systems that will boost productivity depending on the crop pattern. If necessary, agricultural training events will be organized by the Provincial and District Directorates of Agriculture and Forestry for the stakeholders.	Meetings Brochures and Posters DSI Website Field Visits	Members of the Water Users Association	Once a year
				Those Who Are Not the Members of the Water Users Association	Once a year
				Mukhtars	Once a year
				Chamber of Agriculture	Once a year
				IWC	Once a year
12	Recommended Crop Pattern	Depending on potential changes regarding water supply during the construction and operation periods, recommendations will be made and information will be provided about the crop pattern. If necessary, agricultural training events will be organized by the Provincial and District Directorates of Agriculture and Forestry for the stakeholders upon the completion of the construction phase.	Meetings Brochures and Posters	Members of the Water Users Association	Once a year
				Those Who Are Not the Members of the Water Users Association	Once a year
				Provincial/District Directorates of Agriculture	Once a year
13	Information about Smart Farming practices	Smart Agriculture practices will be introduced for PAPs with the Provincial/District Directorate of Agriculture. In this way, the PAPs will be able to learn about the Smart Agriculture practices they can apply after the completion of the modernization construction activities.	Meetings Brochures and Posters	Members of the Water Users Association	Once a year
				Those Who Are Not the Members of the Water Users Association	Once a year
				Mukhtars	Once a year
14	Cooperation with Local	Cooperation will be developed with local and regional stakeholders to	Information	PAPs	Once a year

	and Regional Corporate Stakeholders	identify the capacity building activities (agricultural extension, training, etc.) and support programmes to be organized for PAPs and let the PAPs know about them, execute the preliminary activities that must be performed during the operation phase of the project (crop pattern, the drip-irrigation system to be used, etc.), identify potential problems and develop measures to mitigate them and the PAPs will be informed about these activities.	Meetings Brochures and Posters Sharing the project reports Press Releases DSI Website	Vulnerable groups	Once a year
				Ivriz Working Committee (IWC)	Once a year
				Konya Governorship	Once a year
				Konya Metropolitan Municipality	Once a year
				Ereğli District Governorship	Once a year
				Ereğli SYDV	Once a year
				Ereğli Municipality	Once a year
				Ereğli District Directorate of Agriculture	Once a year
				Konya Provincial Directorate of Agriculture	Once a year
				Ereğli Chamber of Agriculture	Once a year
				Mukhtars	Once a year
				KPP	Once a year
				MEVKA	Once a year
				İŞKUR	Once a year
				Selçuk University	Once a year
				Necmettin Erbakan University	Once a year
15	Monitoring and evaluation	Stakeholders will be informed about the progress of the project. Grievance notifications and stakeholder engagement processes related to the project will be monitored and followed.	Meetings Reports Field Visits Performance Indicators Monitoring and evaluation forms	Members of the Water Users Association	Once a year
				Those Who Are Not the Members of the Water Users Association	Once a year
				Ereğli District Governorship	Once a year
				Ereğli Municipality	Once a year
				Ereğli District Directorate of Agriculture	Once a year

	Mukhtars		Once a year
	Ivriz Committee	Working	Once a year
	KPP		Once a year

8. Grievance Mechanism

8.1. Grievance and Demand Mechanism

DSI has created an easily accessible grievance mechanism to record and resolve negative/positive feedbacks or complaints to be made by the parties affected by the project during its implementation and other stakeholders. The grievance mechanism aims to manage all potential complaints and demands from affected stakeholders regarding land acquisition processes and/or any other environmental and social impacts and problems during the construction phase. Grievance Mechanism of the Project will be operated in accordance with the requirements of the World Bank policies.

DSI currently has a Grievance Mechanism composed of four main channels:

1. Water Users Associations
2. DSI Section Directorates
3. DSI Regional Directorates
4. General Directorate of DSI

Thereby, impacted persons or stakeholders will be able to submit their objections and complaints to any of these institutions/organizations via e-mail/telephone, or through personal complaints via national complaint reporting mechanisms such as CIMER (Presidential Communication Center).

All complaints regarding land acquisition will be collected at the 4th Regional Directorate of DSI in Konya. The complaints collected at local level will be conveyed by DSI Ereğli Section and Ereğli Ivriz Left Bank Water Users Association to the 4th Regional Directorate of DSI in Konya.

In addition, the complaints conveyed through “Flood, Fault and Intervention Spatial Information System” (FFISIS) mobile application, which has been developed by the General Directorate of DSI to allow early warning in case of floods and through which notifications regarding malfunctions and interventions can be made, will be taken into consideration by the project's grievance and demand mechanism.

Incoming complaints are electronically recorded by the Document Registration Section affiliated to the Department of Personnel under the General Directorate of DSI. (The complaints conveyed through written petitions, CIMER, public institutions and organizations, etc.) Real and legal persons can follow the electronically recorded complaints over turkiye.gov.tr address by identity authentication. Grievance and demand mechanism allows the anonymous grievances to be raised and addressed. These grievances will also be recorded.

Incoming complaints are directed by document registrars to the relevant units depending on the type and content of the complaint and examined and resolved within the specified response time (30 days). All complaints filed through written documents, applications or CIMER are recorded by DSI. In cases where the complaints notified by phone need to be resolved by DSI, the complainant is directed to convey his/her objection and/or complaint in writing via the Grievance Mechanism. The document registrars in all units prepare monthly reports on the complaints submitted both through the DSI Grievance Mechanism and CIMER. In addition, people can also submit complaints/demands to DSI over turkiye.gov.tr address.

The complaints received through Water User Associations are generally related to problems encountered during the implementation phase while the complaints conveyed through other units may be related to all works and procedures carried out by DSI. Water User Associations record the complaints received by them to share them with DSI where necessary and upon request.

The grievance mechanism is shown below.

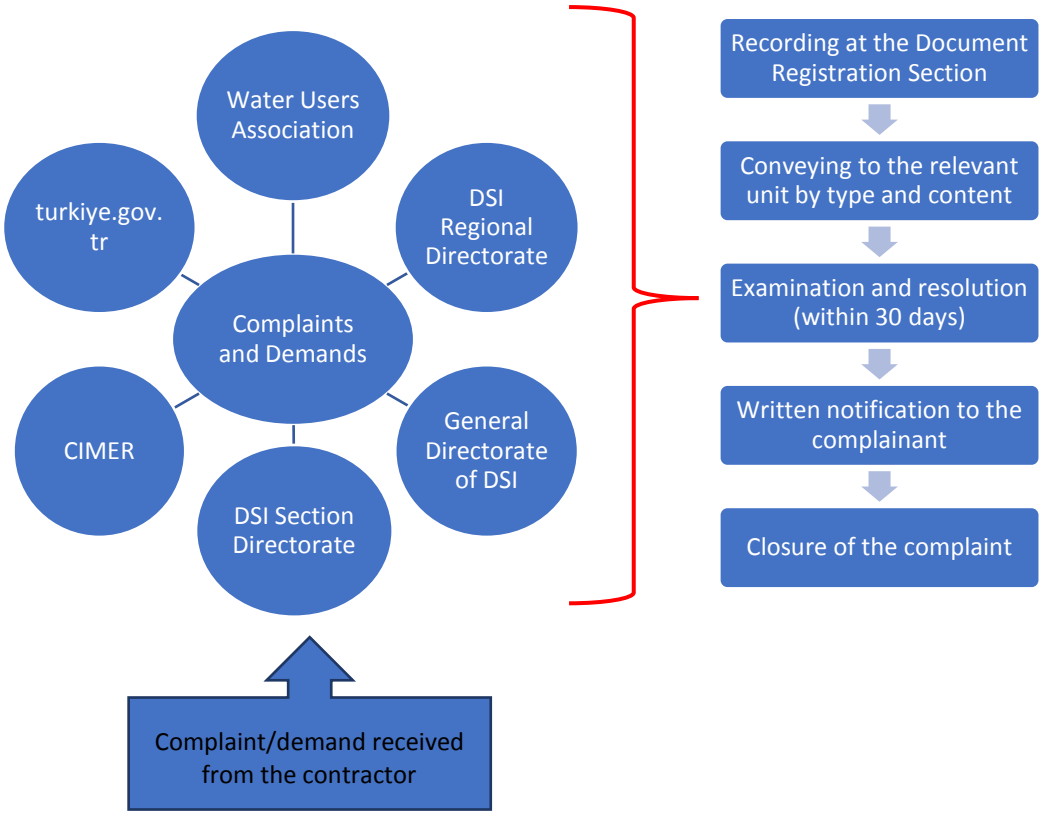


Figure 8.1. Channels and Process of the Grievance Mechanism

DSI will ensure the functionality of the Grievance Mechanism. The Public Relations Specialist, who will be appointed by DSI at the project site, is responsible for recording the complaints filed over phone or in writing. DSI will appoint a Public Relations Specialist (or specialists) to disseminate information about the grievance mechanism.

A database will be created by the Water Users Association for all written and verbal complaints received by the Water Users Association regarding the project. DSI will also inform the management of the Water Users Association about the resolution process of complaints.

The contractor that will carry out the construction works of the project will forward to DSI the complaints and demands notified thereto. In case of any damage to lands, infrastructure or crops by the contractor, DSI undertakes that the contractor will cover the resulting losses. The contract to be signed with the contractor will include provisions as to the effect that the damages caused by the firm will be eliminated.

During the implementation period, objections can be filed to the nearest DSI unit (the Water Users Association, Project Directorate, DSI Section Directorate, Regional Directorate or General Directorate) in person, by phone or by e-mail. All incoming objections will be recorded and the parties filing these objections will be responded in writing. PAPs will be informed about their legal rights regarding the impacts during the construction process as well as the introduced grievance mechanism.

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

Any complaint and demand to be filed by PAPs or other stakeholders will be recorded by DSI on a project basis. Incoming complaints will be evaluated and closed while the closed complaints will be documented and stored.

Any complaint received by DSI will be responded within 30 days of receipt. In case the resolution of a complaint lasts more than 30 days, the circumstance will be notified to the relevant complainant and an attempt will be made by more senior authorities to resolve the problem within a month.

Complaints can be received through written petition, e-mail or in person. Besides, it is also possible to file a complaint by filling in the contact form (http://www.dsi.gov.tr/faaliyetler/d%C3%BCnya-bankas%C4%B1-t%C3%BCrkiye-sulama-modernizasyonu-projesi/i-leti%C5%9Fim) available on the official website of the General Directorate of DSI. Complaints received through this channel will be sent to the relevant units by the Financed Projects Section Directorate under the Department of Project and Construction. Two separate complaint forms will be used for the Grievance Mechanism. The first form is the 'Complaint Filing Form'. When a complaint is initially received, a copy of the filled-in complaint form will be submitted to the applicant upon request. After remedial actions are taken and the complaint is remedied, a 'Closure Form' will be filled in by the grievance officer. Sample Complaint Forms are presented in Annex 11.2. The figure below shows the communication channels for the grievance and demand mechanism.

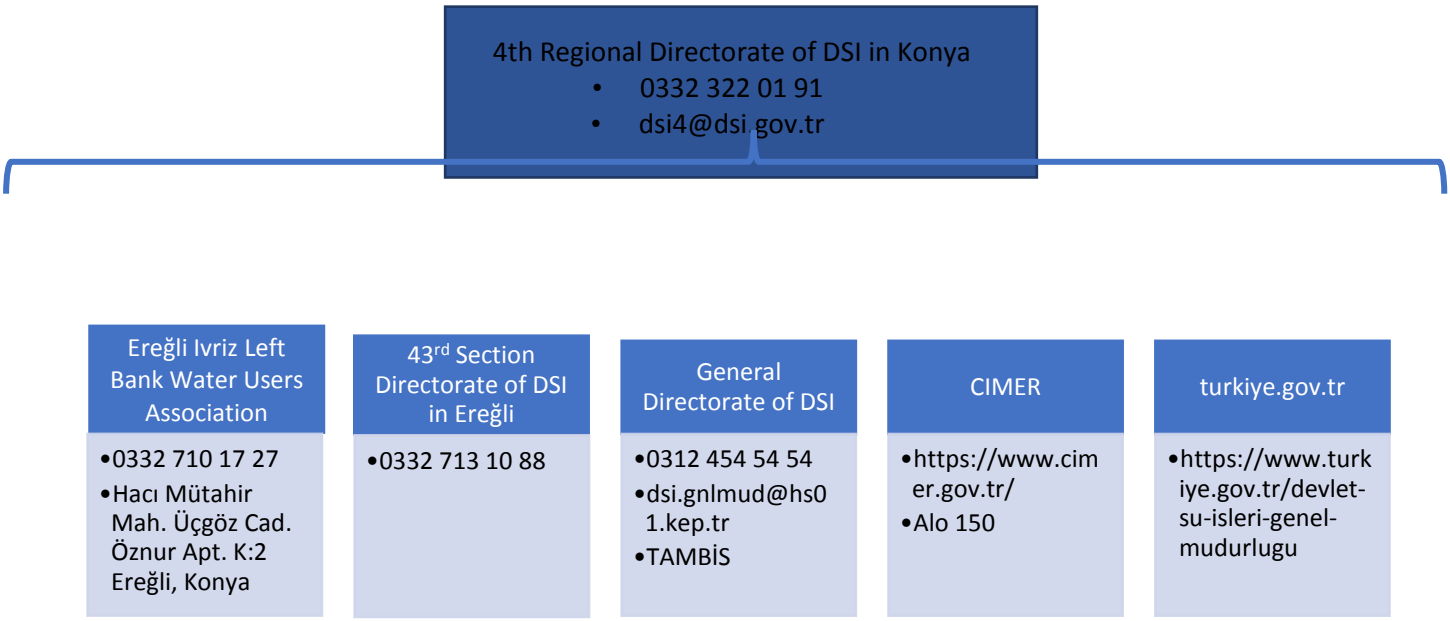


Figure 8.2. Authorities for Filing Complaints

DSI will inform all individuals and communities affected by the project about the Grievance Mechanism through engagement activities and introduce the project's site staff to whom they may file any complaint regarding the implementation of the project.

8.2. Field Findings on Complaints and Demands

Within the scope of the LAD field study, interviews were made with the mukhtars of the project-impacted settlement and the persons affected by the land acquisition process of the project and their opinions, knowledge and satisfaction regarding the grievance and demand system were received.

48% of the mukhtars of the project-impacted settlements stated that they would report to the Water Users Association, 24% to DSI and 12% to the Municipality when they have any complaint about the project. The Water Users Association and DSI are the main constituents of the project's current grievance and demand mechanism, but it is important to integrate to the project's grievance mechanism the complaints conveyed to the Municipality and take them into consideration during the implementation phase. The table below shows the details of the mukhtars' responses.

Table 8.1. Authority for Filing Complaints regarding Mukhtars

Where do the mukhtars report their complaints?	Number of responses	Percentage
Water Users Association	12	48%
DSI	6	24%
World Bank	1	4%
Chamber of Agriculture	1	4%
Municipality	3	12%
Governorship	1	4%
CIMER	1	4%
Total	25	100

Source: Mukhtar Interview Form, 2019

In parallel with the opinions of the mukhtars, 33.7% of the project-impacted stakeholders stated that they would report to the Water Users Association, 24% to DSI and 21.2% to the Municipality when they have any complaint about the project. Apart from this, 12.5% of the stakeholders stated that they would convey their complaints and demands to the District Governorship/Governorship. It is important for the project's grievance mechanism to record and resolve the complaints and demands to be conveyed to DSI by the district governorship and governorship. It is seen that informing the mukhtars about the grievance and demand system will be effective in accurately recording potential complaints from the stakeholders. The table below shows the details of the stakeholders' responses.

Table 8.2. Authority for Filing Complaints regarding PAPs

Where do the stakeholders report their complaints?	Number of responses	Percentage
Water Users Association	35	33.7%
Mukhtar	22	21.2%
Municipality	6	5.8%
District Governorship/Governorship	13	12.5%
DSI	25	24.0%
Chamber of Agriculture	1	1.0%
Security Forces	2	1.9%
TOTAL	**104**	100.0%

Source: Socio-Economic Household Survey, 2019

60% of the mukhtars stated that they knew about the grievance mechanism of DSI but they had insufficient information, and 40% stated that they knew about it and had a good level of knowledge. Providing detailed information to the mukhtars about DSI's grievance and demand mechanism implemented by the project will also make it easier for stakeholders to access the system.

Table 8.3. Knowledge of Mukhtars about DSI's Grievance Mechanism

Are they informed about DSI's Grievance Mechanism?	Number of Responses	Percentage
I am aware of it, but I do not have much information	15	60
I am aware of it and I know it very well	10	40
Total	25	100

Source: Mukhtar Interview Form, 2019

90.4% of the PAPs interviewed stated that they did not know about DSI's grievance and demand mechanism while 78.8% stated that they did not know about the communication channels of the Water Users Association. Accordingly, stakeholders must be informed in detail about both DSI's grievance and demand mechanism and the communication channels of the Water Users Association.

Table 8.4. Knowledge of PAPs about DSI's Grievance Mechanism

	Do you have any information about DSI's Grievance and Demand Mechanism?		Do you have any information about the Communication Channels of the Water Users Association?	
	Number of Responses	**Percentage**	**Number of Responses**	**Percentage**
Yes	10	9.6%	22	21.2%
No	94	90.4%	82	78.8%
TOTAL	**104**	**100%**	**104**	**100%**

Source: Socio-Economic Household Survey, 2019

The table below summarizes the ways of getting information for the mukhtars informed about DSI's grievance and demand mechanism. Thereby, 30% of the mukhtars received information from DSI regarding the grievance and demand system.

Table 8.5. Channels of Information for PAPs about DSI's Grievance Mechanism

How Did They Get Information Regarding DSI's Grievance Mechanism	Number of responses	Percentage
Water Users Association	1	10
DSI	3	30
Petition	1	10
Based on the problems experienced during the HEPP project	1	10
The Water Users Association, DSI	1	10
Face-to-face Interview	1	10
I Searched it Myself	1	10
Interviews and Meetings	1	10
Total	10	100

Source: Socio-Economic Household Survey, 2019

92.3% of the PAPs interviewed stated that they did not previously file any complaint and demand to the Water Users Association while 8 PAPs filed complaints and demands to the Water Users Association. In addition, 90.4% of the PAPs interviewed stated that they did not previously file any complaints and demand to DSI while 10 PAPs filed complaints and demands to DSI. A person who filed a complaint to the Water Users Association also reported this complaint to DSI while 17 of the PAPs interviewed in total filed complaints/demands.

Table 8.6. PAPs that filed complaints to DSI and WUA

	Did s/he file any complaint and demand to the Water Users Association?		Did s/he file any complaint and demand to DSI?	
	Number of responses	**Percentage**	**Number of responses**	**Percentage**
Yes	8	7.7%	10	9.6%
No	96	92.3%	94	90.4%
TOTAL	**104**	**100%**	**104**	**100%**

Source: Socio-Economic Household Survey, 2019

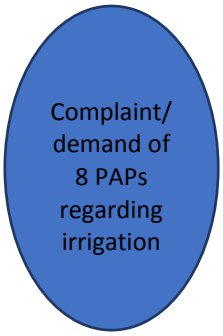
The table below shows the details of the subject of complaint and demand of 8 PAPs regarding irrigation.

Table 8.7. Subjects of Complaint for PAPs

Subject	Number of responses	Percentage
Flooding	1	12.5%
Failure to supply the desired quantity of water	4	50.0%
Damage to crops due to delayed water supply	2	25.0%
Water wastage due to cracked canalette	1	12.5%
TOTAL	**8**	**100.0%**

Source: Socio-Economic Household Survey, 2019

Complaints/demands of 5 out of 8 PAPs who filed any complaint/demand regarding irrigation were not resolved while 3 of them were resolved. 25% of the PAPs were satisfied with the grievance and demand mechanism while 62.5% of them were unsure as their complaints were not resolved at the time.



Has your complaint/demand been resolved?	Number of responses	Percentage
Yes	3	37.5
No	5	62.5
TOTAL	**8**	**100**

Opinion about the Grievance and Demand system	Number of responses	Percentage
I am satisfied	2	25.0%
I am dissatisfied	1	12.5%
My complaint has not been resolved yet. I am not sure	5	62.5%
TOTAL	**8**	100.0%

Figure 8.3. Opinions of PAPs on the Grievance Mechanism of WUA

Complaints/demands of 7 out of 10 PAPs who filed any complaint/demand regarding irrigation to DSI were not resolved while 3 of them were resolved. 40% of the PAPs were satisfied with the grievance and demand mechanism while 30% of them were dissatisfied and 30% of them were unsure as their complaints were not resolved at the time.

Has your complaint/demand been resolved?	Number of responses	Percentage
Yes	3	20.0%
No	7	46.7%
TOTAL	**15**	**100%**

Opinion about the Grievance and Demand system	Number of responses	Percentage
I am satisfied	4	40.0%
I am dissatisfied	3	30.0%
My complaint has not been resolved yet. I am not sure	3	30.0%
TOTAL	**10**	100.0%

Figure 8.4. Opinions of PAPs on the Grievance Mechanism of DSI

9. Monitoring, Evaluation and Reporting

The main objective of implementing a RAP is to mitigate or eliminate negative social impacts on the persons and communities to be affected and to restore livelihoods to the pre-project levels. Aims of the monitoring activities intended for the RAP are as follows:

- To fulfill the actions and commitments under the RAP in a timely and complete manner,
- To ensure that the affected parties fulfilling the criteria of eligibility are fully paid regarding the compensation they are entitled to within the periods agreed upon,
- To follow the objections and complaints filed by PAPs and, if necessary, to take appropriate remedial actions.

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

The General Directorate of DSI and the 4th Regional Directorate of DSI in Konya will be responsible for implementing and monitoring the project's land acquisition activities. A Project Management Team assigned within the Regional Directorate will be in constant contact with the construction contractors, beneficiaries and other stakeholders within the affected communities by monitoring the practices related to the RAP and submit semi-annual reports containing the progress of the RAP to the Regional Coordinator and the Project Management Team within the General Directorate of DSI (to the Relevant Expert) by coordinating the steps taken towards the resolution of complaints.

RAP monitoring activities will be carried out under the supervision of DSI's Project and Construction Department and Real Estate and Expropriation Department and through the active monitoring of the relevant regional directorates. Land acquisition activities carried out by DSI will be monitored, and monitoring activities will be carried out through regular field trips and the reports prepared by the project's field team. If necessary, DSI may choose to hire a consultant for the implementation and monitoring of the RAP.

DSI will inform the World Bank about the progress made in practice and the relevant non-conformities through semi-annual reports by monitoring the land acquisition processes.

As stated above, the World Bank will also follow the processes within the scope of regular supervision and offer solutions to significant problems if necessary.

Following the completion of the RAP implementation, DSI will assign an independent consultant to evaluate the implementation of the land acquisition activities conducted thereby, and this consultant will be different from the monitoring and follow-up consultant. This consultant will:

- Examine whether RAP practices are compatible with the RAP,
- Report the steps taken in a timely and solution-oriented manner regarding the problems encountered and by fulfilling the requirements specified in the RAP,
- Examine whether vulnerable communities and unauthorized land users are ignored,
- Examine the feedback and complaints of the society about the loss of land and land-based livelihoods,
- Evaluate the current consultation strategy and its impacts on local communities and PAPs,
- Evaluate the suitability of the measures taken by DSI regarding land acquisition and the applicable compensation strategy to make sure that the project will not have any negative impact on the lands.

The independent consultant will prepare the RAP Closing Report and submit it to the World Bank for approval. These final Closing Reports will be published on the website of DSI in English and Turkish.

DSI also plans to carry out a comprehensive independent study other than those required by the Bank in order to assess the impacts of land acquisition and irrigation modernization activities on farmers and local people. This study will be carried out in the 5th or 6th year of the project to make sure that the modernized irrigation projects are in operation for at least 1 year.

Some performance criteria suggested for the monitoring of land acquisition implementation processes are given in the table below.

Table 9.1. Monitoring-Evaluation Indicators

Indicator	Source of Information	Responsible Party	Frequency of Reporting
Land Acquisition			
Total number of parcels subject to acquisition (ownership, permanent and temporary easement, rental) (On the basis of the affected settlements) • **Public Lands** • **Privately-Owned Lands** • **Lands of Third-Party Institutions** • **Lands Not Subject to Registration** • **Willing buyer - willing seller arrangement as per Article 8** • **Under Article 10 (Ongoing/closed)** • **Lands acquired as a result of the expropriation request for the remaining lands**	Expropriation records	Department of Real Estate and Expropriation 4th Regional Directorate of DSI	Once a month
Immovable properties affected by land acquisition (buildings, appurtenant structures, trees) • **List of immovable properties** • **Number of parcels housing an immovable property (by type - privately-owned, treasury, etc.)**	Expropriation records	Department of Real Estate and Expropriation 4th Regional Directorate of DSI	Once a month
Total number of affected and compensated persons (By affected settlement) • **Land owners** • **Land users (who are entitled to possession and/or are identified as users)** • **Male/Female** • **Vulnerable communities**	Expropriation records and compensation payment records Contractor rental contract	4th Regional Directorate of DSI	Once a month
Land entries - exits • **Number of reclaimed parcels** • **Number of parcels handed over in a disrupted way** • **Land owners** • **Land users (who are entitled to possession and/or are identified as users)** • **Male/Female** • **Vulnerable communities**	Land Entry and Exit Protocols Grievance Mechanism	4th Regional Directorate of DSI	Every 3 months
Compensations and Payments			
Completed compensation payments (By affected settlement - By ownership, permanent and temporary easement) • **Land owners**	Compensation payment records Comparison	Department of Real Estate and Expropriation 4th Regional	Once a month

Indicator	Source of Information	Responsible Party	Frequency of Reporting
• **Land users (who are entitled to possession and/or are identified as users)** • **Vulnerable communities** • **Compensation in a way to cover the replacement cost** • **Payments made under Article 8** • **Payments made under Article 10** • **Payments made under Article 19** • **Determination of permanent and temporary easement price** • **Calculation of the Loss of Value Arising From Permanent Easement**	of the result with market research and completed payments Settlement Minutes as per Article 8	Directorate of DSI	
Crop price payments • **Landowners** • **Land users (who are entitled to possession and/or are identified as users)** • **Vulnerable communities**	Payment records	Department of Real Estate and Expropriation 4th Regional Directorate of DSI	Once a month
Livelihoods			
Use of compensation • **How do the PAPs use their entitled compensations?** • **Landowners** • **Land users (who are entitled to possession and/or are identified as users)** • **Vulnerable communities**	Survey and Internal Monitoring and Evaluation reports	4th Regional Directorate of DSI	Every 6 months
Income changes of the PAPs • **Sources of income** • **Income/expense amount**	Survey and Internal Monitoring and Evaluation reports	4th Regional Directorate of DSI	Every 6 months
Crop pattern of the PAPs • **Number of households engaged in agriculture** • **Number of female farmers (those who are/are not the members of the WUA, owners/users)** • **Species of cultivated crops** • **Cultivated areas (by crop)** • **Quantity and sources of water supply**	Data of the District Directorate of Agriculture and Forestry Data of the Water Users Association Interviews with the PAPs	4th Regional Directorate of DSI	Every 6 months
Livestock production activities of the PAPs • **Number of bovine and ovine animals** • **Number of households engaged in livestock production** • **Area of cultivated forage crops (by crop)**	Data of the District Directorate of Agriculture and Forestry Data of the Water Users	4th Regional Directorate of DSI	Every 6 months

Indicator	Source of Information	Responsible Party	Frequency of Reporting	
	Association Interviews with the PAPs			
Local employment • **Number of the PAPs employed locally (by settlement)** • **Breakdown of employment by type and gender**	Contractor Interviews with the PAPs	4th Regional Directorate of DSI	Every months	6
Cooperation with institutions • **Number of agricultural extension and training activities offered by third-party institutions** • **Number of the PAPs attending the agricultural extension and training activities offered by third-party institutions (by gender)** • **Number of the attending PAPs awarded with certificates/documents of attendance during the agricultural extension and training activities offered by third-party institutions (by gender)** • **Number of cooperating institutions** • **Number of the PAPs benefiting from the grant schemes and/or supports of institutions (breakdown by types of support and gender)**	Data records of cooperating institutions Interviews with the PAPs	4th Regional Directorate of DSI	Every months	3
Access to fields, grazing areas and valves • **Number of the PAPs reporting that they could not access their fields** • **Number of the PAPs reporting that their animals could not access their grazing areas** • **Number of access points placed for grazing areas and fields** • **Number of valves and hydrant places installed along the route**	Interviews with the PAPs Grievance records Contractor	4th Regional Directorate of DSI	Every months	3
Making open canalette areas available for agriculture • **Number and dimensions of the canalettes removed** • **Size of the area made available for agriculture, the number of users and cultivation information**	Interviews with the PAPs Grievance records Contractor Water Users Association	4th Regional Directorate of DSI	Every months	3
Stakeholder Engagement and Grievance Mechanism				
Consultations (by affected settlement) • **Number of organized meetings** • **Number of the PAPs informed (by gender)** • **Number and breakdown of the stakeholders informed (Municipality, mukhtar, public institution, NGO, etc.), the number of meetings** • **Designs of published and distributed banners, posters, brochures** • **Number of cooperating institutions and the types of cooperation**	Records of 4th Regional Directorate of DSI Data records of cooperating institutions Interviews	4th Regional Directorate of DSI	Once month	a

Indicator	Source of Information	Responsible Party	Frequency of Reporting
• **Number of the meetings organized by third-party institutions (IWC, the District Directorate of Agriculture, etc.) and the number of participants** • **Number of gender-sensitive trainings events organized for the personnel of DSI and the Water Users Association and the number of participants** • **Number of meetings organized only for women and the number of participants**	with the PAPs Data of the Water Users Association		
Number of the complaints filed regarding land acquisition (by affected settlement) • **Breakdown by the channels of submission** • **Open** • **Closed** • **Complainant Woman/Man** • **Subject** • **Average period of closing** • **Closed on time**	Records of 4th Regional Directorate of DSI	4th Regional Directorate of DSI	Once a month
Losses covered by the contractor • **Open** • **Closed** • **Complainant Woman/Man** • **Subject** • **Average period of closing** • **Closed on time** • **Actual budget**	Records of 4th Regional Directorate of DSI Records of the contractor	4th Regional Directorate of DSI	Once a month
Budget, Management Structure and Reporting			
• **Actual budget (TRY and USD)** • **Appointed public relations and environment specialist** • **Created Project Management Unit** • **Prepared reports (ESMP, RAP, etc.)**	Data of DSI's Department of Construction and Project Data of DSI's Department of Real Estate and Expropriation Records of 4th Regional Directorate of DSI	DSI's Department of Construction and Project	Once a month

Subjects covered by the monitoring reports are listed below.

- Information about the area of influence and the owners and users within the area of influence (the breakdown of public and privately-owned lands, overall data on rights holders, overall data on land users and data on vulnerable groups, if any),

- The method and stage of expropriation (Willing buyer - willing seller arrangements, the date of public interest decision, if any, how to inform and consult regarding the parcels acquired through willing buyer - willing seller arrangements and litigation, etc.),
- Status of the expropriated lands (parcels whose legal proceedings are going on, registered parcels, disposed parcels, parcels whose project construction works are completed and handed over for use, etc.),
- Status of the lands rented for a temporary period of time,
- Restoration of lands, land entry and exits,
- Information activities on land restrictions,
- Analysis of the grievance and demand mechanism concerning land acquisition; information on recorded complaints (the number of complaints, the subjects of complaint, the number of female and male complainants, the ratio of resolved and pending complaints, the period of resolving complaints, etc.),
- Information and analysis on the functioning and final status of land acquisition management
- Monitoring the expected realizations in the estimated budget for land acquisition,
- Vulnerable groups will be among the issues to be monitored and evaluated.
- Summary of consultations with the project-impacted and other stakeholders, if any, according to the RAP for the relevant period (including consultations with women and vulnerable groups)

10. Budget and Business Plan

10.1. Budget

An estimated budget has been created in the RAPF for the implementation of the RAP. Consequently, the budget allocated for land acquisition is TRY 26,216,480.

In addition, the supports from third parties other than DSI (IWC, SYDV, the Provincial-District Directorates of Agriculture, Konya Plain Project, Konya Metropolitan Municipality, 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 RAP, 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.

Expropriation compensations for the expropriation process will be determined according to the current parcel based valuation. In this context, the Land Market Research Report prepared by HAPA (October 2019), which illustrates the land value price ranges, is presented in Annex 11-4. The data obtained from this report will be based on the determination of expropriation costs and will be used in the calculation of full replacement compensations in accordance with the World Bank OP 4.12 policy.

Table 10.1. RAP Budget

Item No	Subject	Unit	Type of PIP	Responsible Party	Number of Parcels	Number of PAPs	Total Actual Budget (TRY)	Total Actual Budget (USD)
A. Price of Acquiring Lands and Immovable Properties				**DSI - Contractor**				
1	**Acquisition of Lands and Immovable Properties by Expropriation**			**DSI**				
	Acquisition of privately-owned parcels	Parcel/TRY	Shareholder		250	600	3,000,000	
	Acquisition of immovable properties over privately-owned parcels (Buildings and appurtenant structures)	Appurtenant Structure/TRY	Shareholder		80	170	1,000,000	
	Acquisition of trees over privately-owned parcels	Number	Shareholder		120	220	1,000,000	
	Acquisition of lands owned by third-party institutions apart from privately-owned parcels	Parcel/TRY	Third-party institution PAP holding a right of possession		40	3	1,000,000	
	Acquisition of immovable properties over the lands owned by third-party institutions apart from privately-owned parcels	Appurtenant Structure/TRY	Third-party institution PAP holding a right of possession		40	3	200,000	
	Acquisition of trees over the lands owned by third-party institutions apart from privately-owned parcels	Number	Identified PAP user		40	3	200,000	
	Acquisition of Treasury and Common Public Property Lands	Parcel/TRY	Third-party institution PAP holding a right of possession		90	180	300,000	
	Acquisition of immovable properties over treasury and common public property lands	Appurtenant Structure/TRY	Third-party institution PAP holding a		90	180	300,000	

			right of possession				
	Acquisition of trees over treasury and common public property lands	Number	Identified PAP user		90	180	300,000
2	**Acquisition of Lands and Immovable Properties by Permanent Easement**			**DSI**			
	Acquisition of privately-owned parcels	Parcel/TRY	Shareholder		2,100	6,900	5,000,000
	Acquisition of immovable properties over privately-owned parcels (Buildings and appurtenant structures)	Appurtenant Structure/TRY	Shareholder		300	900	5,000,000
	Acquisition of trees over privately-owned parcels	Number	Shareholder		1,400	3,000	1,000,000
	Acquisition of lands owned by third-party institutions apart from privately-owned parcels	Parcel/TRY	Third-party institution PAP holding a right of possession		150	3	500,000
	Acquisition of immovable properties over the lands owned by third-party institutions apart from privately-owned parcels	Appurtenant Structure/TRY	Third-party institution PAP holding a right of possession		150		300,000
	Acquisition of trees over the lands owned by third-party institutions apart from privately-owned parcels	Number	Identified PAP user		150		500,000
	Acquisition of Treasury and Common Public Property Lands	Parcel/TRY	Third-party institution PAP holding a right of possession		50		300,000
	Acquisition of immovable properties over treasury and common public property lands	Appurtenant Structure/TRY	Third-party institution PAP holding a right of possession		50		200,000
	Acquisition of trees over treasury and	Number	Identified PAP				

	common public property lands		user		50	200,000
3	**Acquisition of Lands and Immovable Properties by Temporary Easement**			**DSI**		
	Acquisition of immovable properties over privately-owned parcels (Buildings and appurtenant structures)	Appurtenant Structure/TRY	Shareholder		300	1,000,000
	Acquisition of trees over privately-owned parcels	Number	Shareholder		1,400	3,000,000
	Acquisition of lands owned by third-party institutions apart from privately-owned parcels	Parcel/TRY	Third-party institution PAP holding a right of possession		150	1,000,000
	Acquisition of immovable properties over the lands owned by third-party institutions apart from privately-owned parcels	Appurtenant Structure/TRY	Third-party institution PAP holding a right of possession		150	500,000
	Acquisition of trees over the lands owned by third-party institutions apart from privately-owned parcels	Number	Identified PAP user		150	500,000
	Acquisition of Treasury and Common Public Property Lands	Parcel/TRY	Third-party institution PAP holding a right of possession		50	
	Acquisition of immovable properties over treasury and common public property lands	Appurtenant Structure/TRY	Third-party institution PAP holding a right of possession		50	500,000
	Acquisition of trees over treasury and common public property lands	Number	Identified PAP user		50	500,000
4	**Land Acquisition by Rental**			**Contractor - DSI**		
	Acquisition of privately-owned parcels	Parcel/TRY	Shareholder		200	500,000

	Acquisition of lands other than privately-owned parcels	Parcel/TRY	PAP holding a right of possession, Third-Party Institutions		50	100,000	
5	**Acquisition of remaining lands agreed for expropriation**	Parcel/TRY	Shareholder	**DSI**	50	300,000	
B. Crop Price				**DSI**			
1	Crop price for privately-owned parcels	Crop species/TRY	Identified PAP user, tenant	**DSI**	500		900,000
2	Crop price for lands other than privately-owned parcels	Crop species/TRY	Identified PAP user, tenant		50		50,000
C. Transaction Costs for the Acquisition of Lands and Immovable Properties				**DSI**			
1	Expropriation (ownership, permanent and temporary easement) prices determined during the negotiations to be conducted as per Article 8 of the Expropriation Law are determined in a way to cover the transaction costs for acquiring immovable properties.	Parcel/TRY	Shareholders, PAPs holding a right of possession	**DSI**			
2	Transaction costs (land registry, etc.) of the PAPs with whom agreement is reached as per Article 8 of the Expropriation Law are covered by the calculated expropriation price.	Parcel/TRY	Shareholders, PAPs holding a right of possession				
D. Compensation of Losses through the Grievance Mechanism				**Contractor - DSI**			
1	Crop losses covered by the contractor		PAP filing a complaint	**Contractor - DSI**	50	100,000	
2	Damage to appurtenant structures and infrastructure, etc. as covered by the contractor		PAP filing a complaint		80	200,000	

E. Supports Offered by Third-Party Institutions				**Third-Party Institution - Contractor - DSI**			
1	Activities such as information, training, agricultural extension, etc.	Person/TRY	Benefiting PAP	**Third-Party Institution - Contractor - DSI**	2,000/10	20,000	
2	Local employment	Person/TRY	Benefiting PAP		20/2,324	46,480	
3	Demonstration activities, grant schemes, offered cash supports, etc.	Person/TRY	Benefiting PAP		100/1,000	100,000	
F. Consultancy Services for Preparing the RAP and Expropriation Plans, Updating, Monitoring and Evaluating the RAP				**Consultant - DSI**			
1	Consultation services for the preparation of expropriation plans	Person/TRY	Benefiting PAP	**Consultant - DSI**		432,000	
2	Consultation services for the preparation of the RAP	Person/TRY	Benefiting PAP			192,000	
3	Preparation of RAP monitoring and evaluation reports	Person/TRY	Benefiting PAP			176,000	
G. Total Budget				**DSI**			
1	Budget items A + B + C + D + E + F	TRY	Total Types of PAP	**DSI**			24,000,000+950,000+- +300,000+166,480+800,000 (TRY 26,216,480)

10.2. Business Plan

The division of labor planned under the RAP is shown below.

The total duration for the preparation, implementation and monitoring of the RAP is 24 months.

1. Preparation of the RAP for the first section will start in the fourth quarter of 2019 and come to an end in the second quarter of 2020.

Implementation of the RAP will start in the second quarter of 2020 and come to an end in the second quarter of 2021.

Table 10.2. RAP Business Plan

Activity		Responsible Party	
Preparation of the RAP			
1	Appointment of a RAP Consultant (if deemed necessary)	DSI's Department of Real Estate and Expropriation	July 2, 2019
2	Reaching an agreement over the social baseline study	DSI's Department of Real Estate and Expropriation and/or the RAP Consultant	October 2019
3	Valuation of assets subject to land acquisition	DSI Regional Directorate	2020-2024
4	Preparation of the draft RAP and submission thereof to DSI and the World Bank for evaluation	DSI's Department of Project and Construction DSI's Department of Real Estate and Expropriation and/or the RAP Consultant	January 2020
5	Disclosure of the draft RAP	DSI's Department of Real Estate and Expropriation	February 2020
6	Finalization of the RAP (in the evidence of feedbacks)	DSI's Department of Real Estate and Expropriation or the RAP Consultant	May 2020
7	Adaptation of the Grievance Mechanism to the Irrigation Modernization Project	General Directorate of DSI	December 2019
Implementation of the RAP			
8	Preparation of expropriation plans for the parcels not expropriated during the first section	DSI's Department of Real Estate and Expropriation and the RAP Consultant	2019-2021
9	Identification of users and vulnerable groups regarding the lands	DSI Regional Directorate	2019-2024
10	Consultations on project requirements with affected parties and other stakeholders	DSI Regional Directorate	2018-2024
11	Compensation negotiations	DSI Regional Directorate	2020-2024

12	Payment of compensations and land entry	DSI Regional Directorate	2020-2024
13	Continuous consultations on the construction plan and the implementation of the RAP	DSI Regional Directorate	2018-2024
14	Construction according to the new irrigation plan	Construction Contractor	2020-2025
15	Continuous monitoring and (semi-annual) reporting of Land Acquisition Plan practices	DSI Regional Directorate, DSI's Department of Real Estate and Expropriation and the RAP Consultant	2020-2025
16	Updating the RAP (if deemed necessary)	DSI's Department of Real Estate and Expropriation and/or the RAP Consultant	2020-2021
17	Disclosure of Updated RAP (if deemed necessary)	DSI's Department of Real Estate and Expropriation and/or the RAP Consultant	2020-2021
18	Water supply during the construction process	DSI Regional Directorate and the Water Users Association	2020-2025
19	Determining the institutions to cooperate and offering and monitoring various supports (agricultural extension, training, grant, etc.)	DSI Regional Directorate and Third-Party Institutions	2020-2025
20	Resolution of complaints about land acquisition	DSI Regional Directorate and the Contractor	2020-2030
Post-RAP Implementation			
21	Preparation of the draft RAP Closing Report	DSI's Department of Real Estate and Expropriation or the Independent Consultant	2026
22	Submission of the draft RAP Closing Report to DSI and the World Bank	DSI's Department of Real Estate and Expropriation or the Independent Consultant	2026
23	Finalization of the RAP Closing Report	DSI's Department of Real Estate and Expropriation or the Independent Monitoring & Follow-Up Consultant	2026
24	Disclosure of the RAP Closing Report	General Directorate of DSI	2026
25	Organization of the RAP Closing Meeting	DSI Regional Directorate, DSI's Department of Real Estate and Expropriation and the RAP Consultant	2026

11. Annexes

11.1. Methodology to be Used by DSI for Identifying Vulnerable Groups

Four different methods will be used to identify vulnerable groups. These are vulnerable groups to be identified based on;

a. Information obtained by mukhtars for vulnerable groups at settlement level (Its format is presented below)
b. Interviews with the lists of names given by mukhtars at settlement level (Its format is presented below)
c. Confirmation of the interviewed vulnerable groups from SYDV (Its format is presented below)
d. Identification of parcel owners and/or users whose parcels are affected by 20% or more (Its format is presented below).

a. Information to be Collected from Mukhtars on Vulnerable Groups at Settlement Level

Name of the Settlement **Date of Interview**

1. **How many people with physical and mental disabilities are there in the village/neighborhood?**

Households _____People_____

2. **How many households have female household heads in the settlement?**

3. **How many *landless households* or *people* are there in the village/neighborhood, meaning that they do not have any land but cultivate the lands of others that migrated from the village/neighborhood either by paying or without paying rent?**

Households_____People_____

4. **How many *people* are there in the village/neighborhood that are over the age of 65, live alone and old people that may be in need of care?**

Households_____People_____

5. **How many *widow/er people* are there in the village/neighborhood?**

Women_____ Men_____

6. **Are there people who work as farmers such as croppers, tenants, sharecroppers, etc. that work on other people's lands in the village? If any, how many households are there and how many households' lands are used by them?**

Tenant/Cropper Households_____Households Renting Out/Not Using Their Lands _____

7. **Are you hiring seasonal workers (including refugees, immigrants) during cultivation, tillage and harvest? How many people? Where do they come from? How are tents set up?**

Number of seasonal workers	Type of activity (irrigation, harvest, etc.)	Where they come from	Place of accommodation	Period (Which months)

8. **List of Names and Contact for the Persons whose lands (owned and/or used) are affected by expropriation and who receive support from SYDV**

b. Interviews with Vulnerable Groups Reported by Mukhtars at Settlement Level

PERSONS DEFINED AS VULNERABLE GROUPS

1. Name and surname of the interviewer
2. Name and Surname
3. Settlement, Date of Interview
4. Is the parcel used/owned thereby affected by expropriation?

   a. Yes b. No
5. Does s/he get support from SYDV? If yes, which supports?
6. If yes, vulnerable group category (More than one options can be chosen)

   a. Female household head

   b. Household head over 65

   c. Physically disabled

   d. Person in need

   e. Person whose lands (owned/used) are affected by 20% and more

c. Confirmation of Interviewed Vulnerable Groups from SYDV

SYDV VERIFICATION

Date of Receiving Information **The Person Receiving Information**

No.	Name	Settlement	Does S/he Get Support? Yes/No	Type of Support

d. Form for the Identification of the Level of Impact for the User and/or Owner Whose Parcel is Affected by Ownership Expropriation (Permanent Land Acquisition) by 20% and More

To be filled in by DSI Officials. **To be filled in for the persons whose parcel is affected by 20%**.

Settlement	**Affected Parcel's No**	**Parcel Size (M2)**	**Affected Crop**	**Species and number of the affected trees**	**Affected immovable properties (Coop, fence, etc.)**	**Type of Impact**	**Type of Parcel**	**Name and Surname of the User**	**Gender**	**Age**	**Phone**	**Status of the Owner**	**Area of registered lands owned (M2)**	**Area of lands used (M2)**	**Total area of lands (M2)**	**Proportion of the size of affected parcels to the total size of lands (%)**
						Expropriation	Privately-Owned					Owner				
						Permanent easement	Treasury					Shareholder				
						Temporary easement	Common Public Property					Official tenant				
						Expropriation + permanent easement	Not subject to registration					User (Without any rental contract)				
						Expropriation + permanent + temporary easement	Forestry					Occupant (User of an unregistered land other than privately-owned parcels)				
Total	X Parcels	X M2											X M2	X M2	XM2	Vulnerable group if 20% and higher

11.2. Additional Tables

Table 11-1. Information on Ereğli District 2018 Field Crops Growing

Crops	Planted Area (da)	Yield (Kg/da)	Production Amount (Ton)
Wheat	266,948	317	82,041
Sweet Corn	63,365	1,02	64,629
Barley	169,322	249	42,122
Rye	30,804	380	11,705
Oat	1,278	400	511
Triticale	2,467	345	851
Beans, dry	3	343	1,03
Chickpeas, dry	17	231	3,92
Lentils, dry (Green)	110	200	22
Vetch	60	67	4
Soybean	56	304	17
Canola Or Rapeseed	47	191	9
Sunflower Seed (For Oil)	38,674	398	15,401
Sunflower Seed (Snack)	25	300	7,5
Safflower Seed	2,343	93	217
Potato	15	3,877	58,153
Sugar beet	23,6	7,156	168,876
Sugar beet	5,5	2,5	13,75
Hungarian Vetch	18	3,5	63
Clover	38	6,1	231,8
sainfoin	350	351	123
Silage Corn	98	5,413	530,5
Mangel	100	4	400
Total	819,024	-	-

Source: TÜİK,2019.

Table 11-2. Distribution of the Products Planted at the Project Site (da)

Settlement	Cereals (da)	Bean (da)	Bağ (da)	Sugar Beet (da)	Chickpea (da)	Corn r (da)	Fruit garden (da)	Vegetable	Potato (da)	Forage Crops (da)	Poplar tree (da)	Fidan (da)	Irrigated Area ı (da)
Alhan	1,150	-	-	100	-	1,300	15	-	-	250	-	-	2,815
Atakent	850	-	-	-	-	290	150	-	-	22	-	4	1,316
Barbaros	700	-	-	120	200	500	45	-	-	30	-	-	1,595
Belceağaç	340	45	-	-	-	450	900	-	-	75	16	15	1,841
Burhaniye	690	-	-	-	-	300	145	-	-	60	-	-	1,195

Cahi	100	-	-	-	-	170	92	-	-	60	-	5	427
Cinler	800	-	-	-	-	600	102	-	-	350	-	2	1,854
Çömlekçi	150	-	-	-	-	160	140	6	-	75	15	-	546
Çimencik	2,500	-	-	-	180	550	280	-	-	55	15	6	3,586
Gaybi	850	250	-	30	-	250	315	-	-	60	-	20	1,775
Kargacı	750	-	-	95	-	1,250	35	-	-	211	-	-	2,341
Namık Kemal	300	-	-	-	-	300	196	18	-	8	-	5	827
Orhangazi	150	-	-	-	-	450	50	-	-	45	-	3	698
Orhaniye	350	-	-	25	-	325	500	-	-	56	-	8	1,264
Sarıca	100	-	-	-	-	250	420	-	-	70	50	16	906
Sarıtopallı	250	-	-	-	-	280	12	-	-	-	-	-	542
Şinasi	200	-	-	90	-	300	245	20	-	20	-	-	875
Talatpaşa	150	-	-	-	-	350	200	10	-	32	-	-	742
Ulumeşe	450	-	-	-	200	80	15	-	-	50	-	-	795
Yazlık	250	55	-	-	80	500	850	-	35	-	20	-	1,790
Yenibağlar	100	45	-	-	-	350	250	15	-	170	-	5	935
Yıldırım Beyazıt	75	-	-	-	-	200	250	7	-	45	-	4	581
Yıldızlı	125	-	60	-	21	250	1,900	-	-	20	35	62	2,473
Yunuslu	100	20	-	-	-	80	300	15	-	42	3	4	564
Ziya Gökalp	210	-	-	-	-	250	173	5	-	38	3	-	679
Total	11,690	415	60	460	681	9,785	7,580	96	35	1,844	157	159	32,962

Source: HAPA, 2019

Table 11-3. Distribution of Parcels in the Project Area by Size

Settlements	**Number of Parcels by Size**									**Number of Pieces (Piece)**
		0,6-10 (da)	10,1-20 (da)	20,1-30 (da)	30,1-40 (da)	40,1-50 (da)	50,1-60 (da)	60,1-70 (da)	70,1-80 (da)	80,1-90 (da)	
Alhan	50	43	20	10	9	2	3	1	1	139
Atakent	28	30	20	2	4	1	1			86
Aydınlar	55	22	15	4	4	1				101
Barbaros	31	70	25	2	1	1	1			131
Belceağaç	75	18	7	4	3	1	1			109
Burhaniye	72	18	18	8	4	4	3	1		128
Cahi	17	19	7	1	1					45
Cinler	65	45	20	17	5	1	1			154
Çömlekçi	40	8	8	2	1	1				60
Çimencik	121	30	20	7	1	1	1			181
Gaybi	28	25	21	7	4	2	2	1		90
Göktöme	64	54	23	10	5	3		1		160
Kargacı	55	20	13	3	4	2	1	1	1	100
Merinos	16	4	7		1					28
Namık Kemal	30	11	3	2	1	1				48

Orhangazi	19	12	5	3	1	1				41
Orhaniye	80	22	8	7	1	1				119
Sarıca	100	22	8	4	3					137
Sarıtopallı	10	9	2	1						22
Şinasi	20	15	18	4	3	1	1			62
Talatpaşa	25	15	10	4	3	1	1	1		60
Ulumeşe	9	10	4	2	1					26
Yazlık	160	60	20	4	1					245
Yenibağlar	55	20	12	5	4	3	1			100
Yıldırım Beyazıt	18	16	13	2	4	1				54
Yıldızlı	180	35	10	1	1					227
Yunuslu	33	27	15	3	5	2	2	1		88
Ziya Gökalp	20	14	8	1	1	1				45
Total	1476	694	360	120	76	32	19	7	2	2786

Source: HAPA, 2019

Table 11-4. Irrigation Union 2019 Neighborhoods Notification List User Details

No	Settlement	No of Parcels	Parcel Area (Da)	Irrigated Area (Da)	Proportion of Irrigated Area	Average Plot Size for Irrigation (Decares)	Parcel Without Irrigation	Proportion of the Parcel Without Irrigation	Number of Watering People	Average Parcel Size Watered Per Person	Average Parcel With Irrigation Per Capita	Parsellerde Malik Sayısı	Non-Owner Users	Proportion of Non-owner Water Users
1	Alhan	165	1,812	1,742	96%	11	3	2%	58	30	3	60	16	27%
2	Atakent	77	1,479	1,081	73%	19	20	26%	122	9	0	85	16	19%
3	Aydınlar	56	395	339	86%	8	13	23%	59	6	1	54	15	28%
4	Barboros	35	1,369	1,049	77%	36	6	17%	27	39	1	27	5	19%
5	Belceağaç	207	2,073	1,529	74%	8	22	11%	198	8	1	184	40	22%
6	Burhaniye	24	736	685	93%	38	6	25%	19	36	1	18	2	11%
7	Cahı	10	78	70	89%	7	0	0%	8	9	1	8	3	38%
8	Cinler	117	1,685	1,498	89%	14	8	7%	64	23	2	71	28	39%
9	Çimencik	197	3,606	3,224	89%	20	35	18%	154	21	1	137	42	31%
10	Çömlekçi	48	471	423	90%	11	10	21%	37	11	1	43	18	42%

11	Gaybi	68	1,729	1,305	75%	20	4	6%	63	21	1	56	21	38%
12	Kargacı	59	1,291	913	71%	16	2	3%	32	29	2	36	19	53%
13	Merinos	22	579	367	63%	20	4	18%	18	20	1	17	2	12%
14	Namık Kemal	25	534	317	59%	14	2	8%	23	14	1	25	11	44%
15	Orhangazi	28	487	402	83%	17	4	14%	25	16	1	23	13	57%
16	Orhaniye	165	1,147	1,011	88%	7	16	10%	130	8	1	123	27	22%
17	Sarıca	97	887	741	83%	9	14	14%	108	7	1	85	12	14%
18	Sarıtopallı	27	3,106	497	16%	18	0	0%	22	23	1	20	6	30%
19	Şinasi	70	1,196	1,046	87%	17	7	10%	42	25	2	45	17	38%
20	Talat Paşa	99	306	249	81%	3	8	8%	32	8	3	32	3	9%
21	Ulumeşe	153	2,590	2,177	84%	15	8	5%	93	23	2	80	18	23%
22	Yazlık	267	3,058	2,253	74%	9	17	6%	236	10	1	206	40	19%
23	Yeni Bağlar	59	904	715	79%	14	9	15%	59	12	1	55	19	35%
24	Yıldırım Beyazıt	83	513	414	81%	6	9	11%	59	7	1	63	17	27%
25	Yıldızlı	416	2,468	2,193	89%	6	20	5%	221	10	2	213	45	21%
26	Yunuslu	104	239	210	88%	2	6	6%	53	4	2	50	5	10%
27	Ziya Gökalp	65	525	501	95%	9	9	14%	46	11	1	52	20	38%
	Total	2,743	35,263	26,951	76%	11	262	10%	2,008	13	1	1,868	480	26%

Source: Ereğli-İvriz Left Bank Irrigation Union, 2019

Table 11-5. Irrigation Union 2019 Neighborhoods Notification List Product Pattern Decares

Settlement/Crop	Sunflower	Bean	Sapling	Wetch	Garden	Vegetables	Cereals	Poplar tree	Corn	Chickpea	Beet	Onion-Garlic	Vineyard	Forage Crops	Clover	Total
Dekar	595	702	27	1,043	5,191	371	5,298	288	10,82	397	87	12	13	58	891	25,79

									2							5
%	2%	3%	0,1%	4%	20%	1%	21%	1%	42%	2%	0,3%	0,0%	0,0%	0,2%	3%	2%

Source: Ereğli-İvriz Left Bank Irrigation Union, 2019

Table 11-6. Irrigation Union 2019 Neighborhoods Notification List Product Pattern Decare

Settlement/Crop (Dekar)	0	0	0	14	4	0	166	0	1,463	0	0	0	0	0	34	1,680
Alhan	0	0	1	0	126	7	84	0	62	0	0	4	0	0	21	306
Aydınlar	0	2	0	12	171	8	638	0	185	10	0	0	0	0	8	1,034
Atakent	215	0	0	96	42	172	93	0	375	0	0	0	0	0	21	1,013
Barboros	0	61	5	30	692	4	106	6	353	0	0	0	9	0	137	1,403
Belceağaç	0	0	0	11	47	0	544	0	54	0	0	0	0	0	0	656
Burhaniye	0	0	0	0	11	0	0	0	52	0	7	0	0	0	0	70
Cahı	94	0	0	50	35	0	153	10	972	0	18	0	0	0	81	1,412
Cinler	65	123	0	314	143	8	850	0	1,209	153	0	5	0	58	120	3,048
Çimencik	0	0	0	33	78	0	8	0	272	0	0	0	0	0	0	390
Çömlekçi	0	135	1	71	200	0	411	0	406	75	0	0	0	0	0	1,299
Gaybi	0	0	0	0	1	0	26	0	877	0	0	0	0	0	0	904
Kargacı	0	0	0	0	0	0	151	38	142	0	0	0	0	0	0	331
Merinos	0	0	0	0	73	0	0	2	199	0	0	0	0	0	31	305
Namık Kemal	51	0	0	13	19	0	49	0	172	0	36	0	0	0	5	345
Orhangazi	0	0	0	8	366	11	54	3	489	0	20	0	0	0	18	969
Orhaniye	0	0	3	0	298	6	7	116	244	0	0	0	0	0	26	698
Sarıca	17	0	0	94	0	0	7	0	380	0	0	0	0	0	0	497
Sarıtopallı	0	0	0	38	94	9	49	0	744	0	0	0	0	0	88	1,022
Şinasi	33	0	0	0	94	0	13	0	92	0	0	0	0	0	0	233
Talat Paşa	0	44	6	91	54	6	1,449	8	351	103	6	0	0	0	19	2,138
Ulumeşe	0	248	4	86	752	7	225	27	645	28	0	0	0	0	148	2,169
Yazlık	41	0	0	74	63	9	187	0	282	27	0	0	0	0	3	685
Yeni Bağlar	0	0	0	0	95	1	0	0	253	0	0	0	0	0	27	375
Yıldırım Beyazıt	0	88	7	0	1,510	123	5	78	237	0	0	0	4	0	98	2,151
Yıldızlı	0	0	0	10	146	1	4	0	25	0	0	0	0	0	6	192
Yunuslu	78	0	0	0	78	0	22	0	290	0	0	3	0	0	0	471
Ziya Gökalp	595	702	27	1,043	5,191	371	5,298	288	10,822	397	87	12	13	58	891	25,795
Total	0	0	0	14	4	0	166	0	1,463	0	0	0	0	0	34	1,680

Source: Ereğli-İvriz Left Bank Irrigation Union, 2019

Table 11-7. Irrigation Union 2019 Neighborhoods Notification List Product Pattern Decare, %

Settlement/Crop(%)	Sunflower	Bean	Sapling	Wetch	Garden	Vegetables	Cereals	Poplar tree	Corn	Chickpea	Beet	Onion-Garlic	Vineyard	Forage Crops	Clover	Total
Alhan	0%	0%	0%	1%	0%	0%	10%	0%	87%	0%	0%	0%	0%	0%	2%	100%
Aydınlar	0%	0%	0%	0%	41%	2%	28%	0%	20%	0%	0%	1%	0%	0%	7%	100%
Atakent	0%	0%	0%	1%	17%	1%	62%	0%	18%	1%	0%	0%	0%	0%	1%	100%
Barboros	21%	0%	0%	9%	4%	17%	9%	0%	37%	0%	0%	0%	0%	0%	2%	100%
Belceağaç	0%	4%	0%	2%	49%	0%	8%	0%	25%	0%	0%	0%	1%	0%	10%	100%
Burhaniye	0%	0%	0%	2%	7%	0%	83%	0%	8%	0%	0%	0%	0%	0%	0%	100%
Cahı	0%	0%	0%	0%	15%	0%	0%	0%	75%	0%	10%	0%	0%	0%	0%	100%
Cinler	7%	0%	0%	4%	2%	0%	11%	1%	69%	0%	1%	0%	0%	0%	6%	100%
Çimencik	2%	4%	0%	10%	5%	0%	28%	0%	40%	5%	0%	0%	0%	2%	4%	100%
Çömlekçi	0%	0%	0%	8%	20%	0%	2%	0%	70%	0%	0%	0%	0%	0%	0%	100%
Gaybi	0%	10%	0%	5%	15%	0%	32%	0%	31%	6%	0%	0%	0%	0%	0%	100%
Kargacı	0%	0%	0%	0%	0%	0%	3%	0%	97%	0%	0%	0%	0%	0%	0%	100%
Merinos	0%	0%	0%	0%	0%	0%	46%	11%	43%	0%	0%	0%	0%	0%	0%	100%
Namık Kemal	0%	0%	0%	0%	24%	0%	0%	1%	65%	0%	0%	0%	0%	0%	10%	100%
Orhangazi	15%	0%	0%	4%	5%	0%	14%	0%	50%	0%	10%	0%	0%	0%	1%	100%
Orhaniye	0%	0	0%	1%	38	1%	6%	0%	5	0%	2	0%	0%	0%	2%	10

		%			%				0 %		%					0 %
Sarıca	0%	0 %	0%	0%	43 %	1%	1%	17 %	35 %	0%	0 %	0%	0%	0%	4%	100 %
Sarıtopallı	3%	0 %	0%	19 %	0%	0%	1%	0%	76 %	0%	0 %	0%	0%	0%	0%	100 %
Şinasi	0%	0 %	0%	4%	9%	1%	5%	0%	73 %	0%	0 %	0%	0%	0%	9%	100 %
Talat Paşa	14%	0 %	0%	0%	40 %	0%	6%	0%	40 %	0%	0 %	0%	0%	0%	0%	100 %
Ulumeşe	0%	2 %	0%	4%	3%	0%	68 %	0%	16 %	5%	0 %	0%	0%	0%	1%	100 %
Yazlık	0%	11 %	0%	4%	35 %	0%	10 %	1%	30 %	1%	0 %	0%	0%	0%	7%	100 %
Yeni Bağlar	6%	0 %	0%	11 %	9%	1%	27 %	0%	41 %	4%	0 %	0%	0%	0%	0%	100 %
Yıldırım Beyazıt	0%	0 %	0%	0%	25 %	0%	0%	0%	67 %	0%	0 %	0%	0%	0%	7%	100 %
Yıldızlı	0%	4 %	0%	0%	70 %	6%	0%	4%	11 %	0%	0 %	0%	0%	0%	5%	100 %
Yunuslu	0%	0 %	0%	5%	76 %	1%	2%	0%	13 %	0%	0 %	0%	0%	0%	3%	100 %
Ziya Gökalp	17%	0 %	0%	0%	17 %	0%	5%	0%	62 %	0%	0 %	1%	0%	0%	0%	100 %
Total	2%	3 %	0,1 %	4%	20 %	1%	21 %	1%	42 %	2%	0, 3 %	0,0 %	0,0 %	0,2 %	3%	100 %

Source: Ereğli-İvriz Left Bank Irrigation Union, 2019

Table 11-8. Irrigation Association 2019 Neighborhoods Notification List Female Water User Details

Settlement	No of Parcels	No of Female Irrigation Parcels	Female Irrigation Parcel Size (Decare)	Number of Women Waterers	Ratio of Female Irritants to Total Water Users	Average Number of Parcels Per Female Irrigator	Percentage of Female Irrigation Parcels to Total Irrigated Parcel %	Female Irrigation Average Parcel Size (Decare)	Female Farmer – Owner Same Person
Alhan	165	0	0	0	0%	0,0	0%	0	0
Aydınlar	77	5	48	7	12%	0,7	12%	7	5
Atakent	77	5	20	6	5%	0,8	9%	3	1

Barboros	35	0	0	0	0%	0,0	0%	0	0
Belceağaç	207	47	175	44	22%	1,1	25%	4	30
Burhaniye	24	6	29	6	32%	1,0	33%	5	6
Cahı	10	1	7	1	13%	1,0	10%	7	1
Cinler	117	1	16	1	2%	1,0	1%	16	1
Çimencik	197	16	135	14	9%	1,1	10%	10	7
Çömlekçi	48	2	10	2	5%	1,0	5%	5	1
Gaybi	68	9	115	7	11%	1,3	14%	16	2
Kargacı	59	9	156	4	13%	2,3	16%	39	1
Merinos	22	1	7	1	6%	1	7	7	
Namık Kemal	25	4	35	2	9%	2,0	17%	17	1
Orhangazi	28	1	1	1	4%	1,0	4%	1	0
Orhaniye	165	19	139	14	11%	1,4	13%	10	4
Sarıca	97	16	84	20	19%	0,8	19%	4	9
Sarıtopallı	27	5	24	3	14%	1,7	19%	8	1
Şinasi	70	4	32	3	7%	1,3	6%	11	2
Talat Paşa	99	6	6	4	13%	1,5	7%	2	2
Ulumeşe	153	8	48	4	4%	2,0	6%	12	2
Yazlık	267	56	170	51	22%	1,1	22%	3	29
Yeni Bağlar	59	5	14	5	8%	1,0	10%	3	3
Yıldırım Beyazıt	83	15	25	9	15%	1,7	20%	3	6
Yıldızlı	416	80	250	47	21%	1,7	20%	5	37
Yunuslu	104	21	50	15	28%	1,4	21%	3	9
Ziya Gökalp	65	10	21	7	15%	1,4	18%	3	5
Total	2,743	352	1,617	278	14%	1,3	16%	5	165

Source: Ereğli-İvriz Left Bank Irrigation Union, 2019

Table 11-9. Irrigation Association 2019 Neighborhoods Notification List Female Water User Product Pattern

Settlement/Crop	Sunflower	Bean	Sapling	Wetch	Garden	Vegetables	Cereals	Poplar tree	Corn	Chickpea	Beet	Onion-Garlic	Vineyard	Forage Crops	Clover	Total
Dekar	10	26	0	14	923	13	211	49	426	16	0	0	4	0	2	1,694
%	1%	2%	0%	1%	54%	1%	12%	3%	25%	1%	0%	0%	0,20%	0%	0,1%	100%

Source: Ereğli-İvriz Left Bank Irrigation Union, 2019

Table 11-10. Irrigation Association 2019 Neighborhoods Notification List Female Water User Product Pattern Decares

Settlement/Crop (Dekar)	Sunflower	Bean	Sapling	Wetch	Garden	Vegetables	Cereals	Poplar tre	Corn	Chickpea	Beet	Onion-Garlic	Vineyard	Forage Cro	Clover	Total

								e						ps		
Alhan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aydınlar	0	0	0	0	5	0	23	0	17	0	0	0	0	0	0	45
Atakent	0	0	0	0	8	0	4	0	5	0	0	0	0	0	0	17
Barboros	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Belceağaç	0	0	0	0	133	1	2	0	40	0	0	0	4	0	0	180
Burhaniye	0	0	0	0	28	0	2	0	0	0	0	0	0	0	0	29
Cahı	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	7
Cinler	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	16
Çimencik	0	0	0	7	22	0	61	0	45	0	0	0	0	0	0	135
Çömlekçi	0	0	0	0	4	0	0	0	6	0	0	0	0	0	0	10
Gaybi	0	23	0	0	61	0	26	0	5	10	0	0	0	0	0	125
Kargacı	0	0	0	0	1	0	0	0	154	0	0	0	0	0	0	156
Merinos	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	7
Namık Kemal	0	0	0	0	6	0	0	2	28	0	0	0	0	0	0	36
Orhangazi	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Orhaniye	0	0	0	8	72	0	0	0	59	0	0	0	0	0	0	139
Sarıca	0	0	0	0	65	0	0	13	19	0	0	0	0	0	0	96
Sarıtopallı	0	0	0	0	0	0	0	0	24	0	0	0	0	0	0	24
Şinasi	0	0	0	0	18	0	14	0	0	0	0	0	0	0	0	32
Talat Paşa	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	6
Ulumeşe	0	0	0	0	5	0	38	0	5	6	0	0	0	0	0	55
Yazlık	0	0	0	0	144	3	18	7	7	0	0	0	0	0	2	182
Yeni Bağlar	1	0	0	0	13	0	0	0	0	0	0	0	0	0	0	14
Yıldırım Beyazıt	0	0	0	0	18	0	0	0	7	0	0	0	0	0	0	25
Yıldızlı	0	3	0	0	244	8	0	27	3	0	0	0	0	0	0	285
Yunuslu	0	0	0	0	50	1	0	0	0	0	0	0	0	0	0	50
Ziya Gökalp	9	0	0	0	12	0,5	0	0	0	0	0	0	0	0	0	21
Total	**10**	**26**	**0**	**15**	**923**	**13,5**	**211**	**49**	**424**	**16**	**0**	**0**	**4**	**0**	**2**	**1.693**

Source: Ereğli-İvriz Left Bank Irrigation Union, 2019

Table 11-11. Irrigation Association 2019 according to Settlements %

Settlement/Crop (%)	Sunflower	Bean	Sapling	Wetch	Garden	Vegetables	Cereals	Poplar tree	Corn	Chickpea	Beet	Onion-Garlic	Vineyard	Forage Crops	Clover	Total
Alhan	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Aydınlar	0%	0%	0%	0%	11%	0%	51%	0%	38%	0%	0%	0%	0%	0%	0%	100%
Atakent	0%	0%	0%	0%	46%	0%	24%	0%	30%	0%	0%	0%	0%	0%	0%	100%
Barboros	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Belceağaç	0%	0%	0%	0%	74%	1%	1%	0%	22%	0%	0%	0%	2%	0%	0%	100%
Burhaniye	0%	0%	0%	0%	94%	0%	6%	0%	0%	0%	0%	0%	0%	0%	0%	100%
Cahı	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%
Cinler	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	100%
Çimencik	0%	0%	0%	5%	16%	0%	45%	0%	34%	0%	0%	0%	0%	0%	0%	100%
Çömlekçi	0%	0%	0%	0%	42%	0%	0%	0%	58%	0%	0%	0%	0%	0%	0%	100%
Gaybi	0%	18%	0%	0%	49%	0%	21%	0%	4%	8%	0%	0%	0%	0%	0%	100%
Kargacı	0%	0%	0%	0%	1%	0%	0%	0%	99%	0%	0%	0%	0%	0%	0%	100%
Merinos	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	100%
Namık Kemal	0%	0%	0%	0%	18%	0%	0%	5%	78%	0%	0%	0%	0%	0%	0%	100%
Orhangazi	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%
Orhaniye	0%	0%	0%	6%	52%	0%	0%	0%	43%	0%	0%	0%	0%	0%	0%	100%
Sarıca	0%	0%	0%	0%	67%	0%	0%	13%	19%	0%	0%	0%	0%	0%	0%	100%

Sarıtopallı	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	100%
Şinasi	0%	0%	0%	0%	57%	0%	43%	0%	0%	0%	0%	0%	0%	0%	0%	100%
Talat Paşa	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%
Ulumeşe	0%	0%	0%	0%	10%	0%	70%	0%	9%	12%	0%	0%	0%	0%	0%	100%
Yazlık	0%	0%	0%	0%	79%	2%	10%	4%	4%	0%	0%	0%	0%	0%	1%	100%
Yeni Bağlar	8%	0%	0%	0%	92%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%
Yıldırım Beyazıt	0%	0%	0%	0%	71%	0%	0%	0%	29%	0%	0%	0%	0%	0%	0%	100%
Yıldızlı	0%	1%	0%	0%	86%	3%	0%	9%	1%	0%	0%	0%	0%	0%	0%	100%
Yunuslu	0%	0%	0%	0%	99%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%
Ziya Gökalp	42%	0%	0%	0%	55%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%
Total	1%	2%	0%	1%	54%	1%	12%	3%	25%	1%	0%	0%	0,20%	0%	0,1%	100%

Source: Ereğli-İvriz Left Bank Irrigation Union, 2019

Table 11-12. Bovine and Ovine Animal Existence at the Project Site

Settlement	No of Sheep	No of Goat	Total Ovine	No of Cattle	No of Buffalo	Total Bovine	Total Livestock
Alhan	1,429	15	1,444	1,557	-	1,557	3,001
Belceağaç	634	-	634	4,113	-	4,113	4,747
Burhaniye	905	26	931	1,446	-	1,446	2,377
Çimencik	1,315	69	1,384	6,162	-	6,162	7,546
Gaybi	765	13	778	1,088	-	1,088	1,866
Kargacı	1,789	137	1,926	3,114	-	3,114	5,040
Merkez-Atakent	1,156	-	1,156	1,542	-	1,542	2,698
Merkez-Barbaros	356	2	358	2,527	-	2,527	2,885
Merkez- Cahı	1,148	58	1,206	4,709	-	4,709	5,915

Merkez- Cinler	113	24	137	7,344	1	7,345	7,482
Merkez- Çömlekci	459	12	471	4,802	-	4,802	5,273
Merkez-Namıkkemal	1,239	106	1,345	6,616	-	6,616	7,961
Merkez-Orhangazi	636	9	645	4,384	-	4,384	5,029
Merkez-Şinasi	889	99	988	5,242	-	5,242	6,230
Merkez-Talatpaşa	348	10	358	1,704	-	1,704	2,062
Merkez-Yenibağlar	1,620	26	1,646	6,755	-	6,755	8,401
Merkez- Yıldırımbeyazıt	95	-	95	1,562	-	1,562	1,657
Merkez- Yunuslu	412	29	441	1,553	-	1,553	1,994
Merkez- Ziya Gökalp	362	-	362	2,910	-	2,910	3,272
Orhaniye	3,048	146	3,194	4,162	14	4,176	7,370
Sarıca	547	4	551	2,376	-	2,376	2,927
Sarıtopallı	2,497	36	2,533	3,173	-	3,173	5,706
Ulumeşe	2,802	2	2,804	1,000	-	1,000	3,804
Yazlık	549	68	617	817	-	817	1,434
Yıldızlı	40	-	40	571	-	571	611
Total Livestock	25,153	891	26,044	81,229	15	81,244	107,288

Source: Ereğli Agriculture District Directorate, 2019

Table 11-13. List Of Immovable Property Affected By Parcels According To Settlements

No	Settlement	Private Parcels				
		Number of Parcels Found Immovable	**Number of Owners**	**Number of Users Identified**	**Owner / User Number of Same Person**	**Affected Immovables**
1	Belceağaç	13	13	11	3	Garden wall, Concrete poles, Wire fence, Concrete wall, Iron door Wooden vine, Iron vine, Poultry, Lock parquet, Iron pole, Warehouse, Concrete trough, Iron manger, Pool, Water well

2	Cahi	8	8	8	4	Concrete poles, Wire fence, Iron door, Iron vine, Wooden vine, Poultry, Briquette toilet, Water well
3	Çömlekçi	2	2	1	1	Concrete poles, Iron door
4	Kargacı	9	9	6	3	Concrete poles, Fence wall, Wooden poles, Wire fence, Iron door, Iron vine, Briquette Poultry, Wooden Poultry, Shack
5	Namık Kemal	13	13	12	4	Concrete poles, Garden wall, Wire fence, Iron fence, Iron door, Wooden vine, Iron vine, Poultry
6	Orhangazi	6	6	3	3	Concrete poles, Wire fence, Iron door, garage
7	Orhaniye	7	7	3	1	Concrete poles, Wire fence, Garden wall, Concrete door, Wooden vine, Parquet floor, Wooden warehouse
8	Sarıca	6	6	12	2	Iron poles, Wire netting, Iron fence, Concrete wall, Iron door, Wooden vine, Iron vine, Poultry

9	Yazlık	15	15	10	1	Concrete poles, Wire wall mesh, Stone garden wall, Wooden poles, Iron poles, Wire fence, Iron door, Wooden door, Iron vine, Wooden vine, Poultry, Concrete floor
10	Yıldırım Beyazıt	6	6	4	1	Concrete poles, Stone wall, Wire fence, Garden door
11	Yıldızlı	4	4	3	0	Concrete poles, Stone wall, Iron arbor, Locked parquet taşı
12	Ziya Gökalp	4	4	1	0	Concrete poles, Wire fence, Concrete wall, Garden wall
	Total	93	93	74	23	Garden wall, Concrete poles, Wire fence, Concrete wall, Garden wall, Iron door, Wooden vine, Iron vine, Poultry, Lock parquet, Iron pole, Warehouse, Concrete trough, Iron manger, Pool, Water well

Source: HAPA, 2019

Table 11-14. List of Immovable Property Affected by Individual Parcels According to Settlements

No	Settlement	Public Common Property			Konya Metropolitan Municipality			Non-Registered Land		
		No of Parcels Found Immovable	**No of Users Identified**	**Affected Immovables**	**No of Parcels Found Immovable**	**No of Users Identified**	**Affected Immovables**	**No of Parcels Found Immovable**	**No of Users Identified**	**Affected Immovables**

1	Belceağaç	0	0	0	0	0	0	4	5	Concrete poles, Wire netting, Iron door
2	Cahi	0	0	0	0	0	0	1	1	Wooden vine
3	Kargacı	4	1	Wooden warehouse, Poultry, Concrete poles, Wire netting, Iron pole, Camellia Concrete floor	1	0	Concrete poles, Wire netting	0	0	0
4	Namık Kemal	0	0	0	0	0	0	1	1	Garden wall
5	Orhaniye	1	0	Concrete poles, Wire netting	0	0	0	0	0	0
6	Sarıca	0	0	0	0	0	0	2	2	Locked parquet, Wooden fence
7	Yazlık	0	0	0	0	0	0	3	2	Concrete poles, Wire fence
8	Yıldırım Beyazıt	0	0	0	0	0	0	1	1	Wooden vine
	Total	5	1	Wooden warehouse, Poultry, Concrete poles, Wire netting, Iron pole, Camellia,	1	0	Concrete poles, Wire netting	12	12	Concrete poles, Wire netting, Iron door, Wooden vine, Locked parquet, Wooden fence,

	Concrete floor	Wire fence
Total No of Parcels		18
Total No of Users		13

Source: HAPA, 2019

Table 11-15. List of Affected Trees and Users Outside the Individual Parcel

Settlements	Explanation	Treasury Parcels	Public Common Property	Non-Registered Land (Overflow, etc.) User Parcel	Ereğli Municipality	DSİStream	DSİ	Total
Belceağaç	Number of parcels with trees	1	0	5	0	0	0	6
Belceağaç	No of trees	2	0	37	0	0	0	39
Belceağaç	No of Users	0	0	6	0	0	0	6
Belceağaç	No of Owners	0	0	0	0	0	0	0
Cahi	Number of parcels with trees	0	0	2	0	0	0	2
Cahi	No of trees	0	0	6	0	0	0	6
Cahi	No of Users	0	0	2	0	0	0	2
Cahi	No of Owners	0	0	0	0	0	0	0
Gaybi	Number of parcels with trees	1	0	0	0	0	0	1
Gaybi	No of trees	20	0	0	0	0	0	20
Gaybi	No of Users	0	0	0	0	0	0	0
Gaybi	No of Owners	0	0	0	0	0	0	0
Kargacı	Number of parcels with trees	0	4	0	0	0	0	4
Kargacı	No of trees	0	254	0	0	0	0	254
Kargacı	No of Users	0	11	0	0	0	0	11
Kargacı	No of Owners	0	0	0	0	0	0	0
Namık Kemal	Number of parcels with trees	0	0	2	0	2	0	4
Namık Kemal	No of trees	0	0	11	0	7	0	18
Namık Kemal	No of Users	0	0	2	0	0	0	2

Namık Kemal	No of Owners	0	0	0	0	0	0	0
Orhaniye	Number of parcels with trees	1	0	0	0	0	0	1
Orhaniye	No of trees	95	0	0	0	0	0	95
Orhaniye	No of Users	0	0	0	0	0	0	0
Orhaniye	No of Owners	0	0	0	0	0	0	0
Sarıca	Number of parcels with trees	0	1	7	0	0	0	8
Sarıca	No of trees	0	2	81	0	0	0	83
Sarıca	No of Users	0	0	9	0	0	0	9
Sarıca	No of Owners	0	0	0	0	0	0	0
Yazlık	Number of parcels with trees	0	0	8	0	0	1	9
Yazlık	No of trees	0	0	142	0	0	13	155
Yazlık	No of Users	0	0	5	0	0	1	6
Yazlık	No of Owners	0	0	0	0	0	0	0
Yıldırım Beyazıt	Number of parcels with trees	0	0	4	0	0	0	4
Yıldırım Beyazıt	No of trees	0	0	6	0	0	0	6
Yıldırım Beyazıt	No of Users	0	0	3	0	0	0	3
Yıldırım Beyazıt	No of Owners	0	0	0	0	0	0	0
Ziya Gökalp	Number of parcels with trees	0	0	3	0	0	0	3
Ziya Gökalp	No of trees	0	0	21	0	0	0	21
Ziya Gökalp	No of Users	0	0	3	0	0	0	3
Ziya Gökalp	No of Owners	0	0	0	0	0	0	0
Total	Number of parcels with trees	3	5	31	0	2	1	42
Total	No of trees	117	256	304	0	7	13	697
Total	No of Users	0	11	30	0	0	1	42
Total	No of Owners	0	0	0	0	0	0	0

Source: HAPA, 2019

11.3. Grievance Application Form / Closing Form

GRIEVANCE APPLICATION FORM			
Name of the Complainant:		Date:	
Title:			
THE OWNER OF THE COMPLAINT		**HOW TO RECEIVE THE COMPLAINT**	
Name/Surname (This area is not a requisite. Anonymous grievances will also be recorded.)		Telephone	□
Telephone		Information meeting	□
Address		Application to field office	□
Settlement		Post/E-post	□
Signature (If)		Filed visit	□
		Other: ……..	□
COMPLAINT DETAILS			

GRIEVANCE CLOSURE FORM		
EVALUATION OF THE COMPLAINT	Expropriation	□
	Damage to homes or livelihoods	□
	Environmental or social	□
	Labor sourced	□
	Other	□
Does It Require Compensation?	□ **YES**	□ **NO**
SONUÇ		
CLOSURE *This section will be filled in and signed by the complainant and The Complaint Evaluation Committee after the compensation has been received and the complaint has been remedied. (Instead of the complainant's signature, bank receipt or other documents indicating that the compensation has been made can be attached)*		
Kurum adına yetkili	**Şikayetçi**	
Name/Surname Date/Signature	Name/Surname Date/Signature (If Possible)	

11.4. Market Land Prices of the Settlements

Neighborhoods	Approximate Value of Lands (TL/m2) 2019
1) Yıldızlı	25-50
2) Sarıca	25-60
3) Gaybi	20-35
4) Belceağaç	25-50
5) Yazlık	25-50
6) Orhaniye	25-35
7) Yıldırım Beyazıt	25-50
8) Çömlekçi	40-60
9) Ziya Gökalp	40-60
10) Orhangazi	30-50
11) Namık Kemal	30-50
12) Cahı	40-60
13) Kargacı	30-60
14) Atakent	40-60
15)Yenibağlar	25-45
16) Çimencik	20-35
17) Burhaniye	20-35
18) Barbaros	20-35
19) Cinler	25-45
20) Alhan	20-40
21) Şinasi	25-50
22) Sarıtopalı	20-30
23) Yunuslu	45-70
24) Talat Paşa	50-70
25) Ulumeşe	20-30

11.5. Photos from the Field Study

Meeting with the President of the Irrigation Association

DSİ Ereğli District Directorate

Alhan Neighbor Mukhtar

Barbaros Neighbor Mukhtar

Belceağaç Neighbor Mukhtar

Cinler Neighbor Mukhtar

Doğuelagözlü Neighbor Mukhtar

Fatih Neighbor Mukhtar

Melicek Neighbor Mukhtar

Orhaniye Neighbor Mukhtar

Sarıtopallı Neighbor Mukhtar

Selvili Neighbor Mukhtar

Talatpaşa Neighbor Mukhtar

Taşağıl Neighbor Mukhtar

Yazlık Neighbor Mukhtar

Yıldızlı Neighbor Mukhtar

Atakent Neighbor Mukhtar

Aydınlar Neighbor Mukhtar

Burhaniye Neighbor Mukhtar

Cahı Neighbor Mukhtar

Çimencik Neighbor Mukhtar

Gaybi Neighbor Mukhtar

Kargacı Neighbor Mukhtar

Namık Kemal Neighbor Mukhtar

Orhangazi Neighbor Mukhtar

Sarıca Neighbor Mukhtar

Şinasi Neighbor Mukhtar

Türkmen Neighbor Mukhtar

Yıldırım Beyazıt Neighbor Mukhtar

Yunuslu Neighbor Mukhtar

 Ziya Gökalp Neighbor Mukhtar	