



AYGM

HALKALI-ISPARTAKULE- CERKEZKOY RAILWAY LINE

Resettlement Action Plan





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Resettlement Action Plan

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WSP

2 London Square
Cross Lanes
Guildford, Surrey
GU1 1UN

Phone: +44 148 352 8400

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APPENDICES

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APPENDIX D

MUKHTAR SURVEY

1

INTRODUCTION



1 INTRODUCTION

1.1 THE PROJECT

- 1.1.1. The Turkish General Directorate of the Infrastructural Investment (AYGM) intends to construct a new high speed railway line from Halkali to Ispartakule and from Isparakule to Cerkezkoy (herein referred to as 'the Project'), in two different tenders and sections. The Project will be located within the region of Istanbul and province of Tekirdag (the land upon which the railway is to be built is herein referred to as 'the Site'). Once operational the Project would be operated by TCDD Taşımacılık (TCDD Transport) (and TCDD).
- 1.1.2. The Project will provide passenger and freight services connecting Istanbul (at the existing Halkali Station) to the district of Cerkezkoy and will link to the under-construction Cerkezkoy-Kapikule railway, which is partially funded by the European Union (EU). The Project, together with the in construction Cerkezkoy to Kapikule railway, will be part of the Trans-European Transport Network (TEN-T) connecting to Turkey's European border (at Kapikule). The Project and the Cerkezkoy to Kapikule railway will together form one integrated railway system with full interoperability.
- 1.1.1. The European Bank for Reconstruction and Development (EBRD) and the Asian Infrastructure Investment Bank (AIIB), collectively called the 'Lenders', are considering financing components of the Project, specifically the railway between Ispartakule and Cerkezkoy only.
- 1.1.2. The Project and this Resettlement Action Plan (RAP)¹ has therefore been developed on behalf of AYGM in accordance with these Lenders policies and requirements, as detailed in **Chapter 3: Legislative Framework, Policy and Guidance**.

1.2 PROJECT NEED

- 1.2.1. The principal need for the Project is to increase the freight and passenger rail capacity in the strategically critical area of Thrace. The area is critical as a European-Asian meeting point of the European rail network and, under future growth scenarios, is set to become an increasing bottleneck unable to meet the demand of future populations.
- 1.2.2. The Project is a response to key transport sector policies and strategic infrastructure initiatives which are described in **Chapter 1: Introduction** of the **Environmental and Social Impact Assessment (ESIA)**.

1.3 AIMS OF THE PROJECT

- 1.3.1. The requirements for the Project are associated with socioeconomic, demographic and infrastructure demands forecasted for Turkey, as well as commitments for trans-national infrastructure policies. The Project objectives are as follows:

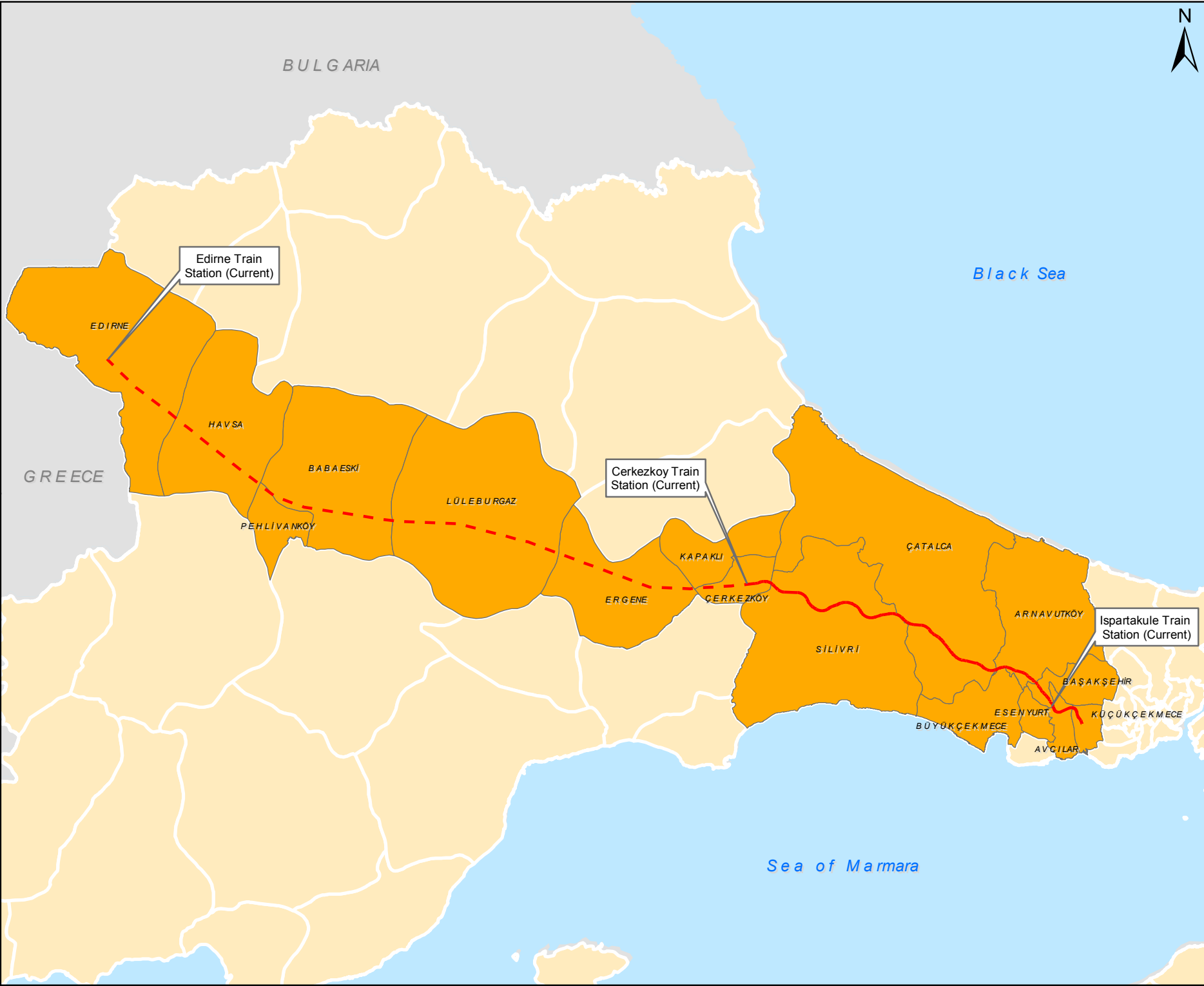
¹ The RAP is a document in which a project sponsor or other responsible entity specifies the procedures that it will follow and the actions that it will take to mitigate adverse effects, compensate losses and provide development benefits to persons and communities affected by an investment project.

- Contribute towards the achievement of:
 - Enhancement of the sustainability and safety of the national transport system;
 - Improved efficiency of the transport system;
 - Facilitation of a shift from individual to sustainable, accessible and inclusive modes of public transport at the national level; and
 - To facilitate further integration of Turkey with the Single European Transport Area.
- Solve the capacity constraints of the railway link between the Orient / Eastern Mediterranean Corridor and the indicative extension of the TEN-T railway network of the Anatolian region of Turkey that will maximise the potential for developing a seamless transition from Europe to eastern Anatolia via the third Bosphorus Bridge.
- Remove the railway capacity limitations and encourage a modal shift from the current heavy reliance on road transport to railway transportation by:
 - Improving the level of service provided by TCDD Transport to its passengers / customers by reducing travel time and increasing train frequency;
 - Increasing capacity and the level of service for freight customers; and
 - Reducing the passenger and freight traffic loads on highways, thereby reducing the risk of accidents on said highways.

1.4 PROJECT SETTING

- 1.4.1. The Project is located in the north western of Turkey, and within the province of Tekirdag, in the region of Thrace, and the region of Istanbul. These regions are largely urbanised, containing the largest city in Turkey (Istanbul). There is an existing rail network in these regions which has a single-track layout throughout and connects Istanbul (Halkali station) to the Bulgarian border (Kapikule station). The Project alignment is broadly aligned with this existing railway, which can be divided into sections as follows:
- Halkali – Ispartakule; and
 - Ispartakule – Cerkezkoy.
- 1.4.2. There is also an established road network connecting the city of Istanbul to the Bulgarian border, as well as providing links to the major port of Tekirdag and Istanbul's international and national airports.
- 1.4.3. The Project alignment is shown on **Figure 1-1** below.

Path: \\uk.wspgroup.com\central data\Projects\700699xx\70069978 - IPPF - Turkey TCDD Halkali - Cerkezkoy High Speed Railway\03 WIP\GIS\Map\Figure 1-1 - Project Location Plan.mxd



THIS DRAWING MAY BE USED ONLY FOR THE PURPOSE INTENDED AND ONLY WRITTEN DIMENSIONS SHALL BE USED

Legend

- Proposed Railway Route
- Railway Route Under Construction
- District



Note:

Drawing Status

FINAL

Job Title:

HALKALI-ISPARTAKULE-CERKEZKOY RAILWAY LINE

Drawing Title

Figure 1-1 - Project Location Plan

Scale at A4

1:925,000

Drawn

DG

Stage 1 check

LW

Stage 2 check

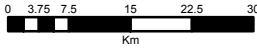
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Originated

DG

Date

22/02/2021



Drawing Number

Figure 1-1

1.5 LENDERS ENVIRONMENT AND SOCIAL REQUIREMENTS

- 1.5.1. The Lenders are considering financing the section of the Project between Ispartakule and Cerkezkoy, the “Lenders’ Project”, in accordance with their respective policies outlined below.

AIIB

- 1.5.2. The Lenders’ Project will be compliant with AIIB’s Environmental and Social Framework (approved 2016 and amended 2019). In accordance with its provisions regarding development partners policies, the AIIB has elected to apply the EBRDs Environmental and Social requirements on the Project.

EBRD

- 1.5.3. The EBRD Environmental and Social Policy (2014) establishes the environmental and social requirements for the defined set of business activities considered for financing by the Bank, i.e. the Lenders’ Project which consists of the new railway and associated systems from Ispartakule to Cerkezkoy section only. The Halkali to Ispartakule section intersects the proposed Kanal Istanbul project and therefore includes a tunnel crossing under the proposed canal. This section is not part of the Lenders’ Project as they are not considering financing this section. The Halkali to Ispartakule section is considered an associated facility under EBRD Environmental and Social Policy (2014) and therefore, is included in this RAP.
- 1.5.4. This RAP includes an assessment of both the Lenders’ Project and the associated facilities (‘the Project’).
- 1.5.5. Further details on the legislative and policy requirements are provided in **Chapter 3: Legislative Framework, Policy and Guidance**.

1.6 PROJECT CATEGORISATION

The Lenders Project has been assigned a Category A status in accordance with the EBRD ESP and PRs 2014. The categorisation as a Category A project means that a comprehensive **ESIA**, including review of associated documents must be carried out, followed by the public disclosure of the **ESIA** for 120 days. As well as requiring the development of a comprehensive **ESIA**, this Category A Project also required the development of a RAP. This is due to the Project alignment necessitating the acquisition of land parcels from private owners and the physical and economic displacement of Project Affected Persons (PAPs)².

1.7 NATIONAL REGULATORY REQUIREMENTS

- 1.7.1. This RAP will conform to Turkish resettlement regulatory standards, inclusive of, but not limited to, the following:

² Project Affected Persons, or PAPs, are all persons impacted by the involuntary resettlement, including all members of a household (women, men, girls, boys, including several generations in the case of extended households); the owner and employees of a business; tenants; landowners and sharecroppers; informal settlers (i.e. lacking formal titles); holders of customary land-rights; informal business-operators and their workers.

- The Expropriation Law (1982, No. 2942), as amended in 2020;
- Forest Law (1956, No. 6831);
- Pasture Law (1998, No. 4342);
- Cadastral Law (1987, No. 3402);
- Land Registry Law (1934, No. 2644);
- Agricultural Reform Law on Land Arrangement in Irrigated Areas (1984, No. 3083);
- Law on Soil Protection and Land Use (2005, No. 5403);
- Law of Population Services (2006, No. 5490);
- The Notification Law (1956, No. 7201); and
- Land Registry Code (2013, No. 28738).

1.8 AYGM

- 1.8.1. In August 2020, AYGM took over the role of detailed designer and developer for the Project from TCDD. TCDD has been responsible for the design and development of the Project prior to August 2020. AYGM will be responsible for the development and delivery of Project until the completion of the construction phase.
- 1.8.2. AYGM is a Directorate of the Turkish government. Its responsibilities are inclusive of the development and construction of railways, ports, airports and logistics centres.

1.9 TCDD TRANSPORT AND TCDD

- 1.9.1. TCDD Transport (and TCDD) will be responsible for the operation of the Project.
- 1.9.2. TCDD, State Railways of The Republic of Turkey, falls under the jurisdiction of the Ministry of Transport and Infrastructure. TCDD will be responsible for the operation and maintenance of railway infrastructure.
- 1.9.3. TCDD Transport is a subsidiary organisation to TCDD who will work in collaboration with TCDD. TCDD Transport will be responsible for the operation and maintenance of the railway for passengers and freight.

1.10 PURPOSE OF THIS RAP

- 1.10.1. This document presents the RAP for the Project. The RAP has been prepared in line with Lenders Standards and Turkish regulations that are relevant to this Project.
- 1.10.2. This RAP describes the policies, principles and procedural requirements that will be followed throughout the Project to ensure that PAPs and communities are resettled and compensated for any losses, such that their livelihoods and standards of living are restored to at least pre-Project levels.
- 1.10.3. The overall purpose of this RAP is to:
 - Avoid or minimise involuntary resettlement, physical and economic displacement;
 - Consider feasible alternative project designs to avoid, or at least minimise displacement, while balancing environmental, social and financial costs and benefits;
 - Mitigate adverse social and economic impacts from land acquisition or restrictions on affected persons' use of and access to land;
 - Provide compensation for loss of assets at replacement cost;
 - Improve or, at a minimum, restore the livelihoods and standards of living of displaced persons to pre-Project levels; and

- Provide measures to effectively consult PAPs and communities in order for them to participate in the design of this RAP and the mitigation and compensation measures presented herein.

1.10.4. This RAP will be implemented by AYGM.

1.10.5. This RAP has been informed by and/or is supported by the following relevant reports prepared as part of the Disclosure Package for the Project:

- **ESIA** (including the **Environmental and Social Management Plan (ESMP)**);
- **Stakeholder Engagement Plan (SEP)**;
- **Contractor Management Plan (CMP)**; and
- **Emergency Response Framework (ERF)**.

1.10.6. EBRD PR5 states that involuntary resettlement refers both to physical displacement (relocation or loss of shelter) and economic displacement (loss of assets or resources, and/or loss of access to assets or resources that leads to loss of income sources or means of livelihood) as a result of project-related land acquisition and/or restrictions on land use.

1.10.7. Resettlement is considered involuntary when affected individuals or communities do not have the right to refuse land acquisition, or restrictions on land use, that result in displacement. This occurs in cases of: (i) lawful expropriation or restrictions on land use based on eminent domain; and (ii) negotiated settlements in which the buyer can resort to expropriation or impose legal restrictions on land use if negotiations with the seller fail.

1.10.8. In the case of this Project, a public interest decision was taken by TCDD and approved by the Ministry of Transport, Maritime Affairs and Communication on 30th May 2017. This decision gave TCDD the lawful right to expropriate land required for this Project. Those who currently own the land to be expropriated by the Project had the legal right to refuse the land acquisition during earlier announcements for National EIA for the Project (2017)³. However, the Project follows a procedure and the Project alignment is decided on the most advantageous alternative for both the community and the Authority. The Project alignment will involve physical and economic displacement and as such involuntary resettlement and PR5 requirements are triggered. The process of how AYGM will be taking over the rights to undertake the land expropriation for this Project is described in **Chapter 6: Organisational Arrangements and Land Acquisition Approach**.

1.10.9. Unless properly managed, involuntary resettlement may result in long-term hardship and impoverishment for the project-affected persons and communities, as well as environmental damage and adverse socio-economic impacts in areas where the affected persons have been displaced. This RAP sets out measures to plan and manage involuntary resettlement.

1.11 THE OBJECTIVES OF THIS RAP

1.11.1. This RAP presents AYGM's approach to mitigating the potential negative impacts of physical and economic displacement that could be caused by the Project. The information contained in the document applies to those impacted by the Project, providing a timeline of actions between the latter

³ Sweco Mühendislik Müşavirlik ve Tasarım Ltd. Şti.(2017). Halkalı – Kapikule Railway Project EIA Report.

part of 2020 and 2026, when the Project will become fully operational (primarily consisting of RAP implementation and monitoring).

1.11.2. The information in this RAP has been compiled based on:

- **Household Surveys** of the formal and informal users of the land to be acquired for the Project (83% of the surveys were completed by the head of household) and data gathered on socio-economic characteristics of affected land users and owners (30th June 2020 to 31st August 2020);
- **22 Mukhtars**⁴ interviewed to develop a greater understanding of the affected settlements and views on the Project from elected officials (1st July to 5th July 2020);
- **13 Governors** interviewed to explain the Project and understand their views on the Project (29th June 2020 and 1st July 2020);
- **14 Focus Groups** (10th August to 25th August 2020) comprising:
 - **Informal User Focus Groups** conducted to develop a greater understanding of the affected informal users (including regulated traditional charcoal producers and seasonal agricultural workers) and their views on the Project;
 - **Women-Only Focus Groups** conducted to develop a greater understanding of gender issues in local communities, potential impacts on women in the affected communities and their views on the Project; and
 - **Community Focus Groups** conducted to understand community views of the Project.
- **Site Drive Through** of the Project alignment in August 2020; and
- **Asset Inventory Update** conducted by the AYGM Expropriation Department in December 2020.

1.11.3. In addition to the above, a second site drive through was conducted in the vicinity of Yeşilbayır, Kabakça and Akören, between the 15th and 19th February 2021 where the expropriation corridor is substantially wider, to identify any further PAPs. This included additional meetings with the Mukhtars of these 3 settlements.

1.11.4. Prior to the surveys, interviews and meetings being completed, the surveyors were trained on the Project and data collection. An overview of these surveys, interviews and meetings is presented in **Chapter 4: Affected People and Assets**.

1.11.5. The Asset Inventory Update conducted by AYGM examined the levels of compensation required for the PAPs, identified during the household surveys. It provided an update to asset inventory information that was originally quantified by TCDD in 2017. The update included the identification of PAPs and valuation of all land parcels and structures identified as being affected by the Project in 2020, to determine the compensation required to meet both national legislation and PR5. In addition to the asset inventory, surveys, interviews and meetings, secondary data sources were also used to add context to the socio-economic conditions of the PAPs and communities.

1.11.6. The land acquisition approach and implementation schedule for resettlement are described within **Chapter 6: Organisational Arrangements and Land Acquisition Approach** and **Chapter 12:**

⁴ Mukhtar's are the elected village leaders in settlements across Turkey.

Implementation Schedule respectively. The resettlement programme will be applied to all Project activities in relation to the construction and operation of the Project.

- 1.11.7. This RAP is a live public document and will continue to be revised following Project approval, to inform the resettlement programme through the various stages of Project development (construction and operation).

1.12 STRUCTURE OF THE RAP

- 1.12.1. A summary of the chapters are included in **Table 1-1**.

Table 1-1 - Summary of Chapters

Chapter	Description
Chapter 1: Introduction	Introduction to the Project and the RAP, presenting the document's purpose, scope and method of preparation.
Chapter 2: Project Description	Description of the Project and alternative modes, locations and technologies that have been considered for the Project.
Chapter 3: Legislative Framework, Policy and Guidance	Lenders' requirements and national and international resettlement legislation that is of relevance to the Project.
Chapter 4: Affected People and Assets	The social baseline of the affected PAPs and communities, including the differing land uses of the land affected by the Project.
Chapter 5: Project Impacts	Expected project impacts/losses associated with the project components/phases covered by the RAP, and an explanation of all activities and alternatives considered to avoid or minimise displacement.
Chapter 6: Organisational Arrangements and Land Acquisition Approach	The roles and responsibilities of all involved agencies/organisations, including coordination arrangements, and the procedures for the delivery of entitlements.
Chapter 7: Valuation Methodology	Description of the methodology for valuing losses to determine their replacement cost and compensation and assistance measures. Description of process for executing compensation and assistance.
Chapter 8: Eligibility and Entitlements	Cut-off date for eligibility and eligibility of categories of displaced persons for compensation and other resettlement assistance. Entitlements matrix addressing categories of losses and entitlements pertaining to the project components/phases in question.
Chapter 9: Livelihood Restoration Plan	Description of proposed livelihood restoration measures to be implemented as part of the RAP to support the PAPs that will be economically displaced due to Project activities. This includes support to maintain and improve current economic activities, as well as provide alternative livelihood opportunities.

Chapter	Description
Chapter 10: Monitoring and Reporting	Description of the internal and external monitoring and evaluation arrangements and presentation of monitoring indicators to measure inputs, outputs, and outcomes for resettlement/livelihood restoration activities. Linking to the disclosure of information, public consultation and GM in the SEP . Also covers reporting on the implementation of the RAP.
Chapter 11: Implementation Costs and Budget	Tables presenting expected costs and budget for all resettlement activities and sources of funds.
Chapter 12: Implementation Schedule	Implementation schedule covering all activities from preparation of the plan through implementation, including monitoring and evaluation.

- 1.12.2. This RAP, which has been prepared to comply with potential Lenders' requirements, utilises information from the asset inventory carried out for this Project by TCDD (2017) and information from further studies and designs that were prepared for the Project, including the Asset Inventory Update (2020).
- 1.12.3. This RAP, supported by the Project's **Guide for Land Acquisition and Compensation (GLAC)**, and the wider disclosure package, will be available for public review and comment for 120 days. After this disclosure period the documentation will be revised, where appropriate, in response to the comments received.

2

PROJECT DESCRIPTION



2 PROJECT DESCRIPTION

2.1 OVERVIEW OF THE PROJECT

- 2.1.1. The Project will provide a new 76km high speed electric rail link connecting Istanbul (at the existing Halkali Station) to Ispartakule, and from Ispartakule to just before the existing Cerkezkoy Station to the west. Halkali Station is located within Istanbul province and Cerkezkoy is located in Tekirdag province, both in the north west of Turkey. The Project will accommodate passenger and freight trains. The location of the Project is shown in **Figure 2-1**.
- 2.1.2. For the purposes of this RAP, the term 'Project' refers to the following (a detailed description of the Project is provided in **Chapter 2: Description of the Project** of the **ESIA**):
- A new double track 9km line (i.e. two new lines) between Halkali Station and Ispartakule Station. In order for the Project to pass under the proposed Kanal Istanbul project a 6km twin-bored tunnel will be constructed in this section. The twin-bored tunnel will contain two high speed tracks with one line for each direction (though bi-directional operation will also be possible, if necessary). The twin-bored tunnel tracks will be suitable for use by both conventional and high-speed trains. Conventional trains will re-join the existing railway prior to Ispartakule Station;
 - A new double track 67km line from Ispartakule to a location adjacent to the east of Cerkezkoy Station (approximately 1km from the centre of Cerkezkoy);
 - Modification of existing infrastructure, but not buildings, at the 3 existing stations Halkali (0km from Halkali), Ispartakule (9km from Halkali) and Çatalca (76km from Halkali)), including the provision of footbridges, platforms and additional tracks;
 - New ancillary structures, inclusive of bridges, viaducts, tunnels, overpasses and underpasses;
 - Supporting power supply systems, inclusive of overhead lines and substations; and
 - Supporting electrification, signalling and control systems.
- 2.1.3. The Project, in comparison with the projected usage of the existing railway line, would see the following changes to trains per hour by the forecast year of 2041:
- Halkali – Çatalca:
 - An 80% increase in passenger trains, with no change in freight train numbers.
 - Çatalca – Cerkezkoy:
 - An 80% increase in passenger trains and a 45% increase in freight trains.

THIS DRAWING MAY BE USED ONLY FOR
THE PURPOSE INTENDED AND ONLY
WRITTEN DIMENSIONS SHALL BE USED

Legend

- Town
- ✕ Railway Station (Current)
- +++ Existing Railway Route
- Proposed Railway Route



Note:

Drawing Status

FINAL

Job Title:

HALKALI – CERKEZKOY
HIGH SPEED RAILWAY

Drawing Title

Figure 2-1 - Project Location

Scale at A4

1:300,000

Drawn

DG

Stage 1 check

JK

Stage 2 check

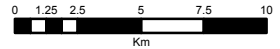
JW

Originated

DG

Date

22/02/2021



Drawing Number

Figure 2-1



Black Sea

Sea of Marmara

END

Cerkezkoym CH76+000

Cerkezköy

İstasyon

Büyükçavuşlu
Merkez

Beyciler

Küçüksinekli

Mızraklı

Çayırdere

Sinekli

Büyüksinekli

Kurfalı

Bekirli

Akören

Kabakça

Kabakça

Gökçeali

İnceğiz

Kaleiçi

Catalca CH31+800

Çatalca

Ferhatpaşa

Bahşayış

Yeşilbayır

Ömerli

Karaağaç Mah.

Orhangazi

Bahçeşehir

Esenkent

Ardıçlı

Halkali CH0+000

START

Ispatarkule CH9+373

Ispartakule

Tahtakale

Melantias

Halkalı

- 2.1.4. The key design parameters and specifications for the Project are shown in **Table 2-1**. The Project will link to the Cerkezkoy to Kapikule railway section, which is currently under construction, and is funded by the EU. The Project will be fully integrated with the Cerkezkoy to Kapikule railway section and will have full interoperability. The Project is part of the Trans-European Transport Network (TEN-T) connecting to Turkey's European border (at Kapikule). The Project, together with the Cerkezkoy to Kapikule railway, will provide connections to Sofia (Bulgaria), which is located within the Orient / East-Mediterranean corridor of the TEN-T Network.
- 2.1.5. The Project is also a subcomponent of the TRACECA Project (Transport Corridor Europe-Caucasus-Asia). The aim of the TRACECA Project is to strengthen economic relations, trade and transport in the regions of the Black Sea basin, South Caucasus and Central Asia.

Table 2-1 - Design Parameters

Parameter		Specification / Number
Line Type		Electric
Gauge		1,435mm
Distance Between Line Axes		4.5m
Minimum Horizontal Curve Radius		2,200m
Maximum Vertical Slope		1.6%
Design Speed (Maximum)	Passenger Trains	200km/h
	Freight Trains	120km/h
Structures	Bridges	9
	Viaducts	2
	Tunnels	8
	Overpasses	17
	Underpasses	26
Railway Fencing		Throughout the Project, fencing, that is between 1.5 and 2m in height, will be provided in the expropriation corridor, as shown in Chapter 2: Description of the Project of the ESIA .
Railway Corridor		50m
Platform Width		14.5m

2.2 THE EXISTING SITE

- 2.2.1. The Project broadly follows the route of an existing railway. For the purposes of this RAP it is assumed that the existing railway will remain and be used for maintenance and emergency purposes. Areas of the Project deviate from this existing railway in order to adhere to the needs and optimisation of a high-speed railway, such as adhering to maximum gradient and minimum curve radius, that is required to allow rolling stock to operate safely and passengers to remain comfortable at higher speeds.
- 2.2.2. The general characteristics of the settlements along the Project alignment are presented in **Chapter 4: Affected People and Assets**.

2.3 CONSTRUCTION PROGRAMME

- 2.3.1. The Project is due to be tendered in 2021, with construction commencing in 2021, and the Project becoming fully operational in 2026. The construction programme allows for pre- and post-construction activities such as mobilisation, enabling works, testing and commissioning.
- 2.3.2. A detailed construction programme will be prepared by the appointed Contractor.
- 2.3.3. Details on the key construction activities, such as enabling works, access roads and temporary construction compounds and construction workers accommodation, are provided in **Chapter 2: Description of the Project** of the **ESIA**.

2.4 PROJECT LAND REQUIREMENTS

- 2.4.1. This RAP covers the permanent land requirements for the Project. The Contractor is also likely to require some temporary areas of land during construction, such as for the construction compounds and temporary access roads. This land will be acquired on a temporary basis but will still align with the compensation entitlements as described in **Chapter 8: Eligibility and Entitlements** of this RAP.
- 2.4.2. The information on the affected land area, plots, owners and structures presented in this RAP is based on data available at the time of preparing the document. The land areas required for this Project are located within the following 7 districts (no land areas are required in Kucukcekmece):
 - Avcılar
 - Başakşehir;
 - Arnavutköy;
 - Büyükçekmece;
 - Çatalca;
 - Silivri; and
 - Çerkezköy.
- 2.4.3. Some of the land that is required for the Project is owned by governmental institutions. However, there is a substantial amount of the land owned by private individuals (over 1.2 million m²) that will need to be expropriated.
- 2.4.4. The scope of this RAP covers all owners and formal/informal users of private land and formal/informal users of public land that will be expropriated. This includes land plots which are currently owned by individuals, those owned by multiple individuals, and those owned by private businesses and Non-Government Organisations (NGOs).

2.4.5. **Chapter 4: Affected People and Assets** of this RAP presents the social baseline of the affected PAPs and communities, including the differing land uses of the land affected by the Project. In addition, a description of land take for the Project is provided in **Chapter 5: Project Impacts** of this RAP.

2.5 LAND ACQUISITION FOOTPRINT

2.5.1. The overall land acquisition footprint of the Project is described in **Table 2-2** below. The construction area of the Project remains within the expropriation corridor. However, in case of temporary physical and economic displacement being needed for the construction compounds and access roads, the RAP principles and mitigation measures will be followed by the Contractor in compliance with PR5. These requirements are included in the ESMP in addition to this RAP for the Project, as described in **Chapter 8: Eligibility and Entitlements**.

Table 2-2 - Land Acquisition Footprint

Project Components	Land Acquisition or Easement ⁵	Footprint Area
Rail Track		
<p>Land to be permanently acquired for the 50m rail corridor. This includes:</p> <ul style="list-style-type: none"> ■ Power supply systems, electrification, signalling and control systems, including overhead lines and transformers; ■ New drainage system consisting of interceptor ditches, side ditches, box culverts and manholes; ■ The Right of Way and Safety Zone; ■ Modification of existing infrastructure, but not buildings, at the 3 existing stations (Halkali, Ispartakule and Çatalca), including the provision of footbridges, platforms and additional tracks; and ■ Any additional areas of land to be used for construction. 	Acquisition	4,794,725 m ²

⁵ Easement is a legal right to use of land of another, without the right to possession of that land, or to take any part of the soil or produce of such land. In accordance with Article 4 of the Law No: 2942, instead of expropriating an immovable property, easement can be granted for a certain portion, elevation and depth of the immovable property or for the resource in Turkey, if adequate for the purpose. Therefore, easement right can be established for the immovable property in favour of the administration without need for changing its owner to keep the integrity of the land. However, if the use of the property right of the lands is not violated, the provision of no expropriation regarding the lands is also clearly stated in the same article. Article 4 of the Expropriation Law, suggests "Provided that the use of the property rights of the owners are not prevented and the necessary measures are taken in terms of life and property safety, all kinds of bridges and similar transportation lines and all kinds of bridges, subways, tunnels and similar rail transport systems can be built under the lands, based on the public interest. In the event that the use of the property right of the land is not prevented, no expropriation is made regarding the land."

Project Components	Land Acquisition or Easement ⁵	Footprint Area
New Ancillary Structures		
Land to be permanently acquired for the 6km twin-bored tunnel under the Proposed Kanal Istanbul.	Acquisition	105,350 m ²
Land to be permanently acquired for the tunnels (total 5,498m in length), which includes areas of land to be used for construction.	Acquisition	206,417 m ²
Land to be permanently acquired for the bridges and viaducts (total 1,820m in length and 12m wide), which includes areas of land to be used for construction.	Acquisition	12,840 m ²
Land to be permanently acquired for the overpasses (total 535.2m in length and 10m wide) which includes areas of land to be used for construction.	Acquisition	5,520 m ²
Land to be permanently acquired for the underpasses (total 177m in length and maximum 8m wide) which include areas of land to be used for construction.	Acquisition	1,416 m ²
Land to be permanently acquired for the power supply systems, electrification, signalling and control systems, inclusive of overhead lines and transformers which include areas of land to be used for construction. ⁶ – 6 parcels. Signal open line for technical buildings; 1 station technical building with local traffic control room; and 6 parcels. open line RTU Technical building.	Acquisition	1,200 m ²
Total Estimated Land Acquisition Footprint		5,127,468 m²
Halkali Substation (outside the expropriation corridor) – currently owned by TCDD	Easement	200 m ²
Kabakça Substation (outside the expropriation corridor) – currently owned by TCDD	Easement	1,000 m ²
Easement rights in ancillary/engineering structures	Easement	262,483 m ²
Total Estimated Easement Footprint		263,683 m²

- 2.5.2. Areas of land used for construction described in **Table 2-2** will be restored and returned to former owners, wherever possible.
- 2.5.3. The estimated land acquisition footprint information presented in **Table 2-2** above excludes any land that may be required on a temporary basis outside of the expropriation corridor. For example, any

⁶ Land take for the power supply systems, electrification, signalling and control systems, including overhead lines and transformers, is 0 m² as it is already within the rail corridor.

land required for construction compounds or construction access roads that do not fall within the expropriation corridor. The Contractor will be responsible for selecting the location of these construction compounds, in accordance with the selection criteria in the ESMP and community engagement in the SEP, and for the construction of access roads, with compensation that meets PR5 requirements. This is included as an item within the ESAP. At this point, the footprint of the land required on a temporary basis is estimated to be between 5,000 m² and 9,000 m² for the construction compounds and 4,000 m² for the access roads, however this will be refined by the appointed Contractor.

2.6 ANALYSIS OF ALTERNATIVES

- 2.6.1. **Chapter 3: Consideration of Alternatives** of the **ESIA** describes the main alternatives to, and within the Project, such as alternative modes of transport, route alignments, and structures that have been considered by TCDD⁷ and AYGM, together with the principal reasons for proceeding with the options selected for the Project.
- 2.6.2. Several alternatives for this Project were considered prior to the undertaking of the **ESIA** and are presented in detail within the National EIA for the Project (2017) and the Feasibility Study for the Project (2018)⁸.
- 2.6.3. In summary the alternatives consisted of:
- 'Do-nothing' scenario;
 - A road alternative; and
 - 11 rail alternative scenarios.
- 2.6.4. This process is described in detail in **Chapter 3: Consideration of Alternatives** of the **ESIA** and resulted in the detailed evaluation of 3 of the 10 rail alternatives, which were developed further and presented within the 2018 Feasibility Study for the Project⁹:
- Alternative 1 continued use of the existing railway with some improvements to align with the TEN-T policy (a 'business as usual' approach);
 - Alternatives 7 and 8 were based on a new high-speed railway largely along the existing alignment from Halkali to Çerkezköy, and a new high-speed alignment between Cerkezkoy and Kapikule (currently under-construction).
- 2.6.5. The 2018 Feasibility Study for the Project concluded that, based on the comparison against TEN-T criteria, Alternative 7 (which was subsequently refined to form the Project) was the most appropriate of the alternatives considered as it met the Project aims, provided sufficient capacity for future demand and complied with TEN-T policy. Alternative 7 and 8 were both assessed in the National EIA for the Project (2017). The design of Alternative 7 has evolved since the National EIA for the

⁷ Prior to August 2020, when TCDD had responsibility for developing the design for the Project.

⁸ Feasibility Study for Halkalı-Kapıkule Railway Line Project Revised Report (2018).

⁹ Feasibility Study for Halkalı-Kapıkule Railway Line Project Revised Report (2018).

Project was prepared, into its current design iteration which forms the Project (**Chapter 2: Description of the Project** of the **ESIA** provides further details).

2.7 ALTERNATIVES TO MINIMISE RESETTLEMENT

- 2.7.1. The cost benefit analysis in the 2018 Feasibility Study concluded that both Alternatives 7 and 8 were economically feasible and beneficial for society. Expropriation costs for the acquisition of affected assets and land were included in the evaluation of construction costs associated with each of the alternatives. No expropriation costs were identified in relation to Alternative 1. Expropriation costs of 206 million euros and 204 million euros for Alternative 7 and Alternative 8, respectively, were included in the cost benefit analysis. These expropriation costs were based upon high-level initial information and reflected a valuation in accordance with Turkish regulatory requirements, as opposed to Lenders' requirements.
- 2.7.2. In addition, a multi criteria analysis was used to establish an overview of all relevant impacts of the Project and assist with choosing the best alternative for improvement of the current railway. For social impacts, the sub-criteria included welfare distribution impacts, gender impacts, construction impacts, and number of people to be displaced.
- 2.7.3. Overall in relation to social impacts, Alternative 1 scored the highest (i.e. lowest social impact) mainly due to the lack of construction needs, reducing impacts on the existing rail services. The scores for both Alternative 7 and 8 were at similar levels lower than Alternative 1 (i.e. higher social impact) . However, Alternative 7 (the selected alternative) was expected to result in slightly fewer people being displaced compared to Alternative 8 (i.e. Alternative 7 had a slightly higher score than Alternative 8).

MINIMISING PHYSICAL DISPLACEMENT

- 2.7.4. The Project design has aimed to minimise physical displacement where possible, reducing land acquisition where practicable to avoid the acquisition of residential properties.
- 2.7.5. The Project alignment follows the existing railway before diverging at chainage 16+900 in Ömerli Village, Arnavutkoy. This approach minimises the need for expropriation in this area, as TCDD already own the railway, its immediate buffer surrounding, and some land parcels adjacent to the line. Extending the width of this current alignment to fit the high-speed railway line and an exclusion zone (50m width in total, i.e. 25m either side of the Project alignment) will require less additional land, compared to proposing a completely separate alignment that would require the expropriation of other land.
- 2.7.6. Aligning the Project to the existing railway takes advantage of an infrastructure corridor where residential development and private land ownership is lower, thus minimising physical resettlement. Furthermore, following the existing railway will reduce the risk and magnitude of severance and access restrictions that would occur if there were two distinct alignments located far apart. Instead the Project will have two alignments that are mainly located close together, forming one transport corridor.
- 2.7.7. In addition, the tunnel underneath the proposed Kanal Istanbul project will avoid the expropriation of households in residential areas of Yarımburgaz (to the east of the tunnel) and a further small residential area to the west of the tunnel (to the south of Ispartakule).

MICRO ROUTING OF THE PROJECT

- 2.7.8. Separate to the 2018 Feasibility Study for the Project¹⁰ a micro-routing analysis was undertaken as part of the **ESIA** in order to minimise the extent of expropriation caused by the Project. This was undertaken to ensure compliance with PR5, namely to “avoid or, at least minimise, involuntary resettlement wherever feasible by exploring alternative project designs”. A summary of the micro-routing analysis is provided below.
- 2.7.9. The Project includes the construction of a 3km tunnel from chainage 16+765 to 19+635 in Ömerli Village, to avoid the Hadımköy Organized Industrial Zone (OIZ). The OIZ provides considerable tax and location advantages for the manufacturing of intermediate goods, leading to increased investment in the surrounding area. The infrastructure works have been completed for this OIZ, which aims to boost production in factories, so avoiding this Zone will maintain the economic benefits provided to the surrounding area.
- 2.7.10. The Project alignment diverges to the north of the existing railway between chainage 38+000 and 42+200 and is located approximately 1.4km from the existing railway at its furthest point. This divergence allows the Project alignment to avoid İnçeğiz Village and allows the alignments to be located in a more rural area instead.
- 2.7.11. The Project alignment also diverges to the north of the existing railway between chainage 45+100 and 53+500. This allows the Project to follow a more direct route, achieve a better curvature and avoid the urban areas of Kurfalli and Bekirli.
- 2.7.12. Between chainage 65+200 and 66+500, the Project is located less than one km north of the existing railway. This divergence provides a more direct route, better curvature and reduces the loss of woodland, although some expropriation is required to achieve this alignment.
- 2.7.13. The potential changes to the route of the Project and the crossing structures to be introduced in order to minimise physical and economic displacement were reviewed as part of the micro-routing analysis, and 8 recommendations for the Project were made, as follows:
- Arnavutköy District, Ömerli / Deliklikaya (Chainage 16+200) - Extension of tunnel in Ömerli to avoid expropriating 8 land plots;
 - Büyükçekmece District, Karaağaç (Chainage 20+900 – 22+700) - Change in part of the Project alignment in Karaağaç to avoid 2 land plots;
 - Çatalca District, Ferhatpaşa and İzzettin (Chainage 31+400 – 32+900) - Altering part of the Project alignment by a maximum of 90m to the southwest to avoid the households and/or business activities in Ferhatpaşa and İzzettin;
 - Çatalca District, Gökçeali (Chainage 35+600 – 37+900) - Altering part of the Project alignment in order to avoid at least 8 households located in Gökçeali;
 - Çatalca District, İnçeğiz (Chainage 41+200) - Rebuild a road (currently in the expropriation corridor) to a location south of the Project in İnçeğiz so that the area to the south of the Project alignment occupied by structures retains access to this road;

¹⁰ Feasibility Study for Halkalı-Kapıkule Railway Line Project Revised Report (2018).

- Çatalca District, Kabakça (Chainage 43+400 – 45+700) - Altering part of the Project alignment in Kabakça to the south-west to avoid 12 households and avoid disruption to the surrounding communities;
- Silivri District, Çayırdere (Chainage 69+600 – 71+800) - Diversion of part of the Project alignment approximately 250m to the north to avoid 1 large building, possibly agricultural, and 1 secondary structure; and
- Cerkezkoy District, İstasyon (Chainage 71+800 – 75+100) - Diverting part of the Project alignment in İstasyon to a maximum of 350m south west to avoid expropriation of at least 11 separate households and/or business activities (including an orchard).

2.7.14. These recommendations were made to AYGM to consider possible further options, if practicable, to avoid expropriation of land parcels (with primary / secondary structures) owned and used by households and businesses (formal and informal users), and to avoid splitting and restricting access to land parcels. In addition, a high-level comparison was also undertaken of the location of overpasses and underpasses to identify areas where potential access restrictions may occur.

2.7.15. AYGM has agreed that the Contractor will be responsible for reviewing the practicability of the inclusion of the micro-routing analysis options in the final design, and the requirement for this review will be set out in the tender documents and in the **ESMP** for the Project.

2.8 CERKEZKOY TO KAPIKULE RAILWAY

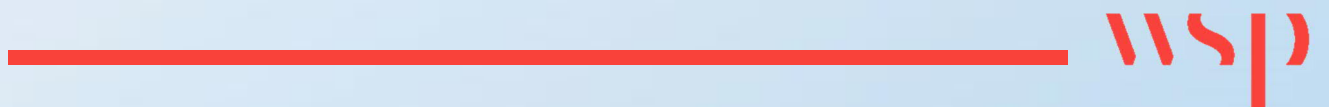
2.8.1. The Project will link to the under-construction Cerkezkoy to Kapikule railway. The Project will be fully integrated with the Cerkezkoy -Kapikule railway and will have full interoperability. The interface between the Project and the Cerkezkoy to Kapikule high speed railway is a location to the east of Cerkezkoy.

2.8.2. According to the Cerkezkoy District Data received by AYGM from TCDD, 2 land parcels (containing residential buildings) at Gazimustafakemalpaşa (GMK) and İstasyon are affected by both this Project and the Cerkezkoy to Kapikule railway. These 2 land parcels are owned by one woman, who has passed the land on to co-inheritors. These 2 land parcels were discussed with the Mukhtars, however they did not know the landowners and could not provide details. The data indicates that these land parcels are currently being used for crop production.

2.8.3. The Cerkezkoy to Kapikule railway has required the expropriation of multiple land parcels and structures in Cerkezkoy, this was undertaken in accordance with Turkish legislation. Those affected land parcels, with land that was expropriated as part of the Cerkezkoy to Kapikule railway in the central area of Cerkezkoy, will be provided with access to this Project's livelihood restoration programmes as described in the Entitlements Matrix presented in **Chapter 8: Eligibility and Entitlements** and **Chapter 9: Livelihood Restoration Plan**. This will ensure that members of the community living around this boundary between the Project and the Cerkezkoy to Kapikule railway are not disadvantaged.

3

LEGISLATIVE FRAMEWORK, POLICY AND GUIDANCE



3 LEGISLATIVE FRAMEWORK, POLICY AND GUIDANCE

3.1 INTRODUCTION

- 3.1.1. The purpose of this chapter is to outline the Lender's policy requirements, national legislative requirements and EU legislative requirements, which this RAP has been prepared in accordance with, to ensure the expropriation process for the Project complies with these requirements. Further information on the environmental and social legislative and policy requirements for the Project is provided in **Chapter 4: EBRD Performance Requirements, EU Standards, Legislative and Policy Context** of the **ESIA**.

3.2 EBRD PERFORMANCE REQUIREMENTS

- 3.2.1. The Project will be required to comply with the following Performance Requirements (PRs). The PRs cover key environmental and social issues in order to ensure that the Project will operate in compliance with the highest international standards in relation to said issues:

- PR1: Assessment and Management of Environmental and Social Impacts and Issues;
- PR2: Labour and working conditions;
- PR3: Pollution prevention and abatement;
- PR4: Health and Safety;
- PR5: Land acquisition, involuntary resettlement and economic displacement;
- PR6: Biodiversity conservation and sustainable management of living natural resources;
- PR7: Indigenous people (not applicable to this Project as no people who possess the characteristics of indigenous people as defined by PR7 are present in the Project area);
- PR8: Cultural heritage; and
- PR10: Information disclosure and stakeholder engagement.

- 3.2.2. The Project needs to meet the requirements for land acquisition, involuntary resettlement and economic displacement as specified in the EBRD's ESP (2014) and PRs. This RAP has been developed, in accordance with PR5.

PERFORMANCE REQUIREMENT 5

- 3.2.3. PR5 sets out the EBRD's requirements in relation to involuntary resettlement, which refers both to physical displacement (relocation or loss of shelter) and economic displacement (loss of assets or resources, and/or loss of access to assets or resources that leads to loss of income sources or means of livelihood) as a result of Project-related land acquisition and/or restrictions on land use; both temporary and permanent. PR5 also summarises the required contents of a detailed RAP.
- 3.2.4. Displaced persons may be classified as persons:
- Who have formal legal rights to the land (including customary and traditional rights recognised under national laws); and/or
 - Who do not have formal legal rights to land at the time of census, but who have a claim to land that is recognised or recognisable under national laws; and/or
 - Who have no recognisable legal right or claim to the land they occupy.
- 3.2.5. PR5 encourages Clients to acquire land rights through settlement agreements even if they have the legal means to gain access to the land without the consent of the seller. Such settlements help avoid

expropriation and can usually be achieved by providing fair and appropriate compensation and other incentives or benefits to affected persons. However, where settlement agreements are not possible and forced eviction is required, involuntary resettlement defined under PR5 is triggered. The following, of relevance to this Project, are required:

- Feasible alternative project designs to avoid or at least minimise physical and/or economic displacement, while balancing environmental, social, and economic costs and benefits, will be considered.
- From the earliest stages and through all resettlement activities the Client will involve affected persons. The Project should provide the affected communities the opportunity to participate in negotiations based on the established procedures.
- Any individuals or groups that may be disadvantaged or vulnerable must be taken into account.
- Where involuntary resettlement is unavoidable, a census, asset inventory and a socio-economic baseline assessment within a defined affected area will be undertaken.
- In the absence of specific national government procedures, a cut-off date for eligibility will be established, which is often the date of completion of the above census and socio-economic survey.
- In the case of economic (but not physical) displacement the Project should develop procedures to offer to the affected persons and communities' compensation and other assistance that meet the objectives of PR5.
- The RAP will establish the entitlements of PAPs or communities and will ensure that these are provided in a transparent, consistent, and equitable manner. The procedures for determining and awarding compensation should be documented in a Plan.
- All displaced persons and communities will be offered compensation for loss of assets at full replacement cost and other assistance. Where livelihoods of displaced persons are land-based, or where land is collectively owned, where feasible, land-based compensation will be offered.
- The Project should summarise the information contained in the resettlement of livelihoods framework or plan for public disclosure to ensure that affected people understand the compensation procedures and know what to expect at the various stages of the Project (for example, when an offer will be made to them, how long they will have to respond, grievance procedures, legal procedures to be followed if negotiations fail).
- The Project should set up a Project-level grievance procedure to deal with concerns about compensation and relocation.
- Monitoring of the resettlement and livelihood restoration process will be carried out in accordance with PR1 and should involve the participation of key stakeholders such as affected communities.

The EBRD Resettlement Guidance and Good Practice document¹¹ (2017) shares practical experiences and good practice gained to-date on resettlement planning and implementation, lessons learned and useful tools. The principles used throughout the document are based on PR5.

¹¹ EBRD (2017). Resettlement Guidance and Good Practice.

3.3 AIIB ENVIRONMENTAL AND SOCIAL FRAMEWORK

- 3.3.1. The Project will be compliant with AIIB's ESF 2016 (amended 2019). The AIIB has elected to apply the EBRD's Environmental and Social requirements on the Project.

3.4 TURKISH LEGISLATION RELATED TO RESETTLEMENT

- 3.4.1. This section summarises key Turkish legislation that applies to this RAP.

ADMINISTRATIVE STRUCTURE

- 3.4.2. The Ministry of Environment and Urbanisation (MoEU) is the key organisation responsible for the development and implementation of policies and procedures for the protection and conservation of the environment, and for sustainable development and management of natural resources. The Public Interest Decision will be obtained from the Ministry of Transport and Infrastructure, whilst the execution of the expropriation works will be carried out by AYGM as per the land acquisition decision taken, as an extension of the Public Interest Decision.

CONSTITUTION OF THE REPUBLIC OF TURKEY

- 3.4.3. The Turkish Constitution (1982), Article 46-D under 'Expropriation' heading addresses expropriation concepts. The article states that whenever a development project serves public interest, the government is authorised to initiate and execute an expropriation process. All hydropower, airport, highway and other roads, and similar large-scale infrastructure projects are considered to be in public interest and provide the basis for Article 46.
- 3.4.4. The specific article of the Constitution states that the compensation value and the decreed increased value will be paid in full and in cash to the owners. The compensation of the farmers farming the acquired land is paid in full and cash. Private land users are eligible for compensation under the Expropriation Law (described below). All compensation payments arising from land take, either by settlement agreement or by court, are allocated in an AYGM opened account. PAPs who have the legal right to this compensation will be able to access these compensation amounts subject to proper documentation being provided to AYGM.
- 3.4.5. There are no direct constitutional principles for resettlement in Turkey. However, Articles 44 and 45 of the Constitution indirectly relate to resettlement activities. Article 44 addresses land ownership and stipulates the responsibility of the government to protect the landless and those with inadequate land. Article 45 describes the responsibility of the government to support those working on agricultural and stockbreeding activities. Article 56 reaffirms the right of all to live in a healthy environment.

EXPROPRIATION LAW

- 3.4.6. The Expropriation Law (1982 (No. 2942), as amended in 2020 (The Constitutional Court dated 16/7/2020 and the Act No. 2018/104; Decision No.: 2020/39)) sets out the procedures for expropriation of immovable property in possession of natural and private legal entities by the State, and public legal entities in circumstances where public interest requires, as well as procedures and methods for calculation and payment of the expropriation price, notifications, negotiations, registration of the immovable property and/or the right of way in the name of the authority, and settlement of related disputes.

- 3.4.7. While expropriation is inevitable, the expropriation price 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 a lawsuit actions against the appraised values and errors of fact before judicial courts. The relevant articles of the Law that will be referenced during the Project's land acquisition activities are explained briefly in **Table 3-1** below.

Table 3-1 - Articles within the Expropriation Law

Article	Description
Article 3 – Requirements for Expropriation	For the implementation of major projects, administrations may pay compensation for the immovable assets, resources and their easement rights in cash or as down payment in equal instalments in specified cases.
Article 5 – Authorities that are entitled for Public Interest Decision Acquisition	Article 5 specifies the authorities that can make decisions in the public interest (i.e. the Public Interest Decision). In the case of this Project, the Public Interest Decision granted to TCDD does not apply as the Project is taken over by AYGM. A new Public Interest Decision will be acquired from Ministry of Transport and Infrastructures as of 15 th April 2021.
Article 7 – Initial Procedures to be Performed for Expropriation and Administrative Annotation	<p>The administration that is to perform the expropriation process (in this case AYGM), prepares or commissions a scaled plan/map indicating the borders, surface area and type of the immovable assets or resources which are to be expropriated. AYGM will identify the registered owners of the property in title deed records; if there is no record for ownership in the title deed then the possessor, with their addresses, are determined through the deed, tax and population records or by external research and documents.</p> <p>After the administration takes the decision on expropriation (i.e. Expropriation Decision), the related annotation of the expropriation in the title deed is notified to the title deed administration where the mentioned immovable asset is registered.</p>
Article 8 – Procurement Procedure	<p>After the Public Interest Decision has been taken and the required land parcels for expropriation are verified, the administration will appoint one or more valuation commissions (consisting of at least 3 people) to identify the value of immovable assets. Additionally, 1 or more negotiation commissions (again consisting of at least 3 people) will be assigned for negotiations.</p> <p>After the administration has notified the owner of its intent to take over the immovable asset, the owner or its representative shall be ready at the time and venue given by the notification letter sent by the administration (within 15 days after notification) with the intent of consent to selling the immovable asset. Negotiation meetings are held on the date identified by the commission and if the affected owner is in agreement with the amount provided by AYGM, an agreement protocol is signed. During this meeting, the valuation prices are set and no bargaining or changing of the price is permitted.</p> <p>The administration prepares the amount stated in the report within 45 days and asks the owner to transfer the ownership rights in the name of the administration on the date specified in the title deed. The agreed value for compensation is paid as soon as the transfer of rights is complete. In cases where an agreement is not reached or transfer is not realised, action is taken as per Article 10 of this Law.</p> <p>If landowners cannot be located or contacted when AYGM requests contract negotiations, assuming that the address identification process is complete, AYGM will forward these cases to court to obtain either:</p> <ul style="list-style-type: none"> ■ Immediate land access decision through Article 27. The relevant compensation amount identified by the court is deposited in an account opened in the name of the court, e.g. escrow account. After this immediate land access can be granted by the courts; and/or ■ When land is expropriated through Article 10, the relevant compensation amount determined by the court valuation commission is deposited in court determined accounts until the finalisation of court and released from AYGM's land acquisition budget.
Article 10 – Identification of the Land Value by Court and Registration of Immovable Asset in the Name of the Administration (Treasury for the Project)	<p>Article 10 states that if the expropriation cannot be carried out through the procurement procedure, the administration then applies to the court in the locale of the immovable asset and requests that the land value for the immovable asset be identified and decision be made for its registration in the name of the administration (Treasury for the Project), in return for the payment of this fee.</p> <p>Within 30 days of the application of the administration, the court notifies the owner of the immovable assets through an annotation (petition of lawsuit) with all relevant documentation collected and compiled for negotiations. An announcement is made in accordance with Notification Law (No. 7201), to parties whose addresses could not be found after inquiries, inviting them to attend the hearing. The court also publishes information on the expropriation at least once in a local newspaper (if there is any), issued in the location of the immovable asset, and in a national newspaper i.e. one circulated across Turkey.</p> <p>On the day of the hearing, the judge invites the parties to reach an agreement on the value of the immovable asset. If an agreement is reached, the judge considers this value to be the land value.</p>

Article	Description
	<p>If the landowner and administration do not agree before the court on the land price calculated by the court, the court assigns independent experts to appraise the land within 10 days. The court then sets a new trial date within 30 days and submits the results of the appraisal to the administration and to the landowner. In the event of non-agreement on this court-supervised appraisal, the court can appoint other appraisers within a 15-day period. The court, following the second appraisal, will establish a final expropriation price. The landowner still has the right to appeal the valuation decided in the court, but not the expropriation of the land.</p>
Article 11 – Principles for the Identification of the Land Value	<p>This article regulates the Valuation Process/Methodology for both the Valuation Commission(s) setup in or appointed by AYGM and the court experts. All experts will follow the same methodology to value the lands for expropriation. The defined value is valid for the entire area of the land. If only partial land acquisition will be made (i.e. the land is not entirely expropriated but will be half of it) then, as per Article 12 of the Expropriation Law, only that portion will be acquired.</p> <p>The AYGM Valuation Commission, and later the expert committee to be formed as per Article 15 (if required), will go to the location of the immovable asset or resource to be expropriated with the court delegation, hear the statements of related parties present and draft a justified report that identifies the expropriation fee.</p> <p>During the establishment of easement rights, if there are any value decreases in the immovable asset or the resource due to expropriation, this will be justified and the decrease in value catered for in the expropriation cost.</p>
Article 12 – Partial Expropriation	<p>This article defines the value of partially expropriated immovable assets (e.g. any portion of the land, unviable/orphaned land, decrease or increase in land value due to investment, etc). It states that if part of an immovable asset excluded from expropriation is suitable for utilisation, then there is no further action to be taken. On the other hand, if the remaining part of an immovable asset is not suitable for use, this part can also be expropriated upon the request of the owner within 30 days following the receipt of the expropriation decision. This is further evaluated by AYGM as per the criteria developed for such cases for eligibility. In addition, AYGM also has a pro-active assessment for these cases and will address these during the negotiations.</p>
Article 14 – Right of a Lawsuit	<p>A lawsuit for the cancellation of land acquisition decision in the administrative court (or for correction of material errors) may be filed by the landowner against the expropriation procedure within 30 days as of the date of notification issued by the court as per Article 10 in the administrative court. If there are parties who could not be notified (i.e. where inaccessible for any reason), the court replaces the date of notification with the date of announcement in the newspaper.</p>
Article 15 – Court Appointed Valuation Commission	<p>This Article describes the selection process for experts appointed for the court valuation commission. It also determines the remuneration of the experts assigned by the court and of the village headman to accompany the commission during their valuation survey.</p>
Article 18 – Dispute on the Ownership	<p>The administration shall investigate whether there are any disputes on the immovable assets to be expropriated by performing an inquiry at the title deed administration, land survey directorate and civil courts in the location of the immovable asset. If the inquiries indicate that there is a dispute on its ownership, or that it was subject to a lawsuit, all the documents prepared as per Article 10 are submitted by the administration to the civil court in the location of the immovable asset. The administration will also request the court to appraise the expropriation cost of the immovable asset and decide on the registration of the asset in the name of the administration in return for either cash payment to the rightful holder (identified as a result of the settlement of the land ownership dispute) or for payment in instalments in case the expropriation is made in accordance with the second paragraph of Article 3 of that Law.</p>
Article 25 – Limitation of Rights and Transfer of Ownership to the Administration	<p>The owner of the immovable asset loses his/her rights to engage in activities such as construction or cultivation, or to make fundamental changes in the current structure of the immovable asset, after the date of the registration or land access decision taken by the court or through consent agreement. The value of activities undertaken after this date is not taken into consideration in the process. The cut-off date for this Project is 31st December 2021.</p> <p>An amendment to Article 25 allows PAPs to be informed of the public interest decision, and thus of the expropriation activity that will take place for large projects, in advance of receiving a notification on land acquisition activities for such projects. With this change, the public interest decision is announced (for a duration of 15 days) in the Mukhtar's office of the neighbourhood and/or village where the immovable assets to be expropriated are located. Although this change serves the purpose of notifying the right holders, additional information on the impact areas of the Project is not provided with the announcement.</p>

Article	Description
Article 27 – Immediate Expropriation	Article 27 states that the immovable assets subject to expropriation may be seized through accelerated expropriation process by the administration undertaking expropriation for public interest: i) for the purposes of implementation of National Defence Law, or ii) in situations of which urgency are determined by the President of Turkish Republic, or iii) under the extraordinary circumstances defined in special laws. In such cases/situations, upon the request of the relevant administration, a court may decide to seize the immovable asset in accordance with the principles set out in Article 10 and Article 15. This can be done on condition that the procedures, other than valuation, will be completed afterwards. In this process, upon the request of the related administration, the compensation amount for the immovable asset must be appraised by the court within 7 days using experts assigned as per Article 10 and 15 of the Expropriation Law. The seizure can be made after the assessed value of the immovable is deposited in a bank account by the administration in the name of the owner.
Article 30 – Transfer of an Immovable Owned by a State Body	<p>This article regulates the acquisition of immovable assets, resources or easement rights owned by public entities and institutions and states that these may not be expropriated by another public entity or institution. All state owned land (other than treasury land) subject to acquisition are acquired through the application of Article 30 of the Law. The administration that requires the immovable asset, resource or easement rights identifies the land value according to Article 8. It lodges a written application at the relevant state authority owning the asset, stating the amount it would pay. If the owner of the asset does not consent to the transfer or does not respond within 60 days, the conflict is settled via an affirmed decision within 2 months after being inspected by the relevant administrative office upon application by the receiving administration.</p> <p>If the parties fail to reach an agreement on the price within 30 days of the notification date of the Council of State decision requesting an expropriation fee to be identified, the receiving state authority lodges an application at the court in accordance with the procedure in Article 10.</p>

ADDITIONAL LEGISLATION

- 3.4.8. Supplementary to the Turkish Constitution and the Expropriation Law, the legislation detailed in **Table 3-2** is also applicable to the Project.

Table 3-2 – Additional Turkish Legislation Related to Land Acquisition

Law	Description
Forest Law (1956, No. 6831)	<p>The Law was enacted in 1956, and amended in 2003, 2004, 2013 and 2020. In accordance with the Forest Law, those responsible for implementing the Project must obtain permission from the Ministry of Agriculture and Forestry to perform activities in forests or lands classified as forest and are required to indemnify damages to public forests resulting from the construction of the Project. According to the Law, the Ministry has the authority to give permission for the use of forest land (49-year lease periods).</p> <p>In addition to the Law itself, the regulation on “Permits to be Given on Land Considered Forest Areas” (Official Gazette dated 22 March 2007, No. 26470) settles the methods and principles of the approvals, permits and easement rights to be given.</p> <p>Another addition to the regulation regarding the implementation of Article 16 of the Forestry Law published in the Official Gazette numbered 28976 and dated 18 April 2014 stipulates the implementation of Article 17/3 and 18 of the Forest Law. Article 9 of this regulation redefines the fees and the calculation of the fees to be collected from other authorities utilising forest land. AYGM, being a state body subject to general government budget, does not make payment to the Forest Authority. Acquisition of such lands is the same as treasury land.</p>
Pasture Law (1998, No. 4342)	<p>This Law was enacted in 1998, and amended in 2004, 2008 and 2013. The acquisition of pasture lands are identified as being public common land. At this point, the area crossed by the Project will be separated in title deed, its status will be changed from ‘pasture’ designation to Treasury land. No further action will be required.</p> <p>Neither the right of the public, nor of the specific users of pastures, are recognised under the Law for compensation. Available payment under local laws is made for grass. Therefore, the pasture and meadow losses of PAPs and the associated income losses cannot be compensated under Turkish legislation.</p>
Cadastral Law (1987, No. 3402)	<p>The Cadastral Law determines the boundaries and legal status of immovable assets based on the national coordinate system and the cadastral or the topographic cadastral maps, in order to register land and to constitute the basis of the spatial information system as the Civil Law (No. 4721) stipulates.</p> <p>The Cadastral Law also defines the process for the identification of landowners when they are without registered title deeds, or where there is confusion over land ownership.</p>

Law	Description
Land Registry Law (1934, No. 2644)	<p>The Law was enacted in 1934 and amended at numerous times between 1934 and the present. Land Registry Law (No. 2644) is the main land title regulation. Land registration in Turkey is based on the Cadastral Law (No. 3402).</p> <p>Land Registry Law also states that citizens can rent treasury lands for agricultural, commercial, sports and social activities.</p>
Agricultural Reform Law on Land Arrangement in Irrigated Areas (1984, No. 3083)	<p>The Law was enacted in 1984 and amended in 2001 and 2014. The Law covers matters regarding land consolidation and allocation of land for purposes other than agriculture when this is needed. It is stipulated in the Law that in areas where agricultural production is no longer economically viable due to fragmentation, land consolidation will be undertaken to prevent fragmentation or a reduction in the spatial extent of agricultural land, that would result in it not being sufficient to provide a household's livelihood, and make use of the household workforce.</p>
Law on Soil Protection and Land Use (2005, No. 5403)	<p>The Law was enacted in 2005 and amended in 2008 and 2014. It sets out the principles for agricultural lands to be improved, protected against misuse, properly categorised and to prevent fragmentation.</p>
Law of Population Services (2006, No. 5490)	<p>According to Article 11 of this Law, all Turkish citizens are required to register their residence, including those who live abroad. Assets ownership reflects the residential registration.</p> <p>People who change their residence are required to inform the population registration offices, in counties that they move to, of the changes.</p>
The Notification Law (1956, No. 7201)	<p>The Law, with its amendments in 2003, 2008 and 2011, provides the basis for a process of notification for property owners. It consists of specific procedures to be followed to reach a range of public and private owners, including those whose addresses are unknown.</p> <p>According to the Law, provisions for notification include sending letters to registered addresses; seeking support from local authorities; publication through an advertisement placed in a national newspaper and published throughout the country in significant numbers; and electronic communications. The Law provides guidance for communicating with different categories of stakeholders, including resident owners, absentee owners, owners outside Turkey, and various public agencies.</p> <p>The Notification Law details the process of notification for landowners and land users whose address is unknown, as determined by the Notification Officer. According to the modifications made in the Law in 2011 (Article 10), the notification can be made wherever appropriate for the affected owner and/or to the last address known. If the person cannot be reached, notification is sent to the last known residence and is directed to the village or municipal quarter headmen. The owners, upon receipt of notification, have the right to apply to those responsible for implementing a Project for a negotiated settlement. Should the owner reside in a foreign country, a</p>

Law	Description
	registered mail is sent to his/hers last known address. The expropriation agency can also seek the support of consulates in order to reach owners.
Land Registry Code (2013, No. 28738)	<p>This Code aims to keep the land registry records in order with respect to the Civil Law (No. 4721). It comprises the principles and procedures pertaining to ownership, limited real and individual rights of immovable assets, and their entry, amendment, cancellation and rectification to the land registry.</p> <p>Articles 24 and 25 of this Code protect the rights of the illiterate, disabled and non-Turkish speaking right holders.</p>

3.5 GAP ANALYSIS BETWEEN LENDERS REQUIREMENTS AND TURKISH EXPROPRIATION LAW

- 3.5.1. The key gaps between the national legislation of Turkey and Lenders Requirements relevant for this Project are summarised in **Table 3-3** below. This RAP contains measures to bridge any disparities **Chapter 11: Implementation Costs and Budget** presents a flow chart that compares the national expropriation process in Turkey and EBRD's PR5 process to illustrate how the two processes align.

Table 3-3 - Gap Analysis between Lenders Requirements and Turkish Resettlement Law

Topic / Issue	EBRD Requirements	National Requirements	Gaps Identified	Measures to close gaps
Avoidance and Minimisation	The Client will consider feasible alternative Project designs to avoid or at least minimise physical and/or economic displacement, while balancing environmental, social, and economic costs and benefits.	There is no provision regarding the avoidance or minimisation of resettlement in Turkish legislation.	The avoidance and minimisation of impacts is not required by national legislation, but it is required by the Lenders.	<p>Measures have already been taken to avoid and minimise resettlement during the development of the Project.</p> <p>The 2018 Feasibility Study for the Project¹² documents the alternatives assessment that was undertaken for the Project, as summarised in Chapter 2: Project Description.</p> <p>The alignment follows the existing railway, where feasible, to minimise land acquisition.</p> <p>The Project design includes a tunnel underneath the Hadimkoy Organised Industrial Zone.</p> <p>Tunnels are included in the design starting at the following chainages: 0+750 (beneath proposed Kanal Istanbul), 16+100, 77+200, 107+500, 168+000 and 219+200. These tunnels have the added benefit of reducing land acquisition impacts related to the Project. The Project's use of a tunnel to route the alignment beneath the proposed Kanal Istanbul will avoid expropriation of over 50 residential houses and businesses.</p> <p>WSP conducted a micro-routing analysis as part of the ESIA in order to minimise the extent of expropriation caused by the Project, providing recommendations for possible Project alignment alterations (as summarised in Section 2.7).</p>
Identification of Potentially Adverse Impacts on Land Acquisition	Affected populations and impacts should be identified through thematic maps and carrying out a census. An inventory of affected assets should be collected, and socio-economic surveys and studies should be carried out. Analysis of the information collated should be undertaken, as well as consultation with affected populations to develop and verify the findings.	Only an inventory of assets is required by Turkish Law. Land acquisition through expropriation requires the preparation of a census of affected immovable assets, and a list of their owners.	No social studies, surveys and consultations are required under Turkish Law.	<p>An asset inventory of landowners had been carried out in 2017 by TCDD to determine the expropriation for the Project and this inventory has been updated by AYGM as of December 2020.</p> <p>Household surveys were carried out in July and August 2020 to identify impacted households and PAPs, determining the significance of the impacts. The survey included an update to the ownership, quantity and quality of resources/assets (with reference to the 2017 asset inventory) which will be impacted by the Project, including: loss of access to housing (physical displacement); land, crops, natural resources and cultural resources (economic displacement). This information was used to inform the Asset Inventory Update that was carried out by AYGM in December 2020.</p>
Resettlement and/or Livelihood	A RAP is required where land acquisition or restrictions on land use related to a project	There is no provision regarding the preparation of a social impact assessment and/or RAP and/or	There is no requirement under Turkish Law to prepare a RAP, although this is required by the Lenders.	This RAP has been prepared to bridge the gap between Turkish national requirements and Lender's requirements. A RAP Fund has been developed to meet replacement value. The Entitlements Matrix in Chapter 8: Eligibility and

¹² Feasibility Study for Halkalı-Kapıkule Railway Line Project Revised Report (2018).

Topic / Issue	EBRD Requirements	National Requirements	Gaps Identified	Measures to close gaps
Restoration Plan	with potential to cause physical and/or economic displacement is unavoidable.	Livelihood Restoration Plan in Turkish legislation, although in practise a basic social assessment is often included in the National EIA for the Project (2017).		Entitlements describes the entitlements for eligible PAPs for this Project. Chapter 9: Livelihood Restoration Plan contains the measures for AYGM to develop a Livelihood Restoration Programme, providing assistance to those PAPs who will be economically displaced because of the Project.
Eligibility	Eligible persons may be classified as persons: (i) who have formal legal rights to the land (including customary and traditional rights recognised under national laws); (ii) who do not have formal legal rights to land at the time of the census, but who have a claim to land that is recognised or recognisable under national laws; or (iii) who have no recognisable legal right or claim to the land they occupy. All those persons must be registered before the cut-off date to be eligible.	Turkish law covers persons with legal rights/claims and customary/traditional users' rights on private property. There is no provision for those who use public land.	Turkish law only provides compensation for the formal owners, who have their land ownership registered, as part of the land acquisition process. There is no requirement to undertake a census to identify or compensate those who are not currently included in the official governmental land registry.	A household survey was undertaken (2020) in order to identify all users and those who are not currently included in the official governmental land registry. All identified PAPs will be included in the affected parcels lists for the Asset Inventory Update to bridge the gaps identified between Turkish legislation and Lender's requirements.
Compensation for Loss of Land	<p>Economically displaced persons will be compensated for such loss at full replacement cost. Compensation at replacement cost is based on valuation at average market value, plus transaction costs and the cost of restoration to an equivalent potential as that of the affected asset.</p> <p>Preferred compensation is in-kind. Compensation is to be provided before displacement or imposition of access restrictions.</p> <p>Measures should be incorporated to provide displaced people with legal assistance to enable them to complete administrative requirements prior to land</p>	<p>Turkish law provides cash compensation to persons with legal/recognisable rights and claims. Valuation of agricultural land depends on net income method and by taking market prices into account. Customary users' rights on private property are recognised due to recent changes in Turkish law. Traditional rights are recognised.</p> <p>Residential properties are compensated on the basis of their cost of construction with high quality material in the market. Amortisation is taken into account. Residential land is compensated by its market prices.</p> <p>Valuation of agricultural land depends on capitalisation of annual net income calculated by taking market prices into account. Income method and fair market value analysis are applied for valuation of affected lands.</p>	<p>The Lenders require the following persons to be compensated, who would not receive compensation in accordance with Turkish law:</p> <p>Turkish law does not require displaced persons without legally recognisable claims to land, such as tenants and squatters on public land, to be compensated for their loss of use of land.</p> <p>Turkish law does not require compensation for displaced people who use pasture lands, or forest land. Compensation is given only for the lost yield from crops/trees farmed on private lands provided that the registered landowners admit the assets belong to the claiming owner.</p> <p>There is no preference given to government-led in-kind compensation rather than cash compensation for PAPs. In addition, there is no livelihood restoration and/or transitional support</p>	<p>An entitlement matrix was prepared for the Project, this document presents the eligible people, households and businesses that are generally entitled to compensation and assistance. Those without a legal right to land have been included in the entitlement matrix (presented in Chapter 8: Eligibility and Entitlements), providing them with compensation.</p> <p>Households using common land are included in the entitlement matrix (presented in Chapter 8: Eligibility and Entitlements), providing them with compensation or assistance.</p> <p>A livelihood restoration programme will be developed by AYGM, based on the livelihood restoration programme presented in Chapter 9: Livelihood Restoration Plan, and transitional support is included in the entitlement matrix (presented in Chapter 8: Eligibility and Entitlements).</p> <p>The AYGM Project Implementation Unit (PIU) will seek in-kind compensation for PAPs as a preference to cash compensation, where possible, as described in the entitlement matrix in Chapter 8: Eligibility and Entitlements.</p>

Topic / Issue	EBRD Requirements	National Requirements	Gaps Identified	Measures to close gaps
	<p>acquisition and, if needed, to seek redress from the courts.</p> <p>Economically displaced persons who are without legally recognisable claims to land will be compensated for lost assets other than land (such as crops, irrigation infrastructure and other improvements made to the land), at full replacement cost. The Client is not required to compensate or assist opportunistic settlers who encroach on the project area after the cut-off date for eligibility.</p>	<p>Valuation for fixed assets are made as per unit values given by Ministry of Environment and Urbanisation. Trees and crops are evaluated as per annually announced unit values given by the Ministry of Agriculture and Forestry. While land valuation is in line with international requirements, landowners are not offered any additional assistance.</p>	<p>provisioned in Turkish law except for government led resettlement.</p>	
Compensation for Structures	<p>Displaced persons must be offered choices among feasible resettlement options and be provided relocation assistance suited to the needs of each group of displaced persons, with particular attention paid to the needs of the poor and the vulnerable.</p> <p>Replacement property (for example, agricultural or commercial sites) must be provided of equal or greater value, or cash compensation at full replacement cost where appropriate.</p> <p>Alternative housing and/or cash compensation will be made available prior to relocation.</p> <p>Choice of replacement property of equal or higher value, or cash compensation at full replacement value where appropriate.</p>	<p>The market value of structures is determined by qualified officials at the Provincial Administration of Environment and Urbanization. These valuations take into account the official unit prices announced annually by the Ministry of Environment and Urbanization for specific structures. These prices take into account completion ratio, cost of depreciation and debris. Turkish law indicates that depreciation shall be deducted in the valuation process for the buildings, which may cause the expropriation value to be less than the full replacement cost.</p> <p>According to Turkish law, the valuation does not consider the internal decoration or improvements made to each building. Buildings are categorised by primary construction material which have specific prices.</p> <p>Furthermore, no preference is given in Turkish law to government-led in-kind compensation rather than cash compensation for structures.</p>	<p>Valuation gaps exist for buildings, i.e. Turkish requirements do not compensate based on full replacement cost nor does it consider the internal decoration / materials used for each building or additional allowances (e.g. moving support, legal fees, etc).</p> <p>No preference is given in Turkish law to government-led in-kind compensation rather than cash compensation for structures.</p>	<p>The Project will establish a RAP fund to compensate for the gap between full replacement cost (including legal and transitional allowances) and depreciated building values. The additional compensation to reach replacement value will be calculated by an independent valuation specialist, engaged by AYGM.</p>

Topic / Issue	EBRD Requirements	National Requirements	Gaps Identified	Measures to close gaps
Addressing Loss of Livelihoods	<p>Livelihoods affected by EBRD-financed projects should be restored. This could involve the replacement and/or restoration of lost land and structures as well as access to these assets.</p> <p>In addition to compensation for lost assets, economically displaced persons whose livelihoods or income levels are adversely affected will also be provided opportunities to improve, or at least restore, their means of income-earning capacity, production levels, and standards of living.</p> <p>Economically displaced persons will be compensated for loss of assets or access to assets prior to displacement.</p> <p>Additional targeted assistance (for example, credit facilities, training or employment opportunities) and opportunities to restore livelihoods must be provided, and where possible improvements to their income earning capacity, production levels and standards of living.</p>	<p>Valuation of agricultural land, trees, vineyards etc. is based on net income capitalisation method and will consider additional factors that may have an impact on the immovable asset.</p> <p>The Expropriation Law does not assess loss of livelihoods, compensation is provided to titleholders for land loss only.</p>	<p>The Lenders requirements specify that all PAPs must be granted the right of compensation which will enable them to restore their means of livelihood at least to the levels prior to the Project.</p> <p>Turkish law does not make provision of livelihood loss or assessment of individual livelihood impacts; this applies only for specific investments such as dam construction and urban transition. for State-assisted resettlement. Only legal right owners can receive compensation.</p> <p>User rights on private property is recognised due to recent changes in the Turkish Law. Traditional rights are recognised.</p>	<p>Measures to address the need to compensate loss of livelihoods, are set out in the entitlement matrix (presented within Chapter 8: Eligibility and Entitlements) which include a livelihood restoration programme.</p>
Community and Public Resource Losses / Common Property Resources	<p>Compensation is due for affected communal resources. Negotiated settlements with relevant community organisations with respect to compensation for affected communal resources will be sought.</p> <p>International policies require compensation for livelihood losses of individuals and</p>	<p>There is no legal provision in Turkish law to compensate for loss of affected communal resources. The loss of pasture and meadow resources for households or the associated income loss to villages of losing such resources cannot be compensated for individuals.</p>	<p>There is no requirement under Turkish law to compensate for affected community and public resources. This compensation is required in accordance with the Lenders requirements.</p> <p>The RAP identifies affected communal resources and recommends appropriate compensation which may not always be financial, as described in the entitlement matrix in Chapter 8: Eligibility and Entitlements.</p>	<p>Measures to ensure compensations are provided for affected communities and public resources have been included in the entitlement matrix (presented within Chapter 8: Eligibility and Entitlements).</p>

Topic / Issue	EBRD Requirements	National Requirements	Gaps Identified	Measures to close gaps
	communities that result from acquisition of pasture lands.			
Compensation Prior to Land Take / Displacement	Displacement or restriction of access does not occur before necessary measures for resettlement are in place.	According to Expropriation Law, compensation needs to be deposited into titleholders account prior to land take.	No gaps identified.	No measures required (Lenders' Requirements and National Requirements align). However, the land cannot be entered without compensation being paid to the PAP, so the immediate expropriation and entry without payment cannot be applied.
Selection of Resettlement Sites	<p>In line with wider resettlement principles, new resettlement sites built for displaced persons will offer, at a minimum, pre-displacement living conditions and where achievable, sustainable and cost-effective opportunities to improve the standard of living.</p> <p>Adequate housing or shelter can be measured by quality, safety, affordability, habitability, cultural appropriateness, accessibility and locational characteristics. Adequate housing should allow access to employment options, markets, and basic infrastructure and services, such as water, electricity, sanitation, health care and education.</p> <p>Clients should include these aspects of adequate housing in the selection of resettlement sites in order to offer improved living conditions, particularly to those without recognisable legal right or claim to the land they occupy.</p>	<p>Land acquired by expropriation can only be compensated by cash compensation according to Law on Expropriation.</p> <p>Host communities (areas where physically displaced PAPs are resettled) are not considered or evaluated under national legislation.</p>	<p>Turkish Expropriation Law does not provide regulation or guidance on selection of resettlement sites and therefore does not meet PR5.</p> <p>Principles to compensation for resettlement to be applied are included in Chapter 8: Eligibility and Entitlements.</p>	Measures to support physically displaced households, including: minimum living standards and building quality; support in finding suitable housing; transaction costs etc, have been included in the entitlement matrix (presented in Chapter 8: Eligibility and Entitlements).
Negotiated Settlement (Mutual Agreement)	Clients are encouraged to acquire land rights through negotiated settlements even if they have the legal means to gain access to the land	Consultations for negotiated purchase of immovable assets are required by Article 8 of the Expropriation Law. No studies, surveys, stakeholder	No gaps identified.	No Measures Required (Lenders' Requirements and National Requirements align).

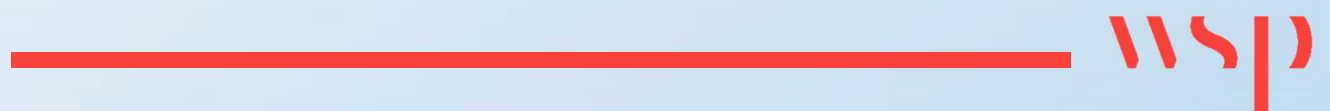
Topic / Issue	EBRD Requirements	National Requirements	Gaps Identified	Measures to close gaps
	without the consent of the seller. Negotiated settlements can usually be achieved by providing fair and appropriate compensation and other incentives or benefits to affected persons or communities, and by mitigating the risks of asymmetry of information and bargaining power.	engagement plan and consultations are required.		
Measures for Vulnerable Persons	The resettlement process and livelihood planning should provide special assistance to women, minorities or vulnerable groups.	<p>The Expropriation Law does not specify vulnerable groups. However, under the Turkish Constitution, the State guarantees citizens to continue their lives in peace and security, also socio-economically encourages them to reach high standards of living. In this context, the State applies several rules and measures to protect and to support its needy, weak, helpless and homeless citizens.</p> <p>Living standards are not specifically considered in Turkish law.</p>	Turkish law on land acquisition does not address vulnerable groups. The Lenders require additional measures for these groups.	Key vulnerable populations were identified as part of the household survey. Measures to address the specific needs of these vulnerable groups have been included in the entitlement matrix. The household survey results are presented in Chapter 4:Affected People and Assets and the entitlements matrix in Chapter 8: Eligibility and Entitlements .
Monitoring and Evaluation	Monitoring and evaluation is required for projects that cannot avoid physical and economic displacement. Resettlement and livelihood restoration of the affected persons should be monitored for such projects.	There are no provisions for monitoring the implementation or impacts of expropriation or resettlement in Turkish law.	<p>There are no provisions for monitoring the implementation or impacts of expropriation or resettlement in Turkish law.</p> <p>The Lenders requirements specify the need for monitoring and evaluation of resettlement and livelihood restoration.</p>	<p>AYGM has not yet established a monitoring mechanism in relation to their expropriation and likelihood restoration activities.</p> <p>A monitoring mechanism has been developed in this RAP as described in Chapter 10: Monitoring and Reporting and in the SEP, and both will be implemented by AYGM.</p>
Level and timing of Community Engagement / Consultation / Negotiation / Participation	<p>EBRD emphasises early and meaningful consultations, and preparation of a SEP. The Project should consult with PAPs about the project's environmental and social aspects and should take their views into account.</p> <p>Affected persons shall be given the opportunity to participate in the eligibility requirements, negotiation of</p>	<p>Public participation meetings are required in accordance with the requirements of the Regulation on Environmental Impact Assessment (EIA Regulation) (No. 29186, 2014) as part of the National EIA process. These have been undertaken.</p> <p>The expropriation process involves notification of the landowners about the process and informing them of the time and place of the negotiation. No</p>	<p>Turkish law does not require early or on-going consultation with PAPs or communities. The Lenders require provisions to ensure effective community engagement through disclosure of Project-related information and consultation with local communities on matters that directly affect them according to PR10.</p> <p>The expropriation process involves notification of the landowners, but no</p>	<p>A number of initial consultation activities were carried out by TCDD, and further consultation was undertaken during the preparation of the ESIA, which are presented in the SEP.</p> <p>Although the Project has acquired the right to expropriate land where needed, including expedited (immediate) expropriation, AYGM will seek to establish negotiated settlements with PAPs through ongoing transparent communication. Triggering of immediate expropriation will be avoided by AYGM. Where this is not possible, the compensation principles in the RAP will still be followed, e.g. payment made to PAPs prior to land entry.</p>

Topic / Issue	EBRD Requirements	National Requirements	Gaps Identified	Measures to close gaps
	the compensation packages, resettlement assistance, suitability of proposed resettlement sites and proposed timing. Consultation activities will continue during the implementation, monitoring and evaluation of compensation payment and resettlement. The Client should consult the affected people on land acquisition; resettlement and livelihood related issues; and disclose relevant documents at various stages of the project. Consultations should be meaningful and inclusive allowing for the participation of all groups and segments of affected people.	<p>bargaining or changing of valuation price is permitted.</p> <p>The Expropriation Law stipulates one round of negotiations with landowners prior to expropriation. Landowners/shareholders are officially invited to undertake negotiated settlements.</p> <p>No social studies, surveys and consultations are required prior to land acquisition. Only consultations for negotiated purchase of immovable assets are required by the Expropriation Law.</p> <p>The Law of Notification ensures that all affected people are informed in writing.</p>	<p>social studies, surveys and consultations are required prior to land acquisition.</p> <p>There is no requirement for a SEP in Turkish law.</p>	This RAP (specifically the grievance mechanism presented in the SEP) and the SEP , together provide PR5 compliant engagement actions for AYGM to follow during the implementation of the RAP.
Gender	EBRD's ESP (2014) addresses gender-differentiated aspects of impacts and opportunities, as well as gender-responsive consultation processes. The use of land and natural resources affected by the Project should be assessed in gender inclusive manner and specifically consider women's role in the management and use of these resources.	Customs and traditional attitudes in the Project areas may deny women the right to ownership and management of cultivated lands. These customs are not recognised by the Civil Law (No. 4721), which states that all siblings and extended family members, regardless of gender and age, have similar inheritance rights.	Turkish law does not require gender responsive consultation, or the identification of gender specific risks and opportunities. This is required by the Lenders.	<p>The consultation undertaken for the Project captured both men's and women's views through community and women-only focus groups, as defined in the SEP. The measures in the SEP will ensure this continues throughout the Project.</p> <p>AYGM will ensure that compensation payments and payment methods are arranged in the names of both spouses or the male and female heads of households. This is covered within the entitlements matrix presented within Chapter 8: Eligibility and Entitlements).</p> <p>Both male and female preferences and considerations in livelihood restoration; choice of resettlement options (if applicable) will be assessed.</p>
Project-level Grievance Redress Mechanisms	Where there are Affected Communities, the Client will establish a grievance mechanism to receive and facilitate resolution of Affected Communities' concerns and grievances about the Client's environmental and social performance.	There is a "Right to Information Act" in Turkey. Complainants can apply with petitions to the following authorities: Regional Directorates; Districts, Provinces Governorships; General Directorates; Ministries; Prime Ministries; Petitions Committee of Parliaments; and Presidencies. Petitions are responded to within 30 days.	There is a generic grievance mechanism for all AYGM projects, which enables all citizens to file complaints to, CIMER (Presidency of the Republic of Turkey Communication Centre); where any grievance can be filed by calling a toll-free number or using an online form http://www.cimer.gov.tr .	A Project-specific grievance mechanism has been developed and included in the SEP for AYGM implementation.

Topic / Issue	EBRD Requirements	National Requirements	Gaps Identified	Measures to close gaps
	<p>The Client will establish an effective grievance mechanism as early as possible in the process, consistent with the objectives and principles of PR10 in order to receive and address in a timely fashion specific concerns about compensation and relocation that are raised by displaced persons and/or members of host communities. It will include a recourse mechanism designed to resolve disputes in an impartial manner.</p>	<p>Governmental organisations have information (knowledge acquisition) sections on their web pages. Applications are responded to within 15 days via the internet.</p> <p>In the expropriation process under Turkish law, the owner's consent is not sought for the immovable property to be expropriated. Expropriation involves compulsory appropriation of the immovable property by the State for public interest. However, the Expropriation Law allows that 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.</p> <p>Apart from abovementioned channels, there is no legal requirement for establishment of a Project specific grievance mechanism under Turkish law.</p>	<p>However, this mechanism does not fully align with Lenders requirements.</p>	

4

AFFECTED PEOPLE AND ASSETS



4 AFFECTED PEOPLE AND ASSETS

4.1 INTRODUCTION

4.1.1. The overview of the PAPs described below is based on the results of the surveys, interviews and focus groups undertaken during the summer of 2020. The following field studies were undertaken to assemble accurate information for this chapter:

- **Household Surveys** of the formal and informal users of the land to be acquired for the Project (83% of the surveys were completed by the head of household) and data gathered on socio-economic characteristics of affected land users and owners (30th June 2020 to 31st August 2020);
- **22 Mukhtars**¹³ interviewed to develop a greater understanding of the affected settlements and views on the Project from elected officials (1st July to 5th July 2020);
- **13 Governors** interviewed to explain the Project and understand their views on the Project (29th June 2020 and 1st July 2020);
- **14 Focus Groups** (10th August to 25th August 2020) comprising:
 - **Informal User Focus Groups** conducted to develop a greater understanding of the affected informal users (including regulated traditional charcoal producers and seasonal agricultural workers) and their views on the Project;
 - **Women-Only Focus Groups** conducted to develop a greater understanding of gender issues in local communities, potential impacts on women in the affected communities and their views on the Project; and
 - **Community Focus Groups** conducted to understand community views of the Project.
- **Site Drive-Through** of the Project alignment in August 2020; and
- **Asset Inventory Update** conducted by the AYGM Expropriation Department in December 2020.

4.1.2. In addition to the above, a second site drive through was conducted in the vicinity of Yeşilbayır, Kabakça and Akören, between the 15th and 19th February 2021, where the expropriation corridor is substantially wider, to identify any further PAPs. This included additional meetings with the Mukhtars of these 3 settlements.

4.1.3. The stakeholder consultation activities undertaken during the governorship meetings, informal user focus groups, women-only focus groups and community focus groups are documented in the Project SEP. The SEP provides further details.

4.1.4. This data was supplemented by the 2020 asset inventory Update to develop a full census of affected households and PAPs. This combined information provided an understanding of the socio-economic environment and vulnerability of PAPs in the Project area in order to use the data for preparation of the RAP budget; and to identify groups and persons who may need additional support due to the Project's impact.

¹³ Mukhtar's are the elected village leaders in settlements across Turkey.

4.1.5. The objectives of these activities for the Project are as follows:

- Collect baseline socio-economic data of the Project affected households¹⁴ and communities¹⁵, affected by land acquisition and/or access restrictions, in order to develop appropriate compensation and livelihood restoration measures;
- To examine the ownership, quantity and quality of resources/assets which will be impacted by the Project, including loss of residential structures (physical displacement) and secondary structures; loss of land, crops, natural resources and cultural resources (economic displacement);
- To inform the suitable design of the RAP (including livelihood restoration aspects) and any measures in the Environmental and Social Action Plan (ESAP);
- To provide a pre-Project socio-economic and community perception and actual baseline about the Project and monitoring indicators, in order to track the progress and to determine whether household wellbeing has been maintained and enhanced; and
- To gather gender disaggregated data within the affected households and communities, in order to mitigate against gender-specific impacts and identify opportunities for women within this **RAP** and **ESIA**.

4.2 ADMINISTRATIVE STRUCTURE AND POPULATION CHARACTERISTICS

- 4.2.1. The Project is located within the provinces of Istanbul and Tekirdağ in Turkey. The Project expropriation corridor covers 8 districts and is located in close proximity to 22 communities.
- 4.2.2. Each district has a local governor and mayor, who are elected by local residents, and report into central government and also chair related local committees.
- 4.2.3. Each municipality consist of numerous communities, each of which has its own basic administration consisting of a headman (Mukhtar) and an assembly of aldermen. The latter are elected for a 5-year term and have an advisory function in the community. Communities represent the smallest form of local administration in rural areas and usually have a population of 150 to 5,000 people.
- 4.2.4. The leaders of the relevant administrative structures (governors, mayors, Mukhtars etc.) were engaged with to obtain important information in relation to the views and concerns of the populations and communities that they represent. Information on the engagement with these stakeholders is set out in the **SEP**.




4.3 CHARACTERISTICS OF AFFECTED COMMUNITIES AND HOUSEHOLDS

- 4.3.1. A summary of the general characteristics of each of the 25 Project affected communities, as informed by data from the household survey and the site drive through, is provided in **Table 4-1** below. **Figure 4-1** shows the location of the communities along the Project.

¹⁴ Project-affected Households (PAHs) refers to the households that are affected by the Project. The survey was completed at household level.

¹⁵ Project-affected Communities (PACs) refers to the communities (villages and neighbourhoods), as well as social networks, that are affected by the Project (e.g. communities around places of worship).

Legend

-  Affected Communities
-  Proposed Railway Route
-  Affected Districts



Note:
Information provided based on OpenStreetMap data and HOTOSM data.

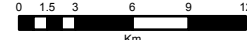
Drawing Status
FINAL

Job Title:
HALKALI – CERKEZKOY HIGH SPEED RAILWAY

Drawing Title
Figure 4-1 - Social Constraints Map / Community Infrastructure

Scale at A4
1:400,000

Drawn	DG	Originated	DG	Date	15/03/2021
Stage 1 check	BR	Stage 2 check	JW		



Drawing Number
Figure 4-1

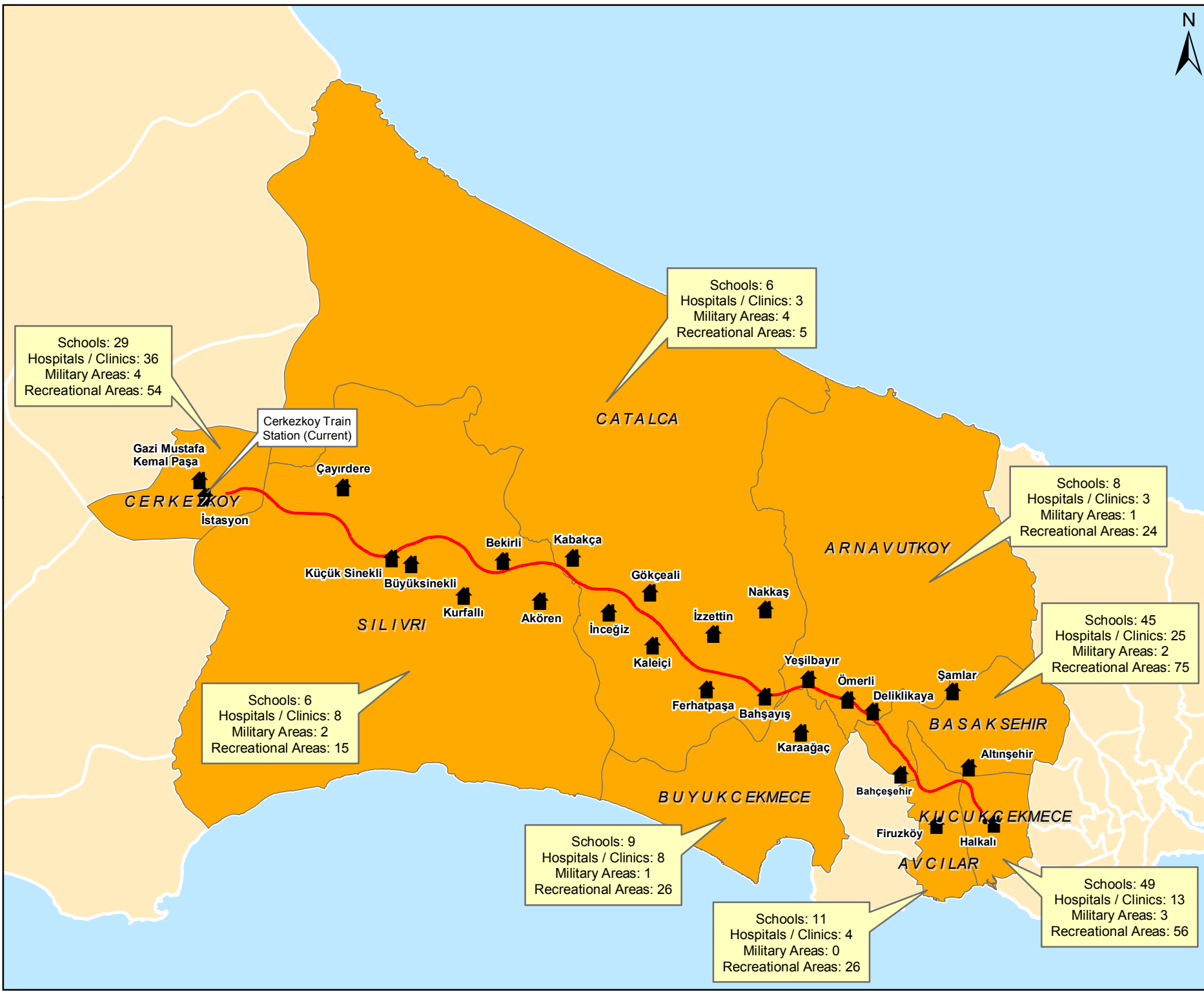







Table 4-1 - Characteristics of Communities

Community	Summary of Socio-Economic Characteristics	Photos of the Relevant Areas/Houses
<p>Halkalı</p> <p>Approximate chainage: 0+000 - 1+600</p> <p>Distance from the Project alignment: Approximately 1km south.</p>	<p>Halkalı, which includes the station, is the urban area of Küçükçekmece. Until the early 1970s, the district centre of Halkalı and Altınşehir and Yarımburgaz, through which the Project as well as the existing railway line passes, were rural communities. They are all now included in Halkalı. There were many farms within its boundaries. Halkalı Station was named “Yarımburgaz Station” until 1951 as a community named "Halkalı" was not developed at this point. Halkalı was a small village located 3km east of the Yarımburgaz Station¹⁶.</p> <p>The following land parcels will be affected by the Project:</p> <ul style="list-style-type: none"> 3 privately-owned land parcels; and 2 publicly-owned land parcels. <p>No residential houses, non-residential buildings or secondary structures in this community will be affected by the Project.</p> <p>There are 3 privately-owned land parcels, with shared ownership with state bodies:</p> <ul style="list-style-type: none"> 1 land parcel with Turkish Electricity Authority (TEDAS) and a private landowner (9 m² easement for tunnel); 1 land parcel with Turkish Housing Compound Authority (TOKİ) and a private landowner (56,925 m² permanent acquisition and 14,706 m² easement for tunnel); and 1 land parcel with TCDD and a private owner (no land area is identified as this is the tunnel area). <p>In addition, 2 publicly-owned parcels have been identified titled to the:</p> <ul style="list-style-type: none"> Treasury (14,582 m² easement); and TCDD (no land area is provided as this land will not be subject to any expropriation). <p>No formal/informal renters or formal industrial/ manufacturing businesses will be affected by the Project.</p>	<p>No site drive-through photo.</p>
<p>Altınşehir</p> <p>Approximate chainage: 1+600-3+600</p> <p>Distance from the Project alignment: Approximately 1km north.</p>	<p>Altınşehir, located under the jurisdiction of Başakşehir District, is a newly formed neighborhood of İstanbul. It is a rural area that was zoned for housing in parallel with the westward development of the city. Başakşehir District is among the top districts in terms of education standards, health and infrastructure facilities in Turkey. The municipality has 14 high schools, 18 secondary schools, 21 primary schools and 55 pre-school education institutions. Among the high schools, in addition to the high schools that provide general education, there are religious vocational high school (imam-hatip), communication vocational high schools, fine arts and sports high schools, health vocational high schools, science high schools and industrial technical high schools. In the healthcare sector, there is a city hospital with a bed capacity of 2682, a state hospital with a bed capacity of 100, and 6 community health centres. Atatürk Olympic Stadium and Başakşehir Fatih Terim Stadium are within the boundaries of the district.</p> <p>The following land parcels will be affected by the Project, as the Project will be located beneath them in a tunnel:</p> <ul style="list-style-type: none"> 151 privately-owned land parcels; and 3 publicly-owned land parcels. <p>No expropriation is required, with 68,361 m² subject to permanent easement. No residential houses, non-residential buildings or secondary structures will be impacted by the Project in this community.</p> <p>The Project will be located beneath land (in a tunnel) owned by 82 single private landowners, 5 business landowners and 80 shareholders on 62 parcels, although no formal/informal renters will be affected. In addition, the Project will be located beneath 5 formal industrial/ manufacturing businesses.</p>	<p>No site drive-through photo.</p>


¹⁶ Nomad Consulting (2020). TCDD HALKALI-ÇERKEZKÖY High Speed Railway Project

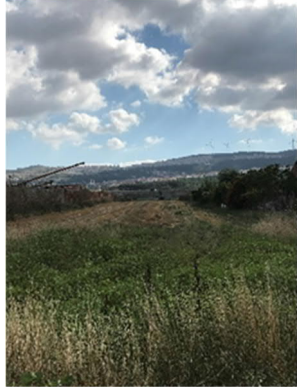


Community	Summary of Socio-Economic Characteristics	Photos of the Relevant Areas/Houses
<p>Firuzköy</p> <p>Approximate chainage: 3+600 - 10+000</p> <p>Distance from the Project alignment: Approximately 2km south.</p>	<p>Firuzköy was formed with the community of Bulgarian Immigrants who bought Firuz Farm in 1928. Firuzköy is in Avcılar district.</p> <p>Avcılar district consists entirely of urban areas. In addition to the campus of İstanbul University, there are 5 kindergartens, 19 primary schools, 16 secondary schools, 7 general high schools, 1 religious vocational high school (imam-hatip), 5 religious vocational secondary schools and 7 industrial vocational and technical high schools in the district.</p> <p>The residential area of Firuzköy is approximately 2km from the Project. Therefore, the Project will have a limited impact on this community.</p> <p>The following land parcels will be affected by the Project:</p> <ul style="list-style-type: none"> 33 privately-owned land parcels; and 11 publicly-owned land parcels. <p>103,930 m² of private and public land is to be expropriated, with 107,114 m² subject to permanent easement. No residential houses, non-residential buildings or secondary structures will be impacted by the Project in this community.</p> <p>The Project will require the expropriation of land owned by 15 single private landowners, 1 business landowner, 83 shareholders on 14 parcels. It will affect 2 formal renters, but no informal renters. In addition, the Project will also affect 1 formal industrial/ manufacturing business.</p>	<p>No site drive-through photo.</p>
<p>Bahçeşehir2.Kısım (previously known as Hosdere)</p> <p>Approximate Chainage: 9+100 - 11+300</p> <p>Distance from the Project Alignment: Adjacent to the north and south.</p>	<p>The community is favoured by the wealthy because of the layout and services provided. The average gross national product is 33,512 TRY (approximately six times the national average).</p> <p>Most of the residents are employed professional workers. The main source of income is from the service sector, with retirement pensions also providing a supplementary source of income.</p> <p>The majority of the land consists of residences and commercial areas that provide services to residences. According to the information given by the Mukhtar, approximately 50% of the land comprises residential and commercial areas, 5% agricultural lands, and the remaining 45% is land that is reported to be empty or unaccounted for. The main crop produced by the agricultural land is wheat.</p> <p>Drinking water, energy network, sewerage system and communication facilities are provided.</p> <p>The approximate population of the community is 100,000. Approximately 55% of the population is aged 16-65. The age group of 0-16 constitutes 35% of the population, and the age group of 65+ constitutes 10% of the population.</p> <p>There are 5 primary schools and 2 high schools within the community. There are also 3 community health centers, 3 mosques and 1 djemevi (a place of worship).</p> <p>The following land parcels will require expropriation due to the Project:</p> <ul style="list-style-type: none"> 1 privately-owned land parcel; and 14 publicly-owned land parcels; <p>The following structures will be affected:</p> <ul style="list-style-type: none"> 2 residential houses – wooden barrack and stone houses (both 15 years old); and 2 non-residential buildings and secondary structures. <p>The Project will require the expropriation of 1 privately-owned land plot owned by 2 shareholders and will affect 3 informal renters. The Project will not affect any business landowners, formal renters, or formal industrial/ manufacturing businesses.</p>	<p>No site drive-through photo.</p>




Community	Summary of Socio-Economic Characteristics	Photos of the Relevant Areas/Houses
<p>Şamlar (known as Tatarcık)</p> <p>Approximate Chainage: 11+300 - 14+800</p> <p>Distance from the Project Alignment: Approximately 1km south.</p>	<p>Although the region known as "Tatarcık" remains within the administrative boundaries of Basaksehir district today, the land of the region is owned by the residents of Şamlar (shown in Figure 4-2). The Sazlıdere Dam was built in this community between 1991 to 1996, resulting in part of the old community being flooded. Around 90 households were resettled in the land east of the dam (with considerable vegetable growing and orchard land being lost).</p> <p>This community is the only one in Basaksehir district that preserves its rural character and agricultural livelihoods.</p> <p>The community now has approximately 170 houses. The approximate population of the community is 1,200. Approximately 70% of the population is aged 16-65. The age group of 0-16 constitutes 20% of the population, and the age group of 65+ constitutes 10% of the population.</p> <p>No privately-owned land parcels, formal / informal renters or formal industrial/ manufacturing businesses will be affected by the Project. 15 publicly-owned land parcels will be affected, 5 of which are reported to be owned by TCDD.</p> <p>No expropriation of privately-owned land parcels is required. No residential houses, non-residential buildings or secondary structures in this community will be impacted by the Project.</p>	 <p>Figure 4-2 - Şamlar</p>
<p>Deliklikaya</p> <p>Approximate Chainage: 14+800 - 16+600</p> <p>Distance from the Project Alignment: Adjacent to the north.</p>	<p>The community includes an industrial area which was built between 2006 and 2018. The industrial area has resulted in population growth. Drinking water, energy network, sewerage system and communication facilities are provided.</p> <p>Approximately 1,500 houses are located in the village. The population of the community in 2019 was 6,584. Approximately 50% of the population is aged 16-65. The age group of 0-16 constitutes 40% of the population, and the age group of 65+ constitutes 10% of the population.</p> <p>Almost all of the working population (those aged 16-65) are employed professional workers. Collective housing was built by the Housing Development Administration of Turkey (TOKİ) in parallel with the establishment of the Organised Industrial Zone (OIZ). However, unionisation of workers in this area has not begun and the income level remains low.</p> <p>Within this community there are 2 primary schools, 1 high school, 1 community health centre and 2 mosques. The community also includes an old Olympic swimming pool and former restaurant, however, since there is no underpasses or overpasses for access purposes on the existing railway these commercial activities are closed.</p> <p>The following land and structures will be affected by the Project:</p> <ul style="list-style-type: none"> 33 privately-owned land parcels; 6 publicly-owned land parcels; 2 non-residential buildings and secondary structures, including an old Olympic swimming pool (Figure 4-3) and an open-air restaurant; and An informal beekeeper (Figure 4-4). <p>The Project will require the expropriation of land parcels owned by 22 single private landowners, 1 business landowner and 67 shareholders on 10 parcels. It will also affect 13 formal renters, but no informal renters. In addition, 1 formal industrial/ manufacturing business will be affected.</p> <p>The Project alignment crosses over the old Olympic pool and open-air restaurant, and as such these structures will be demolished. The pool and open-air restaurant continued to be used for commercial activities after the existing railway was built, but they closed due to access being restricted (no underpasses or overpasses provided).</p> <p>A beekeeper uses a land parcel for approximately 250 beehives. The beekeeper is an informal user with no formal lease agreement in place for the use of the land parcel.</p>	 <p>Figure 4-3 - Old Olympic Swimming Pool</p>  <p>Figure 4-4 - Beehives</p>



Community	Summary of Socio-Economic Characteristics	Photos of the Relevant Areas/Houses
<p>Ömerli</p> <p>Approximate Chainage: 16+600 - 18+900</p> <p>Distance from the Project Alignment: Adjacent to the north and south.</p>	<p>Ömerli, shown in Figure 4-5, is one of the oldest communities in the municipality of Arnavutköy. The community grew after the Ottoman-Russian War of 1877-78 as a result of immigration from Bulgaria. The community experienced further growth during the construction phase of the of the 2nd Stage Ömerli Houses in 2010, to support the OIZ.</p> <p>The community contains about 100 hectares of industrial land, with the largest employer being the Organized Industrial Zone. Drinking water, energy network, sewerage system and communication facilities are provided. Although domestic violence incidents happen occasionally, violence is not a severe problem.</p> <p>The population grew from 287 in 1970 to 3,180 in 2011, and to 7,042 in 2019.</p> <p>Approximately 35% of the population is aged 16-65. The age group of 0-16 constitutes 45% of the population, and the age group of 65+ constitutes 10% of the population.</p> <p>The majority of the workers in this community are manual labourers (approximately 70%), with some of these individuals working on agricultural land.</p> <p>Within the community, there is 1 primary school, 1 community health center, 2 mosques and 1 graveyard.</p> <p>The following land will be expropriated due to the Project:</p> <ul style="list-style-type: none"> 56 privately-owned land parcels; and 27 publicly-owned land parcels. <p>The Project will largely be in a tunnel as it passes through this community. However, the following structures were identified during the asset inventory update and will be affected at the tunnel entrance:</p> <ul style="list-style-type: none"> 11 residential houses – 5 concrete houses (ranging in age from 3-25 years old), 4 stone houses/shelters (3 years old), 1 duplex (3 years old) and 1 two-storey (25 years old); and 57 non-residential buildings and secondary structures, including 1 tomb ruins (Ömer Dede Türbesi). <p>Based on discussions with local residents, the tomb at the entrance of the tunnel is not currently being visited. It is said to have been visited by local residents up until 40 years ago.</p> <p>The Project will require the expropriation of land owned by 12 single private landowners, 17 business landowners, 181 shareholders on 25 parcels. It will also affect 16 formal renters and 3 informal renters. In addition, 17 formal industrial/ manufacturing businesses will be affected.</p>	 <p>Figure 4-5 - Ömerli</p> <p>Note: The figure depicts one of the apartment blocks located at the entrance to the tunnel.</p>
<p>Yeşilbayır</p> <p>Approximate Chainage: 18+900 - 23+600</p> <p>Distance from the Project Alignment: Approximately 200m north.</p>	<p>The community was predominantly formed by immigrants who came from Bulgaria after the Ottoman-Russian War of 1877-78.</p> <p>There has been no rapid population change unlike Ömerli and Deliklikaya. The population was 641 in 1970, 671 in 2010, and 606 in 2019. As this stability in population indicates, the community has preserved its rural character. Agriculture and animal husbandry are the main sources of income.</p> <p>Grains (wheat and barley), sunflowers and corn are the primary agricultural crops. Milk production is the primary animal husbandry activity.</p> <p>Drinking water, energy network, sewerage system and communication facilities are provided.</p> <p>Approximately 60% of the population is aged 16-65. The age group of 0-16 constitutes 20% of the population, and the age group of 65+ constitutes 20% of the population.</p> <p>Within the community there is 1 primary school, 1 mosque and 1 graveyard. The nearest health center is located in Hadımköy, which is approximately 10km away.</p> <p>The following land and structures will be affected by the Project:</p> <ul style="list-style-type: none"> 111 privately-owned land parcels; 30 publicly-owned land parcels; 1 residential house (10-year-old vineyard house) used during the summer by the retired landowner; and 30 non-residential buildings and secondary structures. 	 <p>Figure 4-6 - Informal bee keeping business</p>




Community	Summary of Socio-Economic Characteristics	Photos of the Relevant Areas/Houses
	<p>The Project will require the expropriation of land owned by 71 single private landowners, 6 business landowners, and 117 shareholders on 34 parcels. It will also affect 23 formal renters, but no informal renters of land are recorded in the asset inventory update in the area. In addition, 6 formal industrial/ manufacturing businesses will be affected.</p> <p>In addition, there is 1 informal beekeeper using land for about 100 beehives within the expropriation corridor as shown in Figure 4-6.</p>	
<p>Karaagaç</p> <p>Approximate Chainage: 21+500 - 21+700 and 22+300 - 22+800</p> <p>Distance from the Project Alignment: Approximately 2km south.</p>	<p>A general view of Karaagaç is shown in Figure 4-7. The population of this community has increased from 308 in 1970 to 1,160 in 2010 and 3,331 in 2019. The main reasons for the population increase was the establishment of Roma population in the 1980s and the emergence of a new residential area named Doğa Evleri (shown in Figure 4-8) in the 2000s, with easy access to the E-80 highway. The new residential area contains luxury residences, which has led to some inequality in the community.</p> <p>17,290m² of private land will be acquired in the settlement affecting 68 landowners and 4 land users. However, most of the landowners are shareholders (53) on 13 parcels, with only 1 house and 8 secondary structures that will be directly affected by the Project. Upon review of the asset inventory update information and observations made through the drive-through survey, the Project will not significantly affect poorer areas.</p> <p>As a result of the population growth, the community has both rural and urban characteristics.</p> <p>Incomes in the community are mainly derived from the agricultural, industry and service sectors. The industry sector is associated with the forestry and timber production located in proximity to the community. The community has the right to firewood procurement.</p> <p>Grains (wheat, barley and oats), sunflower and canola are the primary agricultural crops. Milk production is the primary animal husbandry activity.</p> <p>Drinking water, energy network, sewerage system and communication facilities are provided.</p> <p>Approximately 50% of the population is aged 16-65. The age group of 0-16 constitutes 40% of the population, and the age group of 65+ constitutes 10% of the population.</p> <p>There is 1 primary school, 1 private secondary school and 1 international school in the community. In addition, there is 1 community health center, 1 midwife center, 3 mosques and 1 graveyard.</p> <p>The following land and structures will be affected by the Project:</p> <ul style="list-style-type: none"> ■ 24 privately-owned land parcels; ■ 4 publicly-owned land parcels; ■ 1 pre-fabricated residential house (1 year old 2-storey concrete building); and ■ 8 non-residential buildings and secondary structures. <p>The Project will require the expropriation of land owned by 10 single private landowners, 1 business landowner, and 53 shareholders on 13 parcels. It will also affect 4 formal renters, but no informal renters of land are recorded in the asset inventory update in the area. In addition, 1 formal industrial/ manufacturing business will be affected.</p>	<p>Figure 4-7 - Karaagaç (general view)</p> <p>Figure 4-8 - Doga Evleri (General View)</p>
<p>Bahşayış</p> <p>Approximate Chainage: 23+600 - 25+800</p> <p>Distance from the Project Alignment: Approximately 1.5km south.</p>	<p>Located to the immediate north of Büyükçekmece Lake, Bahşayış became a community of Tatar immigrants from Crimea in the 1860s.</p> <p>The community is a rural community with a decreasing population due to people emigrating.</p> <p>The working population primarily comprises people working in agriculture. In addition, people work in the industrial sector and in animal husbandry.</p> <p>Sunflowers and grain (wheat, barley and oats) are the primary agricultural crops. The majority of those working in the industrial sector work at the nearby Hazerfan Airport. Milk production is the main animal husbandry activity.</p> <p>The population has remained comparatively small, only increasing from 347 in 1970 to 387 in 2019.</p>	<p>No site drive-through photo.</p>



Community	Summary of Socio-Economic Characteristics	Photos of the Relevant Areas/Houses
	<p>Approximately 65% of the population is aged 16-65. The age group of 0-16 constitutes 20% of the population, and the age group of 65+ constitutes 15% of the population.</p> <p>There is 1 primary school, 1 mosque and 1 graveyard within this community. The nearest health center is located in Çatalca, which is approximately 10km away.</p> <p>The following land and structures will be affected by the Project:</p> <ul style="list-style-type: none"> ■ 24 privately-owned land parcels; and ■ 13 publicly-owned land parcels. ■ 2 wooden house/barrack residential houses (both 5 years old); and ■ 5 non-residential buildings and secondary structures. <p>The Project will require the expropriation of land owned by 10 single private landowners, 6 business landowner, and 39 shareholders on 8 parcels. It will also affect 11 formal renters, but no informal renters of land in the area. In addition, 6 formal industrial/ manufacturing businesses will be affected.</p>	
<p>Nakkaş</p> <p>Approximate Chainage: 25+800 - 25+900</p> <p>Distance from the Project Alignment: Approximately 6.5km north.</p>	<p>The Project alignment runs in parallel to the existing railway along the southern border of Nakkaş. Figure 4-9 shows a general view of Nakkaş. With the working population emigrating to work in the industrial and service sectors, the community of Nakkaş has a declining population. The communities' main source of income is agriculture and animal husbandry. Grains (wheat and barley), sunflower and canola are the primary agricultural crops. Milk and meat production are the primary animal husbandry activity. Drinking water provision is considered to be insufficient in this community. The population, which was 846 in 1970 and 1,127 in 2000, had decreased to 911 in 2010 and 845 in 2019. Approximately 50% of the population is aged 16-65. The age group of 0-16 constitutes 30% of the population, and the age group of 65+ constitutes 20% of the population. There is 1 primary school, 1 community health center, 1 mosque and 2 graveyards within the community. The following land and structures will be affected:</p> <ul style="list-style-type: none"> ■ 1 privately-owned land parcel; and ■ 2 publicly-owned land parcels. <p>The Project will require the expropriation of land owned by 1 single private landowner. No residential houses, non-residential buildings or secondary structures in this community will be affected by the Project.</p> <p>No formal/informal renters of land in the area, or formal industrial/ manufacturing businesses that will be affected.</p>	 <p>Figure 4-9 - Nakkaş (general view)</p>



Community	Summary of Socio-Economic Characteristics	Photos of the Relevant Areas/Houses
<p>Ferhatpaşa</p> <p>Approximate Chainage: 25+900 - 28+100, 29+000 - 29+100 and 29+200 - 32+200</p> <p>Distance from the Project Alignment: Approximately 2km to the south-west.</p>	<p>This community is integrated within the Çatalca municipality. Çatalca Station is located within this community. Approximately half of the population of the Çatalca municipality resides in this area (25,000 people in 2019, an increase from 15,997 in 2010).</p> <p>The community has an increasing population due to immigration from surrounding communities.</p> <p>The primary source of income is waged income. Although it has become an urban community, agriculture and animal husbandry are other sources of income.</p> <p>Sunflower and grain (barley) are the primary agricultural crops. Milk and meat production are the primary animal husbandry activities; there is also a sacrificial slaughter area within the community. Within the community there is also a small industrial area.</p> <p>Drinking water provisions are considered to be insufficient in this community. Although domestic violence incidents happen occasionally, violence is not a severe problem.</p> <p>Approximately 60% of the population is aged 16-65. The age group of 0-16 constitutes 30% of the population, and the age group of 65+ constitutes 10% of the population.</p> <p>There is 1 kindergarten, 3 primary schools and 2 high schools in this community. Çatalca's main hospital is within the community. There is also 1 community health center and 1 mosque.</p> <p>The following agricultural land (shown in Figure 4-10) and land parcels containing structures will be affected by the Project:</p> <ul style="list-style-type: none"> 54 privately-owned land parcels; 35 publicly-owned land parcels; and 2 outbuildings to houses on two separate land parcels. <p>The Project will require the expropriation of land owned by 16 single private landowners, 4 business landowners, and 149 shareholders on 25 parcels. It will affect 3 formal renters and 10 informal renters. In addition, 4 formal industrial/ manufacturing businesses will be affected.</p>	 <p>Figure 4-10 - Ferhatpaşa (Agricultural Land)</p>  <p>Figure 4-11 - View of a Building (outside the expropriation corridor)</p>
<p>İzzettin</p> <p>Approximate Chainage: 28+100 - 29+000 and 29+100 - 29+200</p> <p>Distance from the Project Alignment: Approximately 3km north-east.</p>	<p>The Project alignment is approximately 3km from İzzettin centre, and it runs parallel to the existing railway through agricultural areas.</p> <p>The population of İzzettin has steadily increased from 670 in 1970 to 1,040 in 2000 and 1,087 in 2019. A general view of İzzettin is shown in Figure 4-12.</p> <p>The primary source of income is waged income. In addition, agriculture and animal husbandry are still among the income types.</p> <p>Grains (wheat, barley and oat), sunflower and corn are the primary agricultural crops. Milk and meat production are the main animal husbandry activities.</p> <p>Drinking water, energy network, sewerage system and communication facilities are provided.</p> <p>Approximately 55% of the population is aged 16-65. The age group of 0-16 constitutes 25% of the population, and the age group of 65+ constitutes 20% of the population.</p> <p>There are no schools in this community, due to the proximity to other communities' pupils attend schools elsewhere. There is 1 community health center, 3 mosques and 2 graveyards in the community.</p> <p>The following agricultural land will be affected:</p> <ul style="list-style-type: none"> 11 privately-owned land parcels; and 5 publicly-owned land parcels. <p>No residential houses, non-residential buildings or secondary structures in this community will be affected by the Project.</p>	 <p>Figure 4-12 - İzzettin (general view)</p>



Community	Summary of Socio-Economic Characteristics	Photos of the Relevant Areas/Houses
	The Project will require the expropriation of land owned by 3 single private landowners and 78 shareholders on 7 parcels. It will also affect 2 informal renters, but no formal renters, business landowners or formal industrial/ manufacturing businesses.	
<p>Kaleiçi</p> <p>Approximate Chainage: 32+200 - 36+200</p> <p>Distance from the Project Alignment: Approximately 2km south-west.</p>	<p>This community is integrated within the Çatalca municipality. It is the oldest residential community in Çatalca.</p> <p>The population largely comprises immigrants from Greece who arrived following the Population Exchange Treaty of 1923. There is also an Alevi population in the area who settled after the Population Exchange Treaty. In more recent years, people have moved to the community from Tokat, Erzincan, Kars and Sivas. The population was 6,799 in 2010 and it rose to 7,780 in 2019.</p> <p>There are approximately 100 historic buildings in the community, as well a historical gendarmerie building, a Museum of Population Exchange and a historical fountain. Further information relating to heritage located in proximity to the Project is provided in Chapter 9: Cultural Heritage of the ESIA.</p> <p>The primary source of income is waged income. Although it has become an urban community, agriculture is still among the income types. Grains (wheat, barley and oat) and sunflower are the primary agricultural crops.</p> <p>Drinking water, energy network, sewerage system and communication facilities are provided.</p> <p>Approximately 50% of the population is aged 16-65. The age group of 0-16 constitutes 35% of the population, and the age group of 65+ constitutes 15% of the population.</p> <p>There are 2 primary schools, 4 high schools and 3 private high schools in the community. In addition, there is 1 hospital, 1 community health center, 4 mosques, 1 djemevi and 1 graveyard.</p> <p>The following agricultural land and land parcels containing structures will be affected by the Project:</p> <ul style="list-style-type: none"> 67 privately-owned land parcels; 19 publicly-owned land parcels; 6 residential houses (2 stone houses both 5 years old, 2 wooden barracks both 10 years old, 1 concrete house of 10 years and 1 metal house of 10 years); and <p>48 non-residential buildings and secondary structures including 1 pergola, 13 outbuildings on separate parcels and an abandoned structure Figure 4-13 and Figure 4-14).</p> <p>The Project will require the expropriation of land owned by 27 single private landowners, 6 business landowners, 377 shareholders on 32 parcels. It will also affect 29 formal renters and 4 informal renters. In addition, 6 formal industrial/ manufacturing businesses will be affected.</p>	 <p>Figure 4-13 - Kaleiçi Abandoned Silo (within the expropriation corridor)</p>  <p>Figure 4-14 - Kaleiçi Building (within the expropriation corridor)</p>
<p>Gökçeali</p> <p>Approximate Chainage: 36+200 - 38+400</p> <p>Distance from the Project Alignment: Approximately 1km north-east.</p>	<p>Gökçeali as shown in Figure 4-15 is the community to be crossed by a tunnel.</p> <p>The population largely comprises of immigrants from Greece who arrived following the Population Exchange Treaty of 1923. Since then, the population gradually increased, from 489 in 1970 to 1,928 in 2000 and subsequently plateaued with 1,858 residents in 2019.</p> <p>The primary source of income is from agriculture and animal husbandry.</p> <p>Grains (barley and wheat) and sunflower are the primary agricultural crops. Milk and meat production are the main animal husbandry activities.</p> <p>Drinking water, energy network, sewerage system and communication facilities are provided.</p> <p>Approximately 50% of the population is aged 16-65. The age group of 0-16 constitutes 40% of the population, and the age group of 65+ constitutes 10% of the population.</p> <p>There is 1 primary school, 1 community health center, 1 mosque and 1 graveyard in the community. There is also a water treatment plant located within this community which treats water from the mountains.</p> <p>The following agricultural land and land parcels containing structures will be affected by the Project:</p>	 <p>Figure 4-15 - Gökçeali (general view)</p>



Community	Summary of Socio-Economic Characteristics	Photos of the Relevant Areas/Houses
	<ul style="list-style-type: none"> 50 privately-owned land parcels; 13 publicly-owned land parcels; 5 residential houses (3 stone houses, 1 hobby house and 1 sheet metal house, all 5 years old); and 86 non-residential buildings and secondary structures, including 2 parcels that have been re-allocated for hobby gardens purpose, 1 container, 1 plastic water tank, 1 stone depot and 7 outbuildings on individual parcels. <p>The Project will require the expropriation of land owned by 1 business landowner. It will also affect 30 formal renters and 3 informal renters. There are no single private landowners that own land identified in the area, and as such it is anticipated that other land parcels are owned by shareholders. However, there is no current data included in the asset inventory update on project affected landowners that are shareholders. In addition, 1 formal industrial/ manufacturing business will be affected.</p>	
<p>İnceğiz</p> <p>Approximate Chainage: 38+400 - 43+000</p> <p>Distance from the Project Alignment: Approximately 800m north-east.</p>	<p>İnceğiz is an old native (“Gacal”) community. Within the community there is an ancient Eastern Roman castle.</p> <p>From 1990, the population grew due to immigration from the Trabzon Province. The population increased from 430 in 1970 to 832 in 2019.</p> <p>The primary source of income is from agriculture and animal husbandry. In addition, forestry also supports livelihoods in this area. The community has the right to firewood procurement.</p> <p>Sunflower, corn, grains (wheat and barley) and vegetables are the primary agricultural crops. Milk production is the main animal husbandry activity.</p> <p>Drinking water, energy network, sewerage system and communication facilities are provided.</p> <p>Approximately 50% of the population is aged 16-65. The age group of 0-16 constitutes 20% of the population, and the age group of 65+ constitutes 30% of the population.</p> <p>There are no schools in this community. Due to the proximity to other communities, local children attend schools elsewhere. There is 1 primary mosque, 1 smaller secondary mosque and 1 graveyard in the community. The mobile health center from the municipality of Çatalca visits this village once a week.</p> <p>The following agricultural land and land parcels containing structures (including animal shelter as shown in Figure 4-16) will be affected by the Project:</p> <ul style="list-style-type: none"> 37 privately-owned land parcels; 33 publicly-owned land parcels; and 18 non-residential buildings and secondary structures, including 11 outbuildings on separate parcels. <p>The Project will require the expropriation of land owned by 18 single private landowners, 2 business landowners, and 366 shareholders on 17 parcels. It will also affect 19 formal renters and 3 informal renters. In addition, 2 formal industrial/ manufacturing businesses will be affected.</p>	 <p>Figure 4-16 - Animal Shelter (within expropriation corridor)</p>
<p>Kabakça</p> <p>Approximate Chainage: 43+000 - 45+900</p> <p>Distance from the Project Alignment: Adjacent to the north-east.</p>	<p>Kabakça Station shown in is located within this community.</p> <p>The population of Kabakça increased from 1,013 in 1970 to 1,763 in 2000, the population then decreased to 1,545 in 2010 before increasing to 1,666 in 2019. Between the years 2000-2010, as in other Çatalca communities, the trend of migration to the city was high. However, this trend stopped after 2010, but it has played a significant role in the ageing of the population in the community.</p> <p>The primary source of income is waged income. In addition, agriculture and animal husbandry are still among the income types. The community has the right to firewood procurement.</p> <p>Those of waged income tend to work in factories around Çatalca and Çerkezköy.</p> <p>Grains (wheat and barley), sunflower, canola and corn are the primary agricultural crops. Milk and meat production are the primary animal husbandry activities.</p> <p>Drinking water, energy network, sewerage system and communication facilities are provided.</p>	 <p>Figure 4-17 - Kabakça Station</p>

Community	Summary of Socio-Economic Characteristics	Photos of the Relevant Areas/Houses
	<p>Approximately 45% of the population is aged 16-65. The age group of 0-16 constitutes 25% of the population, and the age group of 65+ constitutes 30% of the population.</p> <p>There is 1 primary school, 1 community health center, 1 mosque and 2 graveyards in the community.</p> <p>There is a Shepherd container which is used only during the summer by a local person (Figure 4-20). The container is on the edge of the expropriation border. There are houses which are in proximity to the expropriation corridor.</p> <p>The following land and structures will be affected by the Project:</p> <ul style="list-style-type: none"> 41 privately-owned land parcels; 10 publicly-owned land parcels; 22 residential houses– 5 concrete houses (ranging 2-15 years old), 4 wooden barracks/houses (5-10 years old), 6 stone houses (ranging from 2-5 years old), 7 pre-fabricated houses (2-5 years old); and 151 non-residential buildings and secondary structures, including 1 container, 1 ruined house, 2 water depots, 2 water wells, 1 poultry coup and 14 outbuildings to house on separate parcels. <p>The Project will require the expropriation of land owned by 24 single private landowners, 1 business landowners, and 102 shareholders on 15 parcels. It will also affect 46 formal renters and 1 informal renter. In addition, 1 formal industrial/ manufacturing business will be affected.</p> <p>The community of Kabakça contains the highest number of residential structures to be expropriated by the Project. Examples of such structures within the expropriation corridor are shown in Figure 4-18 and Figure 4-19.</p>	 <p>Figure 4-18 - House and Outbuildings (within expropriation corridor)</p>  <p>Figure 4-19 - House (within expropriation corridor)</p>  <p>Figure 4-20 - Shepherd container (outside expropriation corridor, on the border)</p>

Community	Summary of Socio-Economic Characteristics	Photos of the Relevant Areas/Houses
<p>Akören (Akviran)</p> <p>Approximate Chainage: 45+900 - 49+000</p> <p>Distance from the Project Alignment: Approximately 2.4km south-west.</p>	<p>Akören is a community of Gacals and Pomaks. The population increased from 1,292 in 1970 to 1,454 in 2000. The population decreased to 1,312 in 2019. The population decrease was due to emigration to Silivri and İstanbul.</p> <p>The primary source of income is from agriculture and animal husbandry. The community has the right to firewood procurement.</p> <p>Grains (wheat and barley), sunflower and watermelon are the primary agricultural crops. Milk and meat production are the primary animal husbandry activities.</p> <p>Drinking water, energy network and communication facilities are provided. A sewerage system is also provided but not all houses in the community are connected to this system.</p> <p>Approximately 50% of the population is aged 16-65. The age group of 0-16 constitutes 20% of the population, and the age group of 65+ constitutes 30% of the population.</p> <p>There is 1 primary school, 1 community health center, 2 mosques and 2 graveyards in the community.</p> <p>The following agricultural land and land parcels containing structures will be affected by the Project:</p> <ul style="list-style-type: none"> 53 privately-owned land parcels; 17 publicly-owned land parcels. 1 stone residential house (5 years old); and 16 non-residential buildings and secondary structures, including 8 outbuildings to houses on separate land parcels. <p>The Project will require the expropriation of land owned by 33 single private landowners, 4 business landowners, and 275 shareholders on 16 parcels. It will also affect 24 formal renters and 1 informal renter. In addition, 4 formal industrial/ manufacturing businesses will be affected.</p>	 <p>Figure 4-21 – Akören</p>  <p>Figure 4-22 - Houses nearby</p>
<p>Bekirli</p> <p>Approximate Chainage: 48+000 - 48+100 and 49+000 - 50+500</p> <p>Distance from the Project Alignment: Approximately 500m north.</p>	<p>Bekirli was founded by immigrants from Razgrad, Bulgaria, after the Ottoman-Russian War of 1877-78, and was later populated by settler migrating from the northeast of Turkey (Erzurum). The population of Bekirli has been declining, decreasing from 430 in 1970 to 298 in 2000 and 197 in 2019. The population decrease is due to emigration to Silivri and İstanbul.</p> <p>The primary source of income is from agriculture, animal husbandry and forestry. The community has the right to firewood procurement.</p> <p>Grains (wheat and barley), sunflower, melon and watermelon are the primary agricultural crops. Milk production is the primary animal husbandry activity.</p> <p>Drinking water, energy network and communication facilities are provided. A sewerage system is also partially provided but construction was never completed.</p> <p>Approximately 40% of the population is aged 16-65. The age group of 0-16 constitutes 20% of the population, and the age group of 65+ constitutes 40% of the population.</p> <p>There are no schools in this community, due to the proximity to Akören. There is also no community health center. Medical services are provided by a doctor visiting from Akören once a month.</p> <p>The following agricultural land and land parcels containing structures will be affected by the Project:</p> <ul style="list-style-type: none"> 49 privately-owned land parcels; and 7 publicly-owned land parcels. 9 non-residential buildings and secondary structures, including 6 outbuildings to houses on separate land parcels. <p>No residential houses will be impacted by the Project in this community.</p> <p>The Project will require the expropriation of land owned by 35 single private landowners, 3 business landowners, and 225 shareholders on 12 parcels. It will also affect 12 formal renters, but no informal renters. In addition, 3 Project affected formal industrial/ manufacturing businesses have been identified in the asset inventory update.</p>	<p>No site drive through photo.</p>

Community	Summary of Socio-Economic Characteristics	Photos of the Relevant Areas/Houses
<p>Kurfalli</p> <p>Approximate Chainage: 50+500 - 56+400</p> <p>Distance from the Project Alignment: Approximately 2km south-west.</p>	<p>The Project passes 2km northeast of the community within agricultural and forested areas.</p> <p>The population of Kurfalli, an old community, largely comprises immigrants from Greece who arrived following the Population Exchange Treaty of 1923. However, since then the population has decreased from 1,194 in 1970 to 736 in 2000 and 485 in 2019. The population decrease has been due to emigration to Silivri and İstanbul.</p> <p>The primary source of income is from agriculture, animal husbandry and forestry. The community has the right to firewood procurement. Sunflower, grains and canola are the primary agricultural crops. Milk production is the primary animal husbandry activity. Meat production is only undertaken during Eid al-Adha, an Islamic holiday.</p> <p>Drinking water, energy network and sewerage systems are provided. Communication facilities are considered to be insufficient.</p> <p>Approximately 50% of the population is aged 16-65. The age group of 0-16 constitutes 15% of the population, and the age group of 65+ constitutes 35% of the population.</p> <p>There is 1 primary school, 1 mosque and 2 graveyards in the community. There is no community health center. For health services, the health centers in Silivri are used.</p> <p>The Project will affect agricultural land parcels and parcels containing residential houses, secondary structures (including Kurfalli Water Well shown in Figure 4-23) and informal livelihood activities.</p> <p>The following agricultural land and land parcels containing structures will be affected by the Project:</p> <ul style="list-style-type: none"> 5 privately-owned land parcels; 12 publicly-owned land parcels; and 7 non-residential buildings and secondary structures, including 2 outbuildings to houses on separate land parcels. <p>No residential houses will be impacted by the Project in this community.</p> <p>The Project will require the expropriation of land owned by 2 single private landowners It will also affect 3 formal renters and 1 informal renter. There are no business landowners or shareholders that own land in the area. In addition, no formal industrial/ manufacturing businesses will be affected.</p>	 <p>Figure 4-23 - Kurfalli Water Well</p>
<p>Büyüksinekli</p> <p>Approximate Chainage: 56+400 - 59+900</p> <p>Distance from the Project Alignment: Approximately 1km to the south.</p>	<p>The existing railway passes close to Büyüksinekli (1.1km to the northern border of the residential area and 1.5km to the center of Büyüksinekli) and includes an out-of-service station. The Project alignment mostly runs parallel to the existing railway.</p> <p>Büyüksinekli was founded by Turkish and Tatar immigrants from Deliorman and Dobruja, who had to emigrate from Bulgaria after the Balkan Wars of 1912-1913. Some left the community in the mid-1950s, founding the adjacent Küçüksinekli community.</p> <p>The population was 538 in 1970, decreasing to 298 in 2000, and increasing to 407 by 2019. The population fluctuation is due to emigration to Silivri and İstanbul.</p> <p>The primary source of income is waged income. In addition, agriculture, animal husbandry and forestry are also sources of income.</p> <p>Sunflower, grains and canola are the primary agricultural crops. Milk production is the primary animal husbandry activity. Meat production is only undertaken during Eid al-Adha, an Islamic holiday.</p> <p>Drinking water, energy network and communication facilities are provided. A sewerage system is also partially provided, but construction was never completed.</p> <p>Approximately 50% of the population is aged 16-65. The age group of 0-16 constitutes 10% of the population, and the age group of 65+ constitutes 40% of the population.</p> <p>There is 1 primary school, 1 mosque and 1 graveyard in the community. There is no community health center. Health services are provided by the community health center in Alipaşa.</p>	 <p>Figure 4-24 - Büyüksinekli (forestry, charcoal making)</p>

Community	Summary of Socio-Economic Characteristics	Photos of the Relevant Areas/Houses
	<p>No privately-owned land parcels are affected in this area. No formal/informal renters, or formal industrial/ manufacturing businesses have been identified.</p> <p>There is 1 publicly-owned land parcel and livelihood activities (including regulated traditional charcoal making as shown in Figure 4-24 by 10 charcoal producers) that will be affected by the Project.</p> <p>No residential houses, non-residential buildings or secondary structures in this community will be affected by the Project.</p>	
<p>Küçüksinekli</p> <p>Approximate Chainage: 59+900 - 61+600</p> <p>Distance from the Project Alignment: Adjacent to the south.</p>	<p>Küçüksinekli (shown in Figure 4-25) was founded around Sinekli Village Train Station, initially with 12 houses constructed in the 1950s. Approximately 10 immigrant households that emigrated from Bulgaria in the 1980s also settled here.</p> <p>The population of the Küçüksinekli was 244 in 1970, rising to 378 in 1990, but has since decreased to 166 in 2019. The declining population is largely due to limited land and the lack of job opportunities, with individuals moving to Silivri.</p> <p>Approximately 40% of the population is aged 16-65. The age group of 0-16 constitutes 5% of the population, and the age group of 65+ constitutes 55% of the population.</p> <p>The primary source of income is forestry and waged income. In addition, agriculture and animal husbandry are also sources of income. The community has the right to firewood procurement.</p> <p>Waged income is primarily from people working for companies in Büyükkılıçlı and Seymen. Sunflower and grains (wheat and barley) are the primary agricultural crops. Milk production is the primary animal husbandry activity. Meat production is only undertaken during Eid al-Adha, an Islamic holiday.</p> <p>There are no schools in the community, pupils attend school in Fenerköy. There is 1 mosque and 1 graveyard in the community. There is no community health center; for medical services, a doctor and a nurse visit once a month.</p> <p>No privately-owned land parcels in this community will be affected. 1 publicly-owned land parcel used for forestry will be affected.</p> <p>No formal/informal renters or formal industrial/ manufacturing businesses will be affected.</p> <p>The Project will not affect any residential houses, non-residential buildings or secondary structures in this community. However, there is a picnic area within 300-400m near Silivri Municipality that is currently closed that may be affected.</p>	 <p>Figure 4-25 - Küçüksinekli (general view)</p>
<p>Çayırdere</p> <p>Approximate Chainage: 61+600 - 73+500</p> <p>Distance from the Project Alignment: Approximately 1.8km to the north-east.</p>	<p>Çayırdere is a large rural area in Silivri. It was founded by Bulgarian immigrants from Hazergrad, after the Ottoman-Russian War of 1877-1878. The population of Çayırdere steadily increased from 982 in 1970, to 1,361 in 2000, but has since decreased to 1,238 in 2019.</p> <p>The primary source of income is waged income. In addition, forestry, agriculture and animal husbandry are also sources of income.</p> <p>Waged income is primarily from people working for companies in Çerkezköy. Forestry is primarily associated with regulated traditional charcoal production (50 charcoal makers identified in this Project affected area). Grains (wheat, barley and oats) and sunflower are the primary agricultural crops. Milk production is the primary animal husbandry activity.</p> <p>Drinking water, energy network and sewerage systems are provided. Communication facilities are considered to be insufficient.</p> <p>Approximately 50% of the population is aged 16-65. The age group of 0-16 constitutes 20% of the population, and the age group of 65+ constitutes 30% of the population.</p> <p>There is 1 primary school, 1 secondary school, 1 community health center, 1 mosque and 1 graveyard in the community. There is also no community health center. For medical services, a doctor and a nurse visit once a month.</p> <p>The Project alignment runs parallel to the existing railway within the boundaries of Çayırdere (at a maximum distance of 200m from the line). The Project is approximately 2km from the center of the community.</p> <p>The following land and structures will be affected by the Project:</p> <ul style="list-style-type: none"> 64 privately-owned land parcels; 37 publicly-owned land parcels; 	 <p>Figure 4-26 - Agricultural Land (between the existing railway and the Project alignment)</p>

Community	Summary of Socio-Economic Characteristics	Photos of the Relevant Areas/Houses
	<ul style="list-style-type: none"> 2 residential houses, including 1 metal sheet house and 1 container house, both 5 years old on one land parcel; and 24 non-residential buildings and secondary structures, including 1 concrete pump and 12 outbuildings to houses on separate parcels; and Some huts located on one land parcel. <p>The Project will require the expropriation of land owned by 24 single private landowners, 2 business landowners, and 142 shareholders on 28 parcels. It will affect 26 formal renters and 9 informal renters. In addition, 2 formal industrial/ manufacturing businesses will be affected.</p> <p>There are parcels of agricultural land (shown in Figure 4-26) situated between the Project and the existing railway, whose access will be substantially affected.</p>	
<p>Gazimustafakemalpaşa (GMK)</p> <p>Approximate Chainage: 74+000 - 74+800 and 75+200 - 75+900</p> <p>Distance from the Project Alignment: To the west of the end of the Project.</p>	<p>The Project ends 2km east of this community.</p> <p>The population of the community increased as Çerkezköy became one of the priority areas for development in the early 1970s. The population reached 20,000 in 2019.</p> <p>The primary source of income is waged income, with only 10 households receiving an income from agriculture (wheat and sunflower). There is also a high level of unemployment in this community.</p> <p>Drinking water, energy network, sewerage system and communication facilities are provided. Occasionally there are complaints about communication, sewerage and road facilities.</p> <p>Approximately 50% of the population is aged 16-65. The age group of 0-16 constitutes 30% of the population, and the age group of 65+ constitutes 20% of the population.</p> <p>There is 1 kindergarten, 1 primary school, 1 community health center, 1 mosque and 1 graveyard in the community.</p> <p>The Project will affect agricultural land parcels, land parcels containing secondary structures and informal livelihood activities.</p> <p>The following land and structures will be affected by the Project:</p> <ul style="list-style-type: none"> 8 privately-owned land parcels; 19 publicly-owned land parcels; 3 residential houses – 1 stone house (20 years old), 1 wooden shelter (15 years old) and 1 stone house (10 years old); and 24 non-residential building and secondary structures, including 9 outbuildings, 2 barns and 2 containers on separate land parcels. <p>The Project will require the expropriation of land owned by 31 single landowners and 520 shareholders on 27 parcels. It will also affect 11 formal renters and 14 informal renters. There are no business landowners or formal industrial/ manufacturing businesses who will be affected.</p>	 <p>Figure 4-27 - Active Barn (outside of the expropriation corridor)</p>
<p>Istasyon</p> <p>Approximate Chainage: 73+500 - 74+000 and 74+800 - 75+200</p> <p>Distance from the Project Alignment: Approximately 700m south-west.</p>	<p>Formerly named as "Türbedere", this was the first community in Çerkezköy. The community is located to the east of Çerkezköy.</p> <p>Although it is an urban community, some of the population lives on agricultural land. The population of Istasyon was 8,600 in 2010 and has increased to 16,900 in 2019.</p> <p>The primary source of income is waged income. In addition, agriculture and animal husbandry are also sources of income. There is also a high level of unemployment in this community.</p> <p>Waged income is primarily from people working in the nearby Çerkezköy Industrial Zone which contains numerous factories. Grains (wheat and oats) and sunflower are the primary agricultural crops. Milk production is the primary animal husbandry activity (undertaken by approximately 3 households).</p> <p>Energy network and communication facilities are provided. Drinking water and sewage systems are insufficient. Occasionally there are complaints about power and road facilities.</p> <p>Approximately 50% of the population is aged 16-65. The age group of 0-16 constitutes 30% of the population, and the age group of 65+ constitutes 20% of the population.</p> <p>There are 2 kindergartens, 4 primary schools, 2 community health centers, 6 mosques and 1 graveyard in the community.</p>	 <p>Figure 4-28 - Villa (outside of the expropriation corridor)</p>

Community	Summary of Socio-Economic Characteristics	Photos of the Relevant Areas/Houses
	<p>The Project will affect agricultural land parcels and informal livelihood activities.</p> <p>The following land and structures will be affected by the Project:</p> <ul style="list-style-type: none"> 28 privately-owned land parcels; 16 publicly-owned land parcels; 3 residential houses – 1 wooden shelter (20 years old), 1 concrete house (3 years old) and 1 stone house (5 years old); and 20 non-residential buildings and secondary structures, including 1 wooden pergola, 1 poultry, 1 container and 8 outbuildings to houses on separate parcels. <p>The Project will require the expropriation of land owned by 24 single private landowners and 4 shareholders on 1 parcel. It will also affect 13 formal renters and 8 informal renters. The Project will not affect any business landowners and/or formal industrial/ manufacturing businesses.</p>	

4.4 SOCIO-ECONOMIC SURVEY METHODOLOGY

- 4.4.1. The socio-economic survey aimed to analyse a sample of households affected by the Project in order to understand the socio-economic characteristics of the affected communities, and key issues that may arise due to Project activities. Prior notification of the household surveys was provided both through the Mukhtars to PAPs, in addition to, a Project leaflet/Frequently Asked Questions (FAQ) sheet agreed with TCDD that was also circulated to the PAPs being surveyed.
- 4.4.2. A total of 819 households (including formal and informal users of land) were approached by the survey team to complete the household survey, including all PAPs to be physically resettled. The household surveys used the 2017 TCDD Asset Inventory as a basis for contacting affected households, refining and identifying further landowners and users from this list. The survey team were unable to contact 20 owners on this asset inventory, despite the significant effort of the team to contact all affected households through a variety of measures (e.g. contacting neighbours and Mukhtars).
- 4.4.3. Out of the 819 households approached, 95 households declined the survey, resulting in a total of 724 households completing the survey. These surveyed households contained a total population of 1,895 individuals.
- 4.4.4. The 95 households that declined the survey could be due to: reluctance in talking to non-governmental staff; reluctance to discuss informal activities; and fears over being infected with COVID-19 (although all surveyors were socially distancing, wearing masks and regularly sanitising their hands). Only those undertaking informal activities could be defined as a specific group that declined the survey. However, none of those who declined the survey will be physically resettled as part of this Project.
- 4.4.5. The survey included a combination of close ended questions and open ended questions. Due to the COVID-19 pandemic, respondents were provided with the choice of undertaking the survey face-to-face (outdoors), or remotely (over the phone). 76% (624) of the 724 surveys were carried out face-to-face, while 24% (195) of surveys were carried out remotely.
- 4.4.6. An overview of these Project survey studies undertaken and the number of PAPs consulted overall is presented in **Table 4-2** below:

Table 4-2 – Project Survey Methods

Method of Survey	Measure	Unit
Household Survey	No. of households surveyed	724
Mukhtar Survey	No. of Mukhtars representing 22 communities out of the 25 communities in Table 4-1	22
Governorship Meetings	No. of Governorship Meetings undertaken	13
	No. of Informal User FGs	2

Method of Survey	Measure	Unit
Focus Groups (FG) ¹⁷	Total no. of informal users consulted in FGs	6 ¹⁸
	No. of Women-Only FGs	9
	Total no. of women consulted in FGs	53
	No. of Community FGs	3
	Total no. of community members consulted in FGs	45
Total	Number of PAPs consulted directly	863

- 4.4.7. As well as the above primary studies, this chapter has also used secondary data sources to add further understanding of the socio-economic conditions of the PAPs. The secondary data sources are referenced where relevant throughout the RAP.
- 4.4.8. **Table 4-3** provides a summary of the information gathered from the 2020 Household Survey, providing an overview of the affected population and households.

Table 4-3 – Statistics from the 2020 Household Survey

No.	Statistic	Unit
1	No. of households surveyed	724
2	Survey questionnaires completed by head of household	599
3	Survey questionnaires completed by other household members	125
4	No. of households affected by previous expropriation as described in Table 4-8 - Summary of Previous Household Expropriation in the Wider Affected Communities	93
5	Surveyed Household population (female)	893
6	Surveyed Household population (male)	982
7	Total population of households surveyed	1,895 ¹⁹
8	% of households that believe their community's economy has deteriorated over past 5 years	65%
9	% of heads of household that were aware of the Project before the survey	72%

¹⁷ In total, 14 focus groups were undertaken.

¹⁸ These focus groups focussed on those carrying out regulated traditional charcoal making and informal seasonal workers. The total number of informal users identified during the household survey includes 2 beekeepers and 62 informal land users for grazing. 1 focus group was also undertaken specifically for charcoal makers. The 60 traditional charcoal makers identified through this focus group have been included in this statistic as some may not be currently licensed.

¹⁹ The official figure will likely be higher as some survey respondents did not provide this information when asked.

No.	Statistic	Unit
10	% of head of household respondents that have a negative opinion of the Project	18%
11	Literacy rate of total household population	90%
12	% of household survey respondents stating that their household income has been negatively affected by COVID-19 pandemic	15%
13	Number of poor households as identified in the updated asset inventory	363
14	% of PAPs currently looking for employment	9%
15	% of households that possess an individual with a chronic illness and/or disability	18%
16	% of households where titles on land deeds need to be updated	32%
17	Number of permanently occupied residential houses found on land to be expropriated	62
19	% of households using communal natural resources	4%

- 4.4.9. Overall, out of the 724 households surveyed, 13% were found to have had land that had been previously affected by expropriation from other projects and 72% were aware of the Project. 65% of households believed that their community's economy had deteriorated over past 5 years and 15% of household survey respondents stated that their household income had been negatively affected by the COVID-19 pandemic. Over 80% of respondents had a positive opinion of the Project.
- 4.4.10. The 2017 asset inventory data was compared with the data gathered during the household surveys. The data comparison was undertaken in compliance with local and international data protection requirements. Where differences in the data were identified, these were discussed with AYGM to assist with the preparations for the asset inventory update undertaken in December 2020 to confirm the levels of compensation required for the impacted PAPs.
- 4.4.11. The data from the asset inventory update has been combined with certain data from the household surveys to create a combined data set presenting the total number of PAPs and land parcels affected by the Project. By combining these two data sets, AYGM has created a full census of PAPs and land parcels²⁰.

²⁰ This list of PAPs, in line with PR5, is retained confidentially by the AYGM Expropriation Department in accordance with data protection requirements in Turkey. If further PAPs are identified through the implementation of the RAP, these PAPs will be added to this census and compensated accordingly.

4.5 DEMOGRAPHIC PROFILE

DISTRIBUTION OF PAPS ALONG PROJECT ALIGNMENT

- 4.5.1. The 2020 Household Survey identified 1,895 PAPS across 724 affected households. However, this is just a sample of the total affected population. The actual affected population will be higher and there are also likely to be further currently unidentified affected persons who make themselves known during the implementation of the RAP. The census currently estimates a total of 3,228 affected households along the Project alignment (including land shareholders not currently living in the Project affected communities).
- 4.5.2. Overall, the households identified in the household survey were distributed across the following communities.

Table 4-4 – Distribution of PAPS Across the Project Affected Communities

Communities	Population (2018)	Population (2019)	Total PAPS Identified in Household Survey ²¹	Households not Entering Household Data	% of Community Pop. Affected by the Project ²²
Halkali	77,648	80,350	-	-	-
Altınşehir	22,436	16,115	-	-	-
Firüzköy	44,218	22,850	-	-	-
Bahçeşehir2.kısım (previously known as Hosdere)	1,309	47,977	2	2	<1%
Şamlar (previously known as Tatarcık)	15,475	1,214	11	0	1%
Deliklikaya	5,916	6,584	120	4	2%
Ömerli	6,782	7,042	125	3	2%
Yeşilbayır	622	606	185	8	31%

²¹ This presents the population identified in the 724 households surveyed. The actual affected population will be higher due to: the 95 declined surveys; the 20 households that could not be contacted during the survey period; the surveyed households that did not enter household data; and the likelihood that further currently unidentified affected persons will make themselves known during the implementation of the RAP. Contact details for these PAPS have been provided through the AYGM 2020 Asset Inventory and further PAPS will be identified through the public disclosure of the RAP and engagement activities as presented in the **SEP**.

²² These percentages have been calculated through the PAPS identified in the sample of respondents to the household survey as the number of affected households identified in the 2020 Update Asset Inventory is higher than this sample. The percentages of the community's population affected by the Project will likely differ from the figures presented.

Communities	Population (2018)	Population (2019)	Total PAPs Identified in Household Survey ²¹	Households not Entering Household Data	% of Community Pop. Affected by the Project ²²
Karaağaç	2,812	3,331	70	2	2%
Bahşayış	387	387	59	3	15%
Nakkaş	858	845	10	0	1%
Ferhatpaşa	24,183	25,096	142	18	<1%
İzzettin	1,025	1,087	84	5	8%
Kaleiçi	7,814	7,780	29	0	<1%
Gökçeali	1,878	1,858	193	7	10%
İncegiz	825	832	104	8	13%
Kabakça	1,724	1,666	186	19	11%
Akören	1,301	1,312	153	1	12%
Bekirli	204	197	92	0	47%
Kurfalı	535	485	18	0	4%
Büyüksinekli	405	407	13	0	3%
Küçüksinekli	180	166	10	0	6%
Çayırdere	1,228	1,238	252	10	20%
Gazimustafakemalp aşa	19,356	19,879	5	2	<1%
İstasyon	15,590	16,903	22	0	<1%
Empty			2	0	n/a
Total		266,201	1,895	92	1%

Source: TCDD Transport and Household Survey, 2020

- 4.5.3. As shown in **Table 4-4** above, the population of the majority of communities in close proximity to the Project have increased by at least 1% between 2018 and 2019. However, the population of Bahşayış has not changed, and some communities have experienced a reduction in their population, such as Yeşilbayır, Kaleiçi, Kurfalı, Nakkaş, Gökçeali, Bekirli, Kabakça and Şamlar.
- 4.5.4. The percentage of each settlement affected by the Project varies (using the confirmed 1,895 affected population in the household survey). The most significantly affected rural communities as identified by the household survey, with regard to percentage of population affected (defined as number of PAPs divided by population in 2019), are Bekirli (47%), Yeşilbayır (31%) and Çayırdere

(20%). In terms of total people affected (all lands, structures etc.), the following communities will be most significantly affected:

- 1 **Çayırdere with 252 PAPs affected out of a total population of 1,238** – A large rural area with the primary source of income being waged income for PAPs working for companies in Çerkezköy, in addition to, forestry (charcoal production), agricultural crops (grains and sunflowers) and animal husbandry (milk production).
- 2 **Gökçeali with 193 PAPs affected out of a total population of 1,858** – Gökçeali is the community crossed by a tunnel, with the primary source of income being from agriculture and animal husbandry.
- 3 **Kabakça with 186 PAPs affected out of a total population 1,666** – The primary source of income in Kabakça is waged income, primarily from work in factories around Çatalca and Çerkezköy, with agriculture and animal husbandry remaining within the main income types. The community has the right to firewood procurement.
- 4 **Yeşilbayır with 185 PAPS affected out of a total population of 606** – Yeşilbayır is a rural community with its main sources of income in agricultural and animal husbandry.
- 5 **Akören with 153 PAPs affected out of a total population of 1,312** – The primary source of income for this community of Gacals and Pomaks is from agriculture and animal husbandry. The community has the right to firewood procurement.

- 4.5.5. The 2020 asset inventory update also identified the above communities as being most significantly affected in terms of number of households, in addition to, Altınşehir, Firüzköy, Kaleiçi and Bekirli. However, the land parcels associated with the community of Altınşehir will not be expropriated by the Project but will be subject to permanent easement as the tunnel will be routed beneath these land parcels. Given the lack of physical displacement required, the effect of the Project on the community of Altınşehir is anticipated to be minimised.
- 4.5.6. Focused stakeholder engagement and consultation activities will be undertaken in these specific communities identified as most significantly affected as described in the **SEP**.
- 4.5.7. In general, households in these communities have emigrated (although not to a significant extent) to regional centres (such as Istanbul, Çatalca and Silivri) or nearby organised industrial zones (OIZs) in search of better job opportunities. Households that have immigrated into the affected communities recently were primarily due to new housing and villas being built, as well as some individuals retiring and individuals temporarily relocating to these communities during the COVID-19 pandemic.
- 4.5.8. The Mukhtar Survey showed that population size increased in 12 out of the 22 communities they represent, typically during the summer periods, primarily due to tourism. This increase is most substantial in Çayırdere and İzzettin, where approximately 300 households and 150 households respectively, are reported to visit during the summer months compared to the winter. The Project will improve connection from Istanbul to Çerkezköy which will allow easier access to communities in the surrounding region. This may benefit the local tourism industry.
- 4.5.9. A small number of people arrive in İnceğiz (5) and Buyuksinekli (10) for temporary/seasonal agricultural work. These individuals rent accommodation in the communities to easily access their places of work. A focus group was organised and undertaken during the summer of 2020 with seasonal workers visiting these areas at the time. It was discovered that no seasonally visiting workers would be affected by the Project, as the accommodation provided at the farms they work on will not be impacted by the Project.

GENDER, ETHNICITY AND MARITAL STATUS

- 4.5.10. All of the PAPs stated their nationality as Turkish, with 52% male and 48% female. Of the survey respondents who stated they were the head of the household, 27% were female (female-headed households). Of the surveys completing marital status, 58% of the heads of household were married and 36% were single (the rest identified as either divorced, engaged or widowed). The remaining 6% preferred not to respond. 8 communities in the more rural, mountainous areas of Çatalca and Silivri were found to have ageing populations (in terms of the % of residents who were 65 or over), compared to the Turkish national average (8.7%²³). Refer to Section 4.14 for further details.

FORMAL/INFORMAL TENANTS OF RESIDENTIAL HOUSING

- 4.5.11. The household survey data indicated that only 37 of the 819 identified households affected by the Project, were paying rent to live in their current housing (either formally or informally). The majority paid between 200 and 1,000 Turkish Lira (TL) per month. However, 450 survey respondents did not answer this question.

LENGTH OF TIME HOUSEHOLDS RESIDING IN PROJECT AREA

- 4.5.12. The affected households were asked how long the household had been residing in the area as part of the 2020 Household Survey. Survey responses showed the distribution presented in **Figure 4-29**.

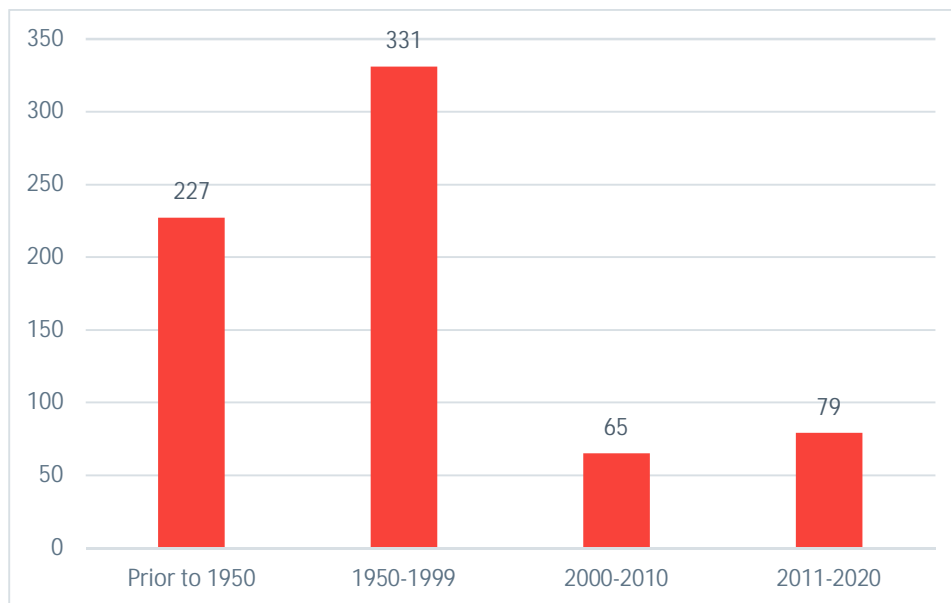


Figure 4-29 – How Long has the Household been Residing in this Area

- 4.5.13. **Figure 4-29** shows that approximately 11% of affected households (79) answering this survey question have been residing in their respective communities over the last 10 years. Approximately

²³ <https://data.worldbank.org/indicator/SP.POP.65UP.TO.ZS?locations=TR>

88% of affected households have lived in their communities for over 10 years, with 79% residing in their communities for over 20 years and 32% for over 20 years. The longer a person lives in a community the more settled they become. Households that live in a community for over 10 years will have developed strong ties to the local community and are likely to need more help with the upheaval caused by relocation.

EDUCATION

- 4.5.14. **Figure 4-30** below shows the highest formal level of education attained for PAPs from the household survey comprising Primary education (44%), followed by High School education (29%) and Tertiary education (22%).

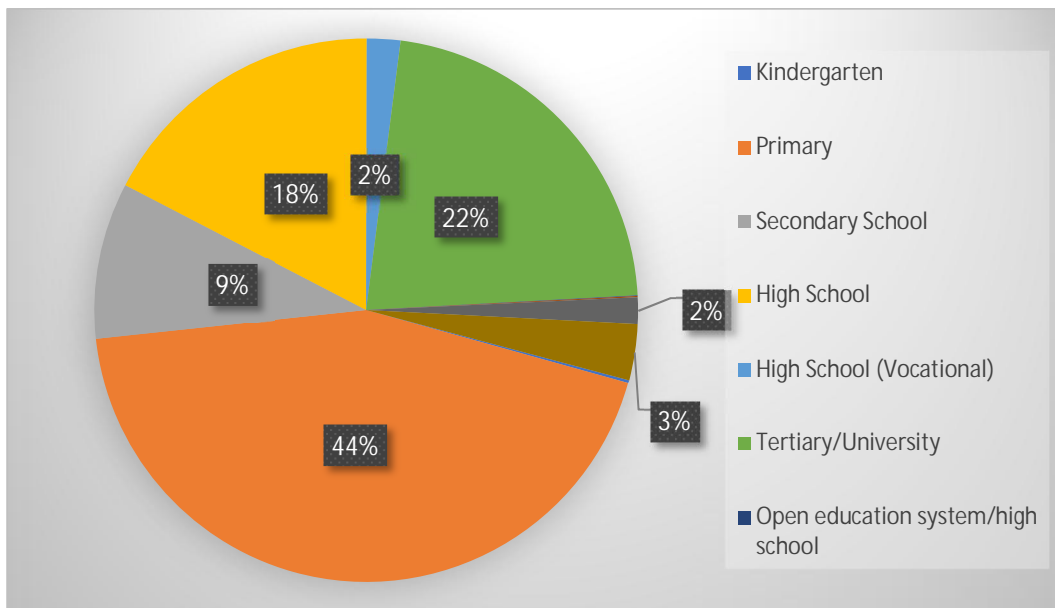


Figure 4-30 – Highest Formal Education Level Attained

- 4.5.15. According to the 2020 Household Survey, 17% of PAPs still attend school. 90% of adult PAPs are literate, which is a slightly lower literacy rate than the country's adult literacy rate of 96%²⁴. Those who are illiterate are considered a vulnerable group and will be provided support as part of the RAP implementation, if required.

²⁴ Available here: <https://datatopics.worldbank.org/education/country/turkey>

4.6 LAND USE

4.6.1. The asset inventory update established that, of the land parcels that will be expropriated for the Project:

- Approximately 66% of land parcels are used directly for agriculture (65% are used for crop growing and 1% are used for pasture);
- Approximately 20% of land parcels are for public use;
- Approximately 5% of land parcels are used for forestry;
- Approximately 5% of land parcels are used for industrial / manufacturing purposes;
- Approximately 2% of land parcels are used for single housing; and
- Approximately 2% are used by TCDD.

4.6.2. A full breakdown of the use of land parcels being used by the affected population are presented in **Table 4-5** below.

Table 4-5 – Land Use of Affected Land Parcels

Land Use	Number of Land Parcels	Total Area of Affected Land Parcels ²⁵ (m ²)	Permanent Easement	Number of Land Parcels currently used by PAPs	Land Acquisition/ Expropriation Area (m ²) of Land Parcels currently used by PAPs
Crop Growing	812	4,347,770	0	0	0
Pasture	14	117,526	0	1	14,600
Forestry	55	1,673,201	0	10	125,081
Single Housing	32	94,730	0	0	0
Industrial / Manufacturing	60	185,637	16,954	0	0
TCDD	30	363,332	0	0	0
Other Public	251	486,659	0	29	76,600
Total	1,254	7,268,855	16,954	40	216,281

Source: Asset Inventory Update, 2020.

²⁵ Total area of affected land parcels including land parcel areas not within the expropriation corridor.

4.7 EMPLOYMENT AND INCOME

- 4.7.1. The greatest source of income/employment for PAPs identified in the household survey, was pension income, with 26% of the PAPs stating it as their greatest source of income. This partly reflects the ageing population characteristics of the more rural affected communities as described in Section 4.14 on the elderly.
- 4.7.2. 454 of the 1,895 identified PAPs (25%) are actively working in a paid profession. The following primary sources of income were reported for these 454 PAPs who are in a paid profession:
- Employed (Private) – 41%
 - Self-employed (Craftsman, Merchant, etc.) – 20%
 - Employed (Public) – 16%
 - Farmer (Arable) – 7%
 - Farmer (Pastoral) – 4%
 - Daily/Seasonal Worker (Construction, Agriculture etc.) – 2%
- 4.7.3. It should be noted that 10% of those actively working in a paid profession provided a response of “Don’t Know / Prefer not to say” in the 2020 Household Survey when asked about their primary source of income.
- 4.7.4. Whilst much of the land to be acquired by the Project is currently used for agricultural purposes and animal husbandry (as shown in **Table 4-5** above), only 11% of those 492 PAPs actively working (or seeking work) are engaged in agriculture as their primary source of income, as shown in **Figure 4-31** below (33 PAPs described themselves as arable farmers and 19 PAPs described themselves as pastoral farmers).

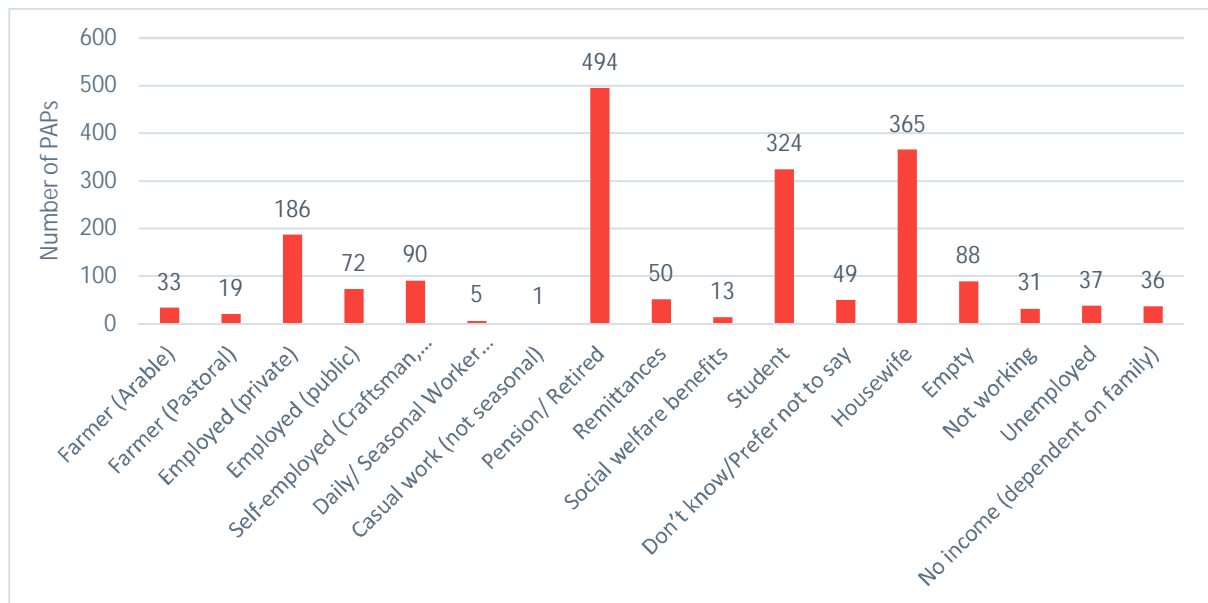


Figure 4-31 – PAPs Primary Source of Income / Employment

4.7.5. Within 6 of the 25 communities, there are specific sites/companies that employ a substantial percentage of local residents. These are as follows:

- **Deliklikaya:** Hadımköy Deliklikaya Organized Industrial Zone;
- **Ömerli:** Hadımköy Deliklikaya Organized Industrial Zone;
- **Bahşayış:** İstanbul Hezarfen Airfield;
- **Ferhatpaşa:** Çatalca Organized Industrial Site; and
- **İstasyon:** Industrial areas in Çerkezköy.

4.7.6. Due to tunnelling and the site locations, these large employment areas will not be affected by the Project in terms of physical or economic displacement.

4.7.7. **Figure 4-32** shows the percentage of monthly income generated from the 1,895 PAP's primary occupation. This graph illustrates that PAPs predominately fall into two categories: 1) 654 PAPs where most of their income (90-100%) is generated from one primary source of employment (35% of PAPs); or 2) 998 PAPs where their primary source of income is not sufficient to cover 25% of their monthly income (i.e. falling within the 0-25% range (53% of PAPs)), suggesting that these PAPs rely on multiple sources of income for their livelihood.

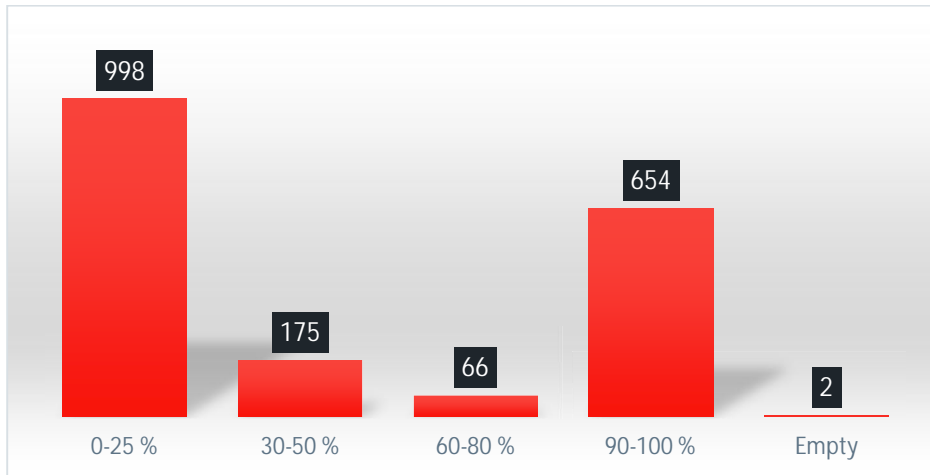


Figure 4-32 - Percentage of Monthly Income from the Primary Occupation

4.7.8. When asked about other income sources, 660 PAPs provided responses to the question in the 2020 Household Survey, whilst responses in this survey questionnaire for 1,233 PAPs were left empty²⁶. Of these 660 PAPs, 201 stated that no secondary income was generated and 149 considered their secondary income/employment as being a housewife, receiving remittances, receiving a pension or

²⁶ These answers are likely to have been left empty as no secondary income was being gathered, likely demonstrating a more significant reliance on one source of income. Some informal secondary incomes may also have been left out by the survey respondents due to a general misunderstanding of the questions, or a reluctance to provide household details to the surveyors, however this is thought to be a smaller proportion.

being a student. Of the remaining PAPs that are actively generating a secondary income, the following key secondary income sources were identified:

- Farming activities – 27%; and
- Rental Income – 18%.

- 4.7.9. 42% of the 660 PAPs responded as “Don’t Know / Prefer not to say”.
- 4.7.10. Even though remittances were not seen as of critical importance in the household income of PAPs, many of the communities along the Project alignment are receiving remittances.
- 4.7.11. Overall, the 2020 Household Survey found that 15% of the PAPs had had their income affected by the COVID-19 pandemic. The primary reason given as to how the pandemic affected their income was that respondents could not physically go to work during this period (and therefore could not work to generate a household income).
- 4.7.12. 2% of (36) PAPs were identified as being previously either temporarily (14) or permanently (22) employed, but currently out of work. 63 respondents stated that someone in their household is actively seeking employment or other forms of livelihood (9% of households), whilst 24 respondents (3.4% of households) stated that someone in their household was registered with the National Employment Agency.
- 4.7.13. When asked which income category their household falls under, 55% of survey respondents stated middle income, whilst 43% stated low income and 2% stated high income. Most of the Mukhtars stated that their communities fall within the middle-income category. The asset inventory update identified 363 affected households (11%) officially categorised as poor, defined as those receiving less than a 1/3 of the minimum wage (minimum wage in Turkey is 2,825.90 TL net per month as of 2021) in Section 4.16 and as shown in **Table 4-10**.
- 4.7.14. As part of the 2020 Household Survey, households were asked whether they think that the economy in their community has improved or deteriorated in the past 5 years. The household’s response to this question is shown in **Figure 4-33** below.

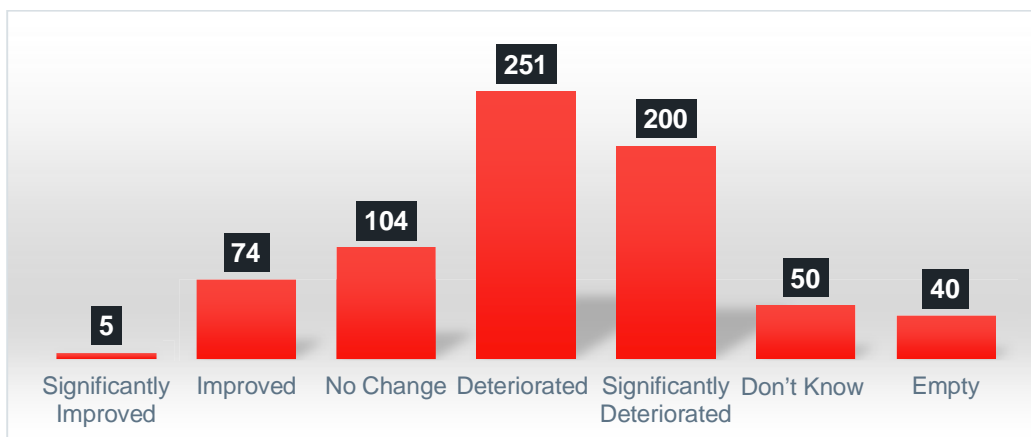


Figure 4-33 – Overall, Do you think that the Economy in your Community has Improved or Deteriorated in the Past Five Years

- 4.7.15. Approximately 69% of respondents to the household survey think that the economy in their community has deteriorated (251) or significantly deteriorated (200). This is due to the weakening livestock and agricultural markets and this was confirmed to be the case during the Mukhtar surveys.
- 4.7.16. This overall split in opinion was also reflected in the Mukhtar Survey, where 4 of the 22 surveyed Mukhtars stated that it had improved, 8 Mukhtars had experienced no change and 10 Mukhtars had seen a deterioration. Mukhtars stated that improvements, where this was the case, were due to urbanisation in Bahçeşehir 2. Kısım and new mass housing having been developed in Deliklikaya. Most of the economic deterioration was also attributed to weakening livestock and agricultural markets, in addition to, the subsequent growth in unemployment.

4.8 COMMUNITY REPRESENTATION

- 4.8.1. Each community elects a Mukhtar to represent their views to higher levels of government and organise village meetings. WSP carried out a survey with Mukhtars from 22 out of the total 25 communities affected by the Project²⁷. The Mukhtar Survey provided the survey team with an overview of the socio-economic characteristics of each affected community, providing more detailed socio-economic baseline data than secondary census data sources. The Mukhtar-specific questionnaire is provided in **Appendix D**.
- 4.8.2. Overall, most of the Mukhtars have resided in their districts since they were born, with their families tracing their ancestry back in these areas to the Ottoman Empire. All Mukhtars interviewed were elected in March 2019 for a period of 5 years, with 7 being in position since 2014, 3 since 2009, and 1 since 2004 (in İzzettin).
- 4.8.3. 12 out of the 22 Mukhtars are employed in another occupation, including as farmers, tradesmen, real estate agents and retirees. Information is shared by the Mukhtars to the individuals residing in their community through community meetings, word of mouth, gazette, the internet, phone calls, WhatsApp and notices attached to public buildings.

Mukhtar's views on community issues are shown in **Figure 4-34** below, which demonstrates that the overriding problem in most communities is unemployment, with 91% of Mukhtars citing this as the most important issue for their community.

²⁷ This survey was carried out prior to the household surveys, allowing the Mukhtars the opportunity to comment on the household survey questionnaire, providing assurance that no unnecessary questions will be asked. It also demonstrated to the Mukhtars how informal settlements and workers will be included in the survey.

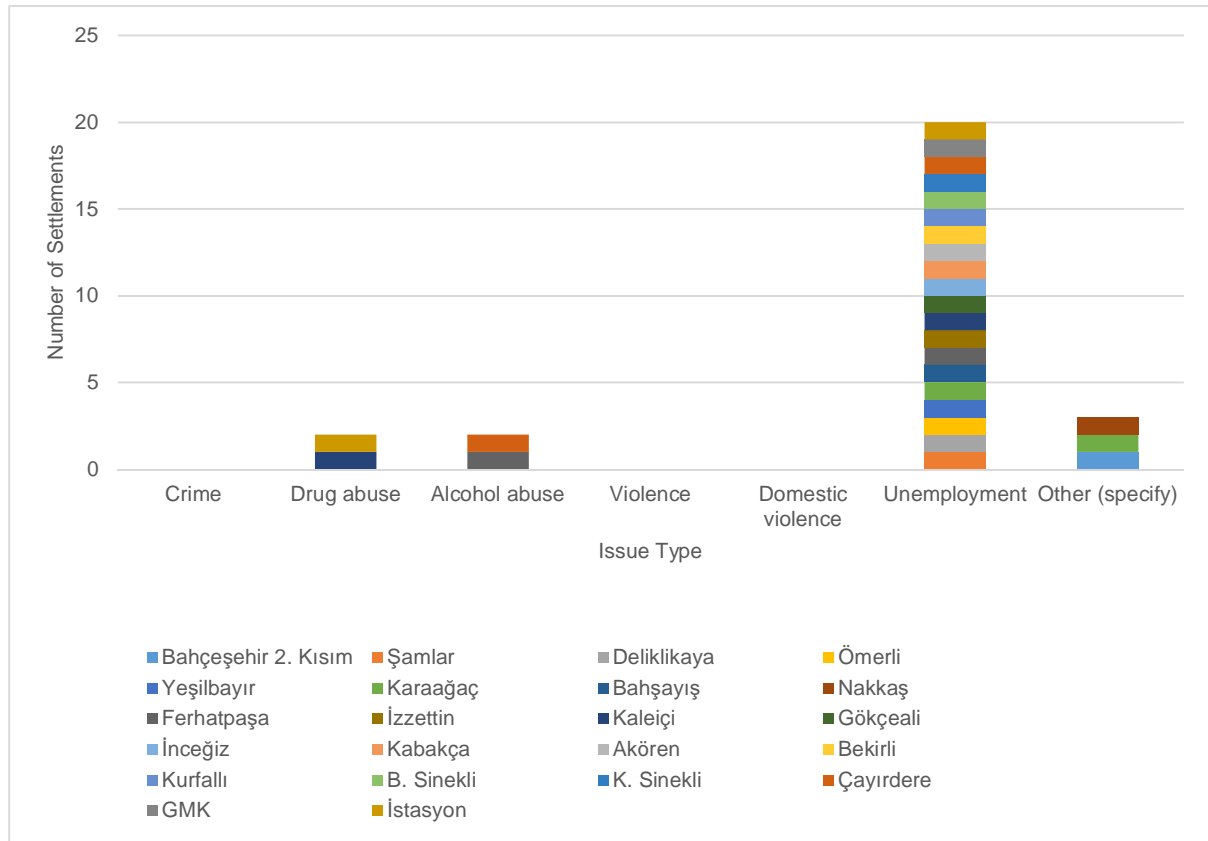


Figure 4-34 – Mukhtar Views on the Most Prevalent Problems in the Community per Community

- 4.8.4. The household survey respondents largely indicated that there were no significant problems in their local communities, although this view is subjective as what constitutes a significant problem may not be the same for everyone. The most prevalent community problems were reported to be drug abuse (11%), crime (10%), unemployment (9%) and alcohol abuse (9%). These predominantly align with the views of the Mukhtars, with the exception of unemployment. The household survey identified that 37 of the 1,895 identified PAPs (2%) are unemployed but seeking work. This represents a very low proportion of unemployment in PAPs along the Project alignment. It is likely that Mukhtars emphasised unemployment with the goal of increasing job opportunities in the communities they represent.
- 4.8.5. Gender-based Violence and Harassment (GBVH) was not identified as being a current major issue in the areas affected by the Project. However, concern was raised in the women-only focus groups in relation to the potential verbal harassment that could be caused by an influx of international workers to local women. Refer to paragraph 4.13.1 below.

4.9 HOUSEHOLD FACILITIES AND EXPENDITURES

- 4.9.1. **Table 4-6** identifies the most common items in PAP households, according to the 2020 Household Survey.

Table 4-6 – Most Common Items in PAP Households

Household Item	Unit	No. of Households with Item	Percentage of Households with Item ²⁸
Landline Telephone	937	471	65%
Television	636	600	83%
Refrigerator	608	601	83%
Washing machine	606	603	83%
Stove	600	594	82%
Iron	543	537	74%
Car/Truck	450	447	62%
Satellite Dish	443	440	61%
Internet connection	281	281	39%
Computer	212	200	28%
Sewing Machine	205	197	27%
Radio	180	176	24%
Dishwasher	110	110	15%

- 4.9.2. As show in **Table 4-6** above, 39% of households were found to have internet connection. According to TurkStat data (2019), the internet usage rate for individuals within the 16-74 age group in Turkey in 2020 was 79%, and the rate of households having access to the internet from home was 90.7% (increased from 88.3%).
- 4.9.3. A total of 24.2 million households and 3,228,421 active businesses were recorded in Turkey (TurkStat 2019). The total number of fixed/stable subscribers in the first quarter of 2020 is 14.3 million in Turkey²⁹. If approximately 3 million of these fixed/stable subscribers are businesses, the remaining 11.3 million subscribers are households, which equates to 47% of the total households in Turkey. Given that the Project affected area is predominantly rural, 39% households with an internet connection from the household survey is not unexpected.
- 4.9.4. During the 2020 Household Survey, the PAPs were also asked to rank five items on which they spend most of their income. The three most expensive outgoing expenditures were rent/mortgage

²⁸ Percentage based on 724 completed surveys.

²⁹ 2020 first quarter, Information and Communication Technologies Authority, "Turkey Electronic Communications Sector" p. 51, "Table 3-1: Total Number of Internet Subscribers". Source: <https://www.btk.gov.tr/uploads/pages/pazar-verileri/2020-1-16-07-20-kurum-disi.pdf>

payments, agricultural production inputs and loan payments. After this, the most expensive items were drinking, smoking and education costs³⁰.

4.9.5. In relation to utility bills, 76% of PAPs answering this question during the 2020 Household Survey stated that they spent less than 1,000TL per month or 12,000TL per year on utility bills. This equates to a maximum of approximately 9% of the average annual household net adjusted disposable income of 18,302 USD or 137,160TL³¹. 88% of PAPs use natural gas as the main source of energy for cooking and 87% use natural gas as the main source of heating. Lighting is primarily powered by mains electricity from the grid (99%).

4.9.6. Household sources of water supply were more varied.

4.9.7. **Figure 4-35** demonstrates the main source of drinking water for PAP households, according to the 2020 Household Survey.

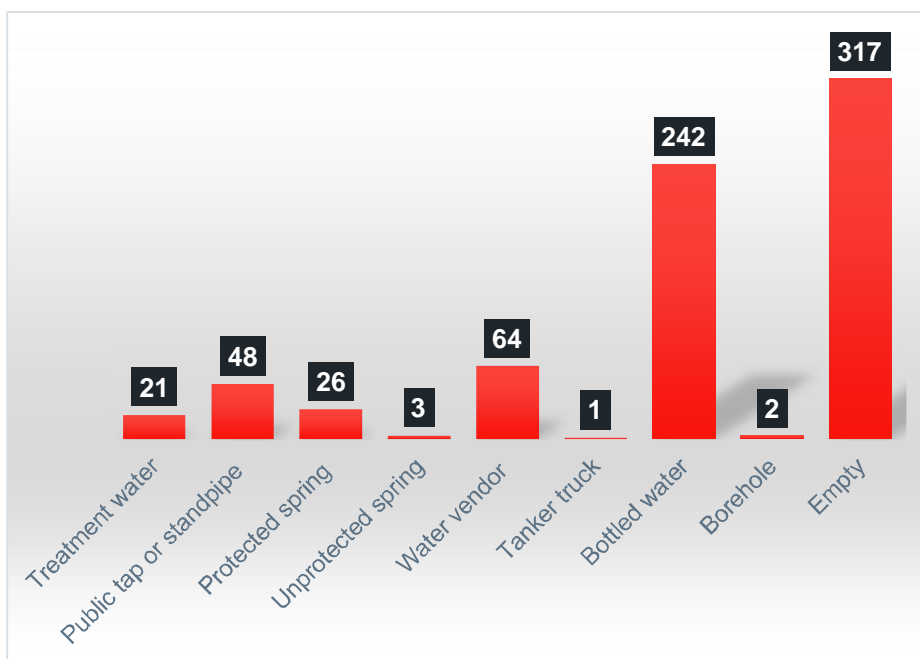


Figure 4-35 - What is the Household's Main Source of Drinking Water³²

³⁰ It was unexpected that "food" was not listed as a major aspect of income spending. This may be due to: reliance on self-sustaining vegetable gardens at home, leading to decreased expenditure; households of extended families/communities cooking/eating together, leading to overall decreased expenditure; and households not categorising "food" as an expenditure.

³¹ The average annual household net adjusted disposable income is the [average](http://www.oecdbetterlifeindex.org/topics/income/) amount of money that a household earns per year after taxes. (source: <http://www.oecdbetterlifeindex.org/topics/income/>)

³² These answers are likely to have been left empty due to a general misunderstanding of the questions, or a reluctance to provide details to the surveyors. After discussion with the survey team, it does not appear that these empty answers correspond to the lack of water supply.

- 4.9.8. Whilst the Mukhtar's reported that both electricity and water supply are reliable across all communities, the 2020 Household Survey respondents stated that water supply is an issue in these communities. After the communities were transformed into neighbourhoods (by removing the village status), the task of water supply was transferred from the General Directorate of State Hydraulic Works (DSI) to Istanbul Water and Sewerage Administration (ISKI). As part of this process, the wells that provided water to these neighbourhoods were closed by ISKI resulting in water supply becoming an issue to the neighbourhoods. Currently, there are problems in providing safe drinking water in neighbourhoods, with supply being intermittent, and as such the use of bottled water is high.

4.10 HEALTH CENTRES AND SCHOOLS

- 4.10.1. There are health centres (mobile or permanent) in most of the communities along the route of the Project, but not in the villages of Şamlar, Yeşilbayır, Bahşayış, Gökçeali, Bekirli, Kurfalı or Büyüksinekli. According to the Mukhtar Survey, 36 schools are present in the affected communities of Bahçeşehir 2. Kısım (7), Şamlar (2), Deliklikaya (4), Ömerli (1), Karaağaç (2), Ferhatpaşa (3), Kaleiçi (6), Kabakça (1), Akören (1), Çayırdere (1), GMK (1) and İstasyon (7).
- 4.10.2. None of these schools or health centres are affected by the Project. None of the households surveyed in 2020 stated that the Project would affect their access to these locations, as the proposed underpasses, overpasses and bridges will be constructed as part of the Project.

4.11 PLACES OF WORSHIP AND CULTURAL SIGNIFICANCE

- 4.11.1. All of the communities affected by the Project contain mosques, with two communities containing djemevi (cemevi)³³. None of these places of cultural significance (including other cemeteries and historical mosques) are located close to (or along) the Project alignment.
- 4.11.2. One tomb (Ömer Dede Türbesi) was discovered in Ömerli, close to the entrance of the proposed cut and cover tunnel at chainage 16+765. This tomb was said to be visited by residents of the neighbourhood up to 40 years ago. However, there is no current community knowledge of individuals continuing to visit this tomb.
- 4.11.3. No existing traditional knowledge, customs, institutions or practices in the community will be affected by the Project.

4.12 OVERALL INFRASTRUCTURE PROBLEMS

- 4.12.1. The Mukhtars reported the following primary infrastructure problems are experienced by the communities they represent.

³³ A djemevi or cemevi literally means "a house of gathering".

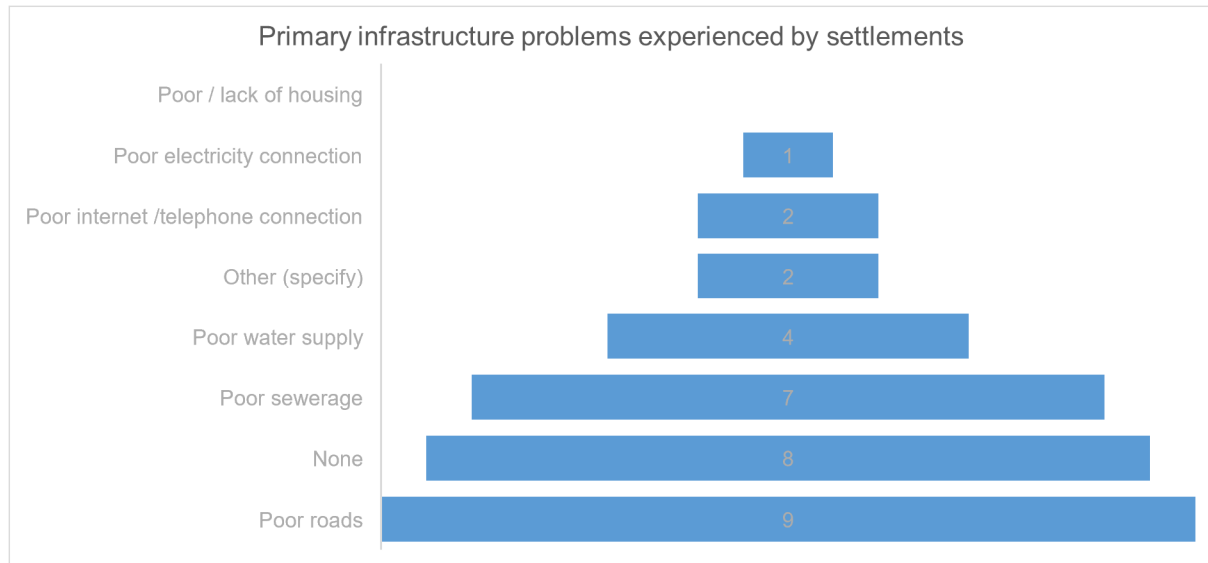


Figure 4-36 - Primary Infrastructure Problems Experienced by Communities

- 4.12.2. 9 of the 22 communities listed more than one issue, with the most common complaints relating to poor road conditions (which could be exacerbated by construction traffic movement if not mitigated) and poor sewerage provision in their community. Mukhtars in 8 communities advised that they do not experience infrastructure issues. In response to the Mukhtar Survey, Bahçeşehir 2. Kısım community selected "other" citing traffic density as an issue in the communities. It should be noted that this community is the closest to Istanbul along the route of the Project. Deliklikaya communities, the third closest communities to Istanbul along the route of the Project, also selected "other" suggesting a "construction/zoning plan should be made ... solving transportation problems".
- 4.12.3. In general, water supply and sewerage issues were found in some rural communities, whilst poor road conditions were identified across a number of different communities.

4.13 GENDER ISSUES

- 4.13.1. 24 respondents of the 2020 Household Survey stated they had concerns about the impact of the Project on women. The primary reason for this concern was due to the potential influx of workers in the area, leading to women and children feeling uncomfortable to leave their homes alone. 23 respondents (3% of all respondents) stated that they do not currently feel safe walking around their local area and using public transport. This was primarily due to the presence of international workers on the construction projects of the E80 road (Otoyol 3) which is now complete and the crowded nature of travelling on public transport. No cumulative impacts currently exist for influx of construction workers.
- 4.13.2. Women who were reported to be head of household provided positive feedback on the Project, including the development of job opportunities and its contribution to local employment, improvements in transportation and the development of the regional and national economy. Specific concerns raised by these women are summarised below.

- Loss of agricultural land and therefore negative impact on women and the elderly's livelihoods;

- Women and children who travel alone to the agricultural land may be disturbed by construction activities and the influx of workers;
- If the construction site is close to the communities, women may be adversely affected by noise, dust and vibration; and
- The loss of the rural character of the region.

4.13.3. 9 women-only focus groups were conducted during the summer of 2020 to discuss potential specific effects of the Project on them, and the general quality of life and status of women in the communities. Overall, it was found that women generally remain at home whilst the men of the household go to work (particularly in rural areas). Most participants in the focus groups stated that women are not offered the same job opportunities as men and are expected to remain at home. Remaining at home, many housewives tend to work in the vegetable gardens and orchards attached to their properties.

4.13.4. Across the 9 focus groups, the following issues and recommendations were raised in relation to the Project:

- **Resettlement** – Specific discussions on resettlement related issues during the focus groups identified the need to provide compensation in line with the improvements made to households over the years and livelihood activities connected to the house, e.g. animal rearing and vegetable gardens.
- **International workers** – On previous projects in the communities, international workers were engaged, and they caused some verbal harassment to local women;
- **Construction dust** – Previous highways projects led to construction dust arising in the local area;
- **Construction site security** – Attendees requested that the Project construction sites be secure, suitably gated and fenced to stop children entering;
- **Harassment prevention** – Requested that suitable security and CCTV are introduced at stations and on trains to discourage harassment;
- **Water supply** – Multiple attendees highlighted that they struggle to obtain a water supply for their households from utility authorities and that resettled households should be guaranteed a piped water supply;
- **Seat allocation** – Attendees suggested that the allocation of train seats for pregnant women and elderly people be increased, due to the high elderly population in these communities; and
- **Meetings and complaints** – Many focus group attendees stated that the focus groups had been a good experience and stated that future women-only focus groups would be beneficial and allow them to voice their concerns. They stated that women do not receive much information about construction projects, receiving anecdotal information from men attending village meetings. They also do not know where and with whom to raise complaints. Some attendees stated that their representative Mukhtar was irrelevant and did not give them any relevant information or communicate/escalate their grievances.
- The 2020 Household Survey identified the key suggestions of those being expropriated by the Project. It was found that the PAPs mostly desired the assurance that they would not be resettled again after the Project. After this, respondents most frequently requested to be provided with a house through the resettlement process, and for their Title Deed information to be updated.

4.14 ELDERLY

- 4.14.1. **Table 4-1** describes the characteristics of the communities along the route of the Project and presents the percentage of the population for 22 of the 25 communities along the route of the Project for the age group 65+, as illustrated in **Figure 4-37** below.
- 4.14.2. 8 communities in the more rural, mountainous areas of Çatalca and Silivri had ageing populations (% of 65+ residents), compared to the Turkish average (8.7%)³⁴. The percentage of residents who are 65 or over in each community with an ageing population are as follows: İncegiz (30%), Kabakça (30%), Akören (30%), Bekirli (40%), Kurfalı (35%), Büyüksinekli (40%), Küçüksinekli (55%) and Çayırdere:

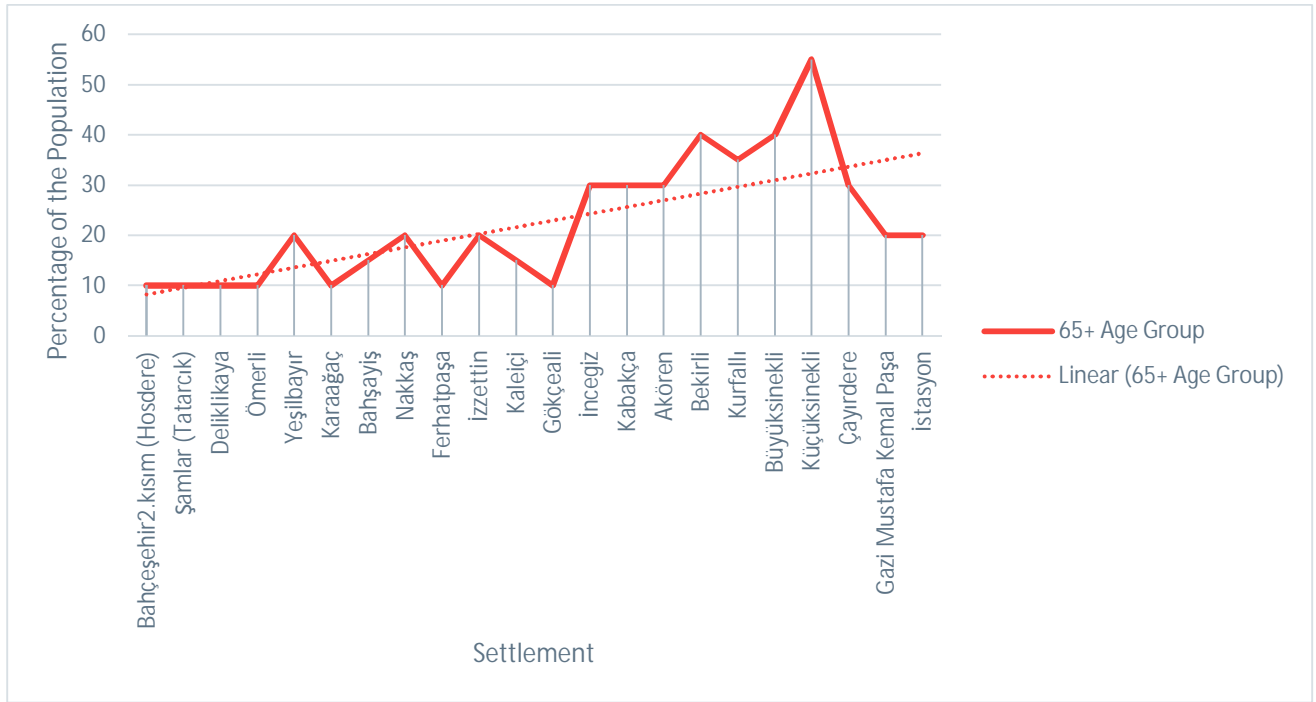


Figure 4-37 - Percentage of Population in 65+ age group for Communes along the route of the Project

- 4.14.3. **Figure 4-37** shows that as the route of the Project extends west from the urban communities of Istanbul to the more rural communities towards Çerkezköy, there is a general upward trend in the percentage population in the 65+ age group (pensionable age). This indicates that the communities have a more notable ageing population as the route of the Project extends west into the more rural areas. The communities with the highest percentage of the population in the 65+ age group is Küçüksinekli, Büyüksinekli and Bekirli.

³⁴ World Bank Group (2019). United Nations Population Division's World Population Prospects: 2019 Revision. Source: <https://data.worldbank.org/indicator/SP.POP.65UP.TO.ZS?locations=TR>.

4.15 DISABILITY AND CHRONIC ILLNESS

- 4.15.1. 334 (18%) of PAPs identified in the 2020 Household Survey had a disability or suffer from chronic illness (or have done within the past 5 years). **Table 4-7** summarises the types of disabilities identified.

Table 4-7 – Disability Types Identified

Disability	Unit
Physical Disability	82
Mental Disability	5
Chronic Illness	240

Source: Household Survey 2020.

- 4.15.2. 13 PAPs also stated that they receive social or other state welfare benefits, the purpose of which was not disclosed during the household survey.

4.16 ECONOMIC POVERTY

- 4.16.1. The term "poor" does not have an official definition in Turkey. Although defining poverty and determining its boundaries is quite difficult. Poverty, in general, is defined as the absolute or relative social welfare level or the status of a person below the minimum standard of living of the society. The World Bank monitors poverty in Turkey and globally using international poverty lines. In the case of Turkey and upper-middle-income countries, the poverty line is defined as less than a 1/3 of the minimum wage (minimum wage in Turkey is 2,825.90 TL net per month as of 2021).
- 4.16.2. The asset inventory update identified 363 affected households (11%) self-identifying as poor, however the above economic poverty definition will be used to define poor households entitled to additional compensation.
- 4.16.3. The percentage of the population in need of state aid living along the Project alignment is 1-2%. Despite the increasing problem of unemployment, all households are self-sustaining, whether through current streams of income and/or state aid. The existence of the social networks provided in their communities prevents the impoverishment of lower income households. The social security system that was introduced in the 1960s (as well as new instruments such as the 65+ pension scheme³⁵ which emerged in the 2000s) further prevents impoverishment in the Project area. Access to the social security system is not automatic upon reaching 65 years old, but assistance can be provided through the Project as part of the livelihood restoration programme.

³⁵ This is available to those over the age of 65 who are not claiming other social security payments/benefits.

4.17 CHARCOAL AND FORESTRY

- 4.17.1. Potential formal and informal land users were discussed with each of the Mukhtars surveyed. These discussions identified charcoal makers that were active in the communities of Büyüksinekli and Çayırdere in the Silivri District. Wood charcoal production in Turkey is regulated with the notification of permission for the people who want to benefit from forest products. Individuals who want to produce charcoal using state-owned forests are permitted to make charcoal from these forests according to the Forest Law. Wood charcoal producers must report the source of wood, scaled plan and duration of wood charcoal production to the district office of the Ministry of Agriculture and Forestry.
- 4.17.2. Silivri Forest Management Directorate allocates a certain area of the forest to each registered charcoal maker on an annual basis. The charcoal makers paid on average 1,000 TL in 2020 to the forest management directorate for an approximate 300 m² charcoal making area. This designated land area is used by the charcoal makers as a designated charcoal preparation in a treeless area of the forest. The wood sourced to make the charcoal is collected from other parts of the forest that are also designated by the Silivri Forest Management Directorate.
- 4.17.3. A focus group meeting for charcoal producers was held in Büyüksinekli, within the Silivri District. There are approximately 60 charcoal makers operational in the land areas affected by the Project, although only 2 charcoal makers attended as the other charcoal makers were concerned about meeting in groups due to the COVID-19 pandemic. Both attendees were male and between 30 and 44 years of age. One attendee advised that he made his living through using forest resources to make their own charcoal and is also an electrical technician working on wind turbines in the region. He is also a member of the village administration. The second attendee runs the village's coffee shop and makes charcoal from the forest resources.
- 4.17.4. They stated that at least 10 households rely to a certain extent on charcoal production in Büyüksinekli, and at least 25 households use forested areas for livelihood income. In addition, there are 50 households in Çayırdere who use the forest and produce and sell charcoal, but the Project will not affect their forestry activities.
- 4.17.5. Overall, the primary concerns of the charcoal makers in Büyüksinekli were related to crossing the Project alignment. Whilst the Project will not affect the supply of charcoal in this (or any other affected) community, the charcoal producers will require passage across the Project. A level crossing was initially provided at the north of the village providing access to the forest (colloquially called "Cattle-Diry Road") when the existing railway was first built. This crossing was used by those engaged in animal husbandry and traditional charcoal manufacturing. The crossing subsequently became rundown due to neglect, with agricultural equipment and tractors no longer being able to use it.
- 4.17.6. The two focus group attendees stated that the crossing should still be accessible during the construction activities. They also stated that when the Project is built, it would be very useful for a crossing to be built that is large enough to accommodate the passage of agricultural equipment and tractors. They currently use the level crossing in Küçüksinekli to get agricultural equipment across the existing railway. If the Project does not include a crossing into the forest to allow the continued use of the forest's resources, including charcoal making, this activity will be terminated. Underpasses and overpasses are included as part of the Project design, with 3 underpasses in Büyüksinekli (at chainages 56+226, 56+495 and 59+845) and 7 underpasses (at chainages

62+008,64+410, 64+935, 66+450, 67+065, 67+535, 68+170, 68+230, 69+012, 70+650 and 71+340) and 2 overpasses (at chainages 63+221, 63+830) in Çayırdere.

4.18 INFORMAL USERS – SEASONAL AGRICULTURAL WORKERS

- 4.18.1. 52 respondents stated that informal settlers or seasonal workers may be affected by the Project (such as migrant agricultural workers, fruit pickers, and herders). The 2020 Household Survey team organised a focus group discussion with 4 seasonal agricultural workers in Kabakça who had been renting a house for 3 months near to the Project (but not in a location directly affected by the Project).
- 4.18.2. These seasonal workers pick the produce, which is then loaded by other workers into trucks every evening. From here, they are taken to wholesale markets in İstanbul. The workers stated that farms in these areas mostly produce wheat and sunflower seeds, but smaller farms also grow mint, cress, parsley, basil and sorrel. They stated that they do not come here every year, and as such are transient, working in multiple areas across Turkey.
- 4.18.3. No particular concerns were raised by this group in relation to the Project affecting their livelihoods. None of the land that they currently work on will be affected by the Project and they are able to find work across Turkey. The only major recent impact on their livelihoods had been due to the COVID-19 pandemic, whereby they were not able to work or travel during the lockdown.

4.19 REFUGEES

- 4.19.1. One focus group stated that there used to be some refugees from Afghanistan in their local community. However, it is reported that they later moved to İstanbul and are not aware of any refugees currently living or using the land parcels affected by the Project.

4.20 PREVIOUS EXPROPRIATION

- 4.20.1. 93 out of the 819 households surveyed have been previously affected by expropriation. **Table 4-8** below provides an overview of this previous expropriation.

Table 4-8 - Summary of Previous Household Expropriation in the Wider Affected Communities

Expropriation Project	1960-1970	1970-1980	1980-1990	1990-2000	2000-2010	2010-2015	2015-2020
DSİ (Büyük Çekmece Dam) (Çatalca)		5	12				
Lake Basin Conservation (B. Çekmece Dam) (Çatalca)						41	
Sazlıdere Dam (Arnavutköy)				2			
BOTAŞ (Natural gas pipeline)			6				
TÜPRAŞ (Energy facility)						2	
TOKİ (Mass housing)					11		
School						2	

Expropriation Project	1960-1970	1970-1980	1980-1990	1990-2000	2000-2010	2010-2015	2015-2020
Directorate General of Highways					6		6
Northern Marmara Highway						9	
TCDD	29					1	1

- 4.20.2. Those households that have been previously expropriated should be provided special support with relocation, including improvements in housing and provision of different housing/land options as described by the Entitlements Matrix in **Chapter 8: Eligibility and Entitlements**. This will also include preferential choice of available housing for relocation, ensuring that this Project does not result in compounded resettlement impacts on these vulnerable groups.
- 4.20.3. 102 households also stated that there has been large-scale construction carried out in their communities over the past 5 years. The previous projects are identified in **Figure 4-38** below.

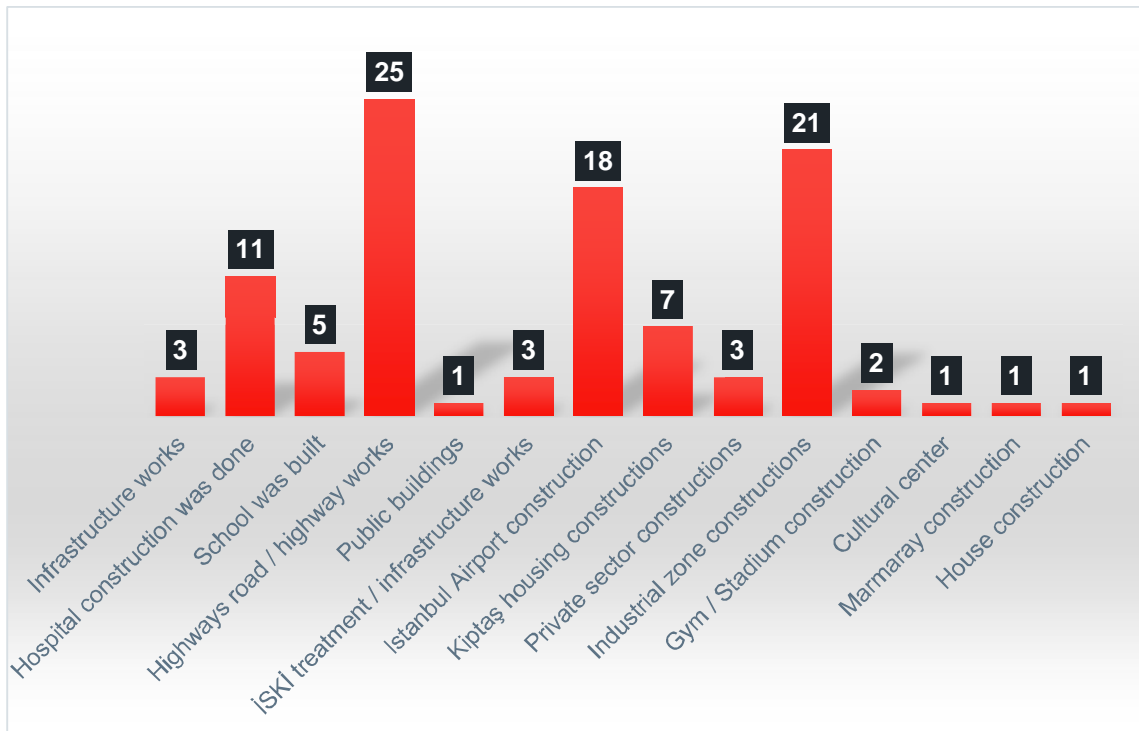


Figure 4-38 – Previous Construction Projects in Impacted Communities (household surveys)

- 4.20.4. In addition, recent development projects are presented in the **Chapter 17: Cumulative Effects of the ESIA**.
- 4.20.5. 50 household survey respondents stated that there were developments being constructed in their communities. **Table 4-9** presents further details on these ongoing developments, and the number of households reporting them.

Table 4-9 – Ongoing Construction Projects within the Wider Affected Communities (Household Surveys)

Developer / Authority	Number of Households
TOKİ	10
TCDD	14
Factory/warehouse	3
Sewage	2
Highways	4
Housing	2
Millet Bahçesi (Nation Garden)	4
District Governorship Building	3
İSKİ	1
Subway	1
Secondary Schools	4

4.20.6. According to the Mukhtar surveys, there have been some minor issues regarding land registry in some of the communities:

- Nakkaş: Problems with the boundaries of public land;
- Kabakça: Conflicts over land borders;
- Kurfalı: A process regarding the sale of treasury lands to individuals is ongoing;
- Küçüksinekli: Claims that some land, registered as treasury land in 1980, should belong to other individuals;
- Çayırdere: Conflicts over land borders; and
- İstasyon: Inheritance issues.

4.20.7. The Entitlement Matrix (**Chapter 8: Eligibility and Entitlements**) will ensure that these outstanding issues are resolved, alongside the expropriation undertaken for this Project.

4.21 VULNERABLE GROUPS

4.21.1. The household survey identified the following vulnerable groups presented in **Table 4-10** below.

Table 4-10 – Number of Vulnerable People Impacted by the Project

Community	Disabled / chronic illness (last five years)	Women headed Household	Poor Household	Elderly (aged 65+)	Receiving State Aid
Halkalı	0	0	2	0	0
Altınşehir	48	23	31	70	139

Community	Disabled / chronic illness (last five years)	Women headed Household	Poor Household	Elderly (aged 65+)	Receiving State Aid
Firuzköy	74	35	48	109	215
Bahçeşehir2.Kısı m	0	0	0	0	0
Şamlar	0	0	0	0	0
Deliklikaya	15	7	10	22	44
Ömerli	30	14	19	44	87
Yeşilbayır	37	18	24	55	109
Karaagaç	12	6	8	18	36
Bahşayış	7	4	5	11	22
Nakkaş	0	0	0	0	0
Ferhatpaşa	33	16	21	48	95
İzzettin	10	5	6	14	28
Kaleiçi	49	23	32	72	142
Gökçeali	43	20	26	63	125
İnceğiz	32	15	21	48	95
Kabakça	27	13	18	40	79
Akören	42	20	28	63	124
Bekirli	43	21	28	61	126
Kurfallı	0	0	0	0	0
Buyuksinekli	0	0	0	0	0
Küçüksinekli	0	0	0	0	0
Çayırdere	49	23	32	73	143
GMK	2	1	1	3	6
Istasyon	5	3	3	8	15
TOTAL	558	267	363	822	1,630

4.21.2. **Table 4-10** provides a general overview of PAPs that are likely to be more vulnerable. Using this background information, a vulnerability analysis has been undertaken to identify more context specific groups of vulnerable people affected by the Project. These specific vulnerable groups are described below.

- **Illiterate PAPs** – The link between illiteracy and social disadvantage and exclusion is well established. Illiterate people may be disadvantaged in their life chances, social and political participation, mental health and personal relationships. Support will be provided to such PAPs, if required, through the RAP.

- **COVID-19** – COVID levels in Turkey at the time of preparing this RAP are Level 4: Very High. The health of PAPs with COVID-19, in particular those with disabilities, chronic illness and the elderly may be increasingly vulnerable due to the impact of the Project.
- **Water Supply Issue** – Multiple focus group attendees highlighted that they struggle to obtain a water supply for their households from utility authorities and felt that resettled households should be provided with piped water supplies.
- **PAPs with disabilities and chronic illness** – PAPs are identified with physical disabilities (82), mental disabilities (5) and chronic illness (240), the nature of which was not disclosed. These PAPs who may need to relocate may find the move difficult or may become increasingly vulnerable to Project impacts in terms of their health due to their sensitive physical and wellbeing status.
- **Location-dependent elderly persons** – A number of households that reside and/or use the land in the expropriation corridor contain elderly persons. The health of some of these elderly persons may be negatively affected by the act of relocation. Further, some use these affected lands for informal livelihood activities (e.g. beekeeping and animal rearing) as they are available and a short walk from their residences.
- **Informal land users, businesses and residents** – whose land use rights are not recognised by national legislation;
- **Households who are significantly affected in terms of income and land take by the Project** – The household survey found 53% of PAPs surveyed are in a situation where their primary source of income is not sufficient to cover 25% of their monthly income, and that PAPs rely on multiple sources of income for their livelihood. In addition, according to the Mukhtars surveys, agricultural income and animal husbandry are very important in these areas. Households who are significantly affected by the Project in terms of their primary income (including those PAPs who have not had regular wage-based income with a job at which they work for more than one year), and/or land take use for agricultural land (including animal husbandry) are considered vulnerable.
- **Prior expropriation** – Households that have been expropriated before under national legislation and have not been compensated to replacement value. Those who are cumulatively impacted by this Project and the under construction Çerkezköy to Kapikule railway.
- **Women headed households** – Widowed women with no provision of social security, or, women headed households if they are categorised as 'Poor'.
- **Poor Households** – PAPs that live below the poverty line defined as less than a 1/3 of the minimum wage (minimum wage in Turkey is 2,825.90 TL net per month as of 2021); and
- **PAPs taking on the role of primary carer for household member** – Households taking care of at least one member that is elderly, sick or disabled.

KANAL ISTANBUL CROSSING

- 4.21.3. The Project needs to cross the alignment of the proposed Kanal Istanbul project, as described in **Chapter 2: Description of the Project** of the **ESIA**, which is due to be constructed. In total, 2

private land parcels will be expropriated by the Kanal Istanbul project where the two projects intersect at this location. The Project will cross the alignment of the proposed Kanal Istanbul project in a tunnel, and no construction activities for the Kanal Istanbul crossing are reported to be located close to the entrance or exit of this tunnel. As a result, the Kanal Istanbul crossing is not anticipated to affect the Project based on its current design.

4.22 SUMMARY

In summary the following key issues have been identified from the socio-economic baseline and will be considered further within this RAP:

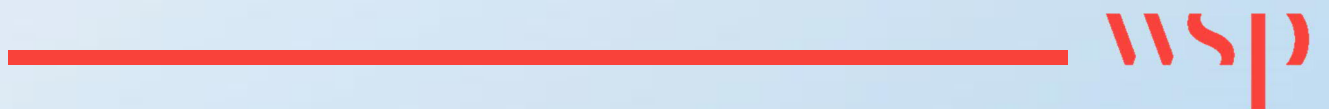
- **Previous expropriation:** 13% of the households surveyed had land that had been subject to expropriation previously.
- **Updating of title deeds:** 32% of surveyed households indicated that the titles on land deeds need to be updated. Support may be required to update these deeds. This also needs to be considered in the context of the inheritance system in Turkey and targeted within the livelihood restoration programme described in **Chapter 9: Livelihood Restoration Plan**.
- **Most significantly Project affected rural communities:** The most significantly Project affected rural communities with regard to percentage of population/households affected are: Firüzköy, Yeşilbayır, Kaleiçi, Gökçeali, Kabakça, Akören, Bekirli and Çayırdere. There will more focused stakeholder engagement and consultation in these particular communities as described in the **SEP**.
- **Construction affecting tourism:** Increased tourism in Çayırdere and İzzettin, where approximately 300 extra households and 150 extra households respectively, are present during the summer compared with the winter months.
- **Formal/informal tenants of residential structures:** 37 of the 819 identified households affected by the Project stated that they were paying rent to live in their current housing (either formally or informally). The majority paid between 200 and 1,000 Turkish Lira (TL) per month.
- **Illiterate PAPs:** Those who are illiterate are considered a vulnerable group and will be provided support as part of the RAP implementation, if required.
- **Elderly population:** The communities with the highest percentage of the 65+ age group are Küçüksinekli, Büyüksinekli and Bekirli, with these and others (İncegiz, Kabakça, Akören, Kurfalı and Çayırdere) above the Turkish average (7.5%).
- **Agricultural and animal husbandry income:** According to the Mukhtars surveys agricultural income and animal husbandry remains of substantial importance. Households who are significantly affected by the Project in terms of their primary income and/or land take use for agricultural land (including animal husbandry) are considered in this RAP.
- **PAPs with multiple sources of income:** 53% of PAPs of PAPs surveyed are in a situation where their primary source of income is not sufficient to cover 25% of their monthly income (i.e. falling within the 0-25% range, suggesting that PAPs rely on multiple sources of income for their livelihood. Key secondary income sources were identified as farming activities and rental income.
- **COVID-19:** The household survey found that 15% of the PAPs had had income affected by the COVID-19 pandemic. The primary reason given as to how the pandemic affected their income

was that respondents could not physically go to work during this period (and therefore could not work to generate a household income). This will be factored into the compensation matrix.

- **Growth in unemployment:** 2% of PAPs were identified as being previously either temporarily or permanently employed, but currently out of work. 9% of survey respondents stated that someone in their household is actively seeking employment or other forms of livelihood, whilst 3.4% of respondents stated that someone in their household was registered with the National Employment Agency. Mukhtars identified unemployment as an overriding issue within their communities.
- **Poor infrastructure:** There are currently problems in providing safe drinking water in some neighbourhoods, with supply being intermittent. This being the case the use of bottled water is high. The most common complaints related to poor road conditions (which could be exacerbated by construction traffic movement if not mitigated) and poor sewerage provision in communities.
- **Tomb ruins:** One tomb (Ömer Dede Türbesi) was discovered in Ömerli, close to the entrance of the proposed cut and cover tunnel at chainage 16+765 but reported not to have been visited for last 40 years.
- **GBVH:** Potential influx of workers in the area, leading to women and children feeling uncomfortable to leave their homes alone. 3% of all women survey respondents stated that they do not currently feel safe walking around their local area and using public transport primarily due to the presence of international workers on the construction projects of the E80 road (Otoyol 3), which is now complete, and the crowded nature of travelling on public transport.
- **Resettlement:** Compensation for relocation in line with the improvements made to households over the years and livelihood activities connected to the house, e.g. animal rearing and vegetable gardens.
- **PAPs with disabilities and chronic illness:** PAPs included those with physical disabilities (82), mental disabilities (5) and chronic illness (240), the nature of which was not disclosed.
- **Economic poverty:** The percentage of the population in need of state aid living along the Project alignment is 1-2%. Despite the increasing problem of unemployment, all households are self-sustaining, whether through current streams of income and/or state aid. Access to the social security system is not automatic upon reaching 65 years old, but assistance can be provided through the Project as part of the livelihood restoration programme.
- **Vegetable gardens:** Household often depend on vegetable gardens; compensation must take into account these requirements.
- **Informal users:** For informal users, the use of land used for pasture and nearby sites for beekeepers is important.
- **Restricted access to land:** Concerns raised by charcoal producers around placement of crossing along the Project alignment to provide access forested areas (colloquially called "Cattle-Diry Road").

5

PROJECT IMPACTS



5 PROJECT IMPACTS

5.1 INTRODUCTION

- 5.1.1. The design philosophy adopted for the Project has been to avoid or, at least, minimise, Project-induced resettlement, where avoidance is not practicable. However, the Project will require the expropriation of public and private land parcels and primary³⁶ and secondary structures³⁷ within the expropriation corridor for the Project. The expropriation corridor includes both the 50m railway corridor for the Project and the permanent land required for the Project (for aspects such as embankments, cuttings and station parking). The expropriation corridor is shown in **Figure 15-26 of Chapter 15: Social** of the **ESIA**. All land within the expropriation corridor will be acquired by AYGM. The expropriation corridor excludes any land that is temporarily required for construction compounds or construction access roads which would be temporarily acquired by the Contractor.
- 5.1.2. This Chapter of the RAP describes the expected Project impacts/losses and summarises the Project structures, ancillary structures and construction activities that will require land acquisition and cause physical and/or economic displacement. It should be noted that the asset inventory update undertaken by AYGM in 2020 assumed all Project affected land parcels will be expropriated as per Turkish Expropriation Law. Furthermore, a negotiated agreement will be preferred, instead of expropriation, for the acquisition of land. With regards to temporary land use required for the construction compounds or construction access roads, the Contractor will not acquire land for the Project. Rather, their approach will be based on rental agreements with the owner of the property. AYGM will not have any involvement in the rental agreement process but will monitor this process to ensure that it complies with PR5.
- 5.1.3. Note that further impacts on the local environment and communities due to the Project design, construction and operation are assessed in the **ESIA** for the Project.

5.2 OVERVIEW OF PROJECT AFFECTED LAND PARCELS

- 5.2.1. The asset inventory update carried out by AYGM identified that a total of 1,256 land parcels will be impacted by the Project – 904 privately-owned land parcels and 352 land parcels on public land. The total land to be acquired for the Project will be approximately 5,391,150 m². Of this amount, 5,127,468 m² will be expropriated, whilst 263,683 m² will be acquired through an easement³⁸

³⁶ Primary structures are houses.

³⁷ Secondary structures include barns, sheds, greenhouses, walls, gates, fences, fountains, etc.

³⁸ Easements may be preferred by AYGM in reference to Turkish Expropriation Law as per project needs. In accordance with national legislation, easement can be granted for a certain portion of a land parcel (or elevation/depth over/underground level) instead of expropriation. Easement agreements do not require the owner of the land to be changed, and the integrity of the land is maintained. Easements can potentially be agreed for areas requiring the construction of bridges, viaducts, tunnels, overpasses and underpasses, provided that the PAPs use of the land is not permanently impacted.

agreement. The 5,127,468 m² to be expropriated under Turkish Expropriation Law comprises approximately:

- 2,477,538 m² privately-owned land parcels; and
- 2,649,930 m² land parcels on public land (some of which is designated as pasture and forestry).

- 5.2.2. The total land to be acquired by the Project will be higher than the land areas presented in **Table 5-1** below. This is because the remaining areas of land parcels that are partially acquired for the Project may be made unusable and redundant (unviable land), either by the lack of continuous land to make farming profitable, or where the geometry (shape of the land or topography) of the parcel is such that it cannot be physically accessed or cultivated. The landowner can request expropriation of the unviable land if it has not already been identified as unviable by AYGM, leading to the expropriation of the full land parcel in some cases. Where this is the case, such identified unviable land will be determined and will be valued alongside land to be acquired prior to construction and expropriated in accordance with this RAP.
- 5.2.3. Approximately 400,000 m² of additional land is estimated by AYGM to require expropriation as unviable land. The criteria used by AYGM to define unviable land are:
- Proportion of land expropriated compared to the remaining land, according to the title deed records;
 - Shape or topography of the remaining land allocation due to the Project; and
 - Land accessibility.
- 5.2.4. Land that is made unviable during construction will be expropriated in accordance with the requirements described in **Chapter 8: Eligibility and Entitlements**.

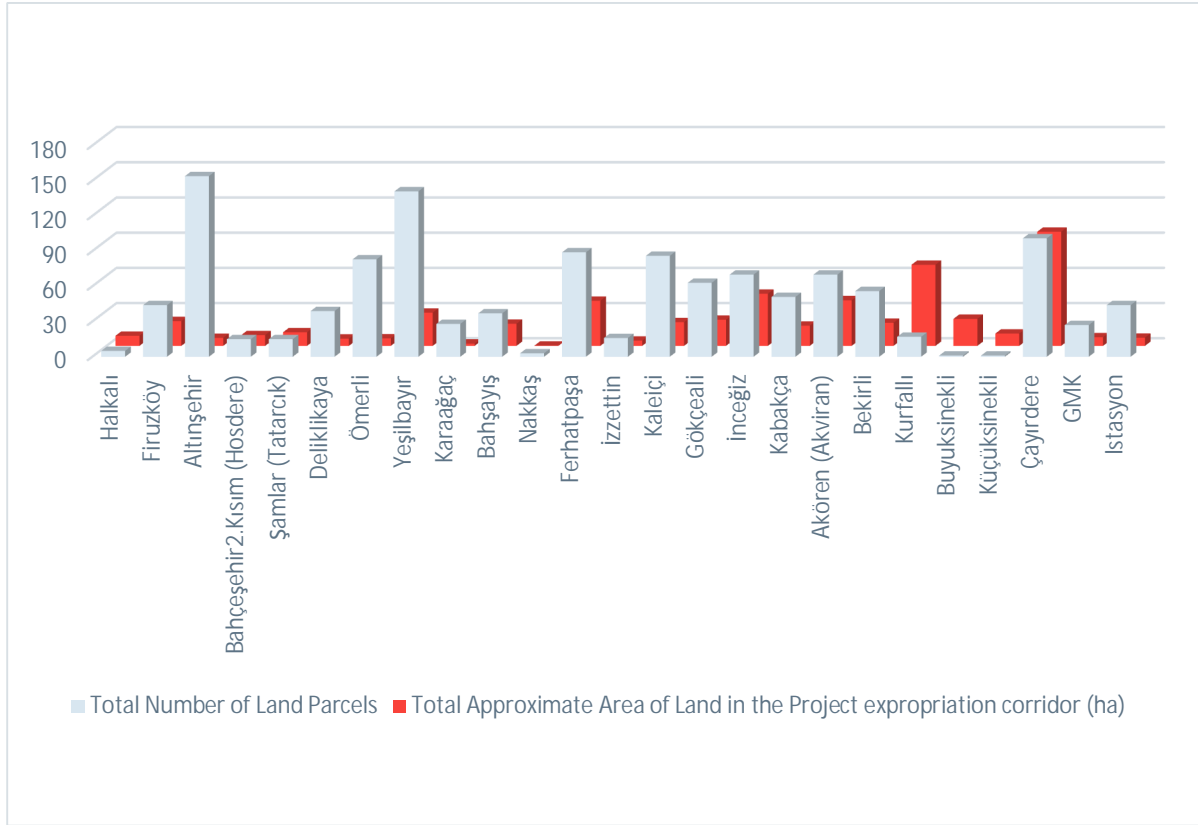


Figure 5-1 - Total Number of Land Parcels and Total Land Area in the Expropriation Corridor (by Community)

- 5.2.5. **Figure 5-1** shows that the communities of Altınşehir, Yeşilbayır and Çayırdere have the highest number of total land parcels in the Project expropriation corridor. However, all land parcels in Altınşehir and 51% of the expropriated land area in Firuzköy will be subject to permanent easement due to the tunnel being routed beneath these land parcels. Çayırdere also has the largest approximate area of land area to be expropriated by the Project. Kurfalı has a high approximate area of land to be expropriated, but a relatively low number of land parcels.
- 5.2.6. **Table 5-1** below summarises the number of land parcels to be impacted, land area to be acquired and permanent easement areas for each of the communities along the Project alignment.

Table 5-1 – Number and Area of Project Impacted Land Parcels (for each community)

Communities	Approximate Chainage (km)	Number of Land Parcels Affected			Approximate Area of Land to be Expropriated by the Project (m²)			Permanent Easement Area (m²)
		Private	Public	Total	Private Land	Public Land	Total	
Halkali-Ispartakule Section								
Halkalı	0+000 - 1+600	3	2	5	56,925	0	56,925	29,297
Altınşehir	1+600-3+600	151	3	154	0	0	0	68,360
Firuzköy	3+600 - 10+000	33	11	44	85,470	18,460	103,930	107,114
Ispartakule to Çerkezköy Section								
Bahçeşehir2.Kısım (previously known as Hosdere)	9+100 - 11+300	1	14	15	397	91,393	91,790	0
Şamlar (known as Tatarcık)	11+300 - 14+800	0	15	15	0	116,313	116,313	0
Deliklikaya	14+800 - 16+600	33	6	39	32,469	29,391	61,860	0
Ömerli	16+600 - 18+900	56	27	83	14,733	15,161	29,894	33,782
Yeşilbayır	18+900 - 23+600	111	30	141	189,411	68,598	258,009	25,129
Karaağaç	21+500 - 21+700	24	4	28	17,290	2,099	19,389	0
	22+300 - 22+800							
Bahşayış	23+600 - 25+800	24	13	37	147,995	40,648	188,643	0
Nakkaş	25+800 - 25+900	1	2	3	1,514	1,055	2,569	0
Ferhatpaşa	25+900 - 28+100	54	35	89	254,281	129,618	383,899	0
	29+000 - 29+100							
	29+200 - 32+200							
İzzettin	28+100 - 29+000	11	5	16	35,315	9,817	45,132	0
	29+100 - 29+200							
Kaleiçi	32+200 - 36+200	67	19	86	102,327	99,786	202,113	0
Gökçeali	36+200 - 38+400	50	13	63	193,720	29,053	222,773	0

Communities	Approximate Chainage (km)	Number of Land Parcels Affected			Approximate Area of Land to be Expropriated by the Project (m ²)			Permanent Easement Area (m ²)
		Private	Public	Total	Private Land	Public Land	Total	
İnceğiz	38+400 - 43+000	37	33	70	171,346	272,768	444,114	0
Kabakça	43+000 - 45+900	41	10	51	151,524	20,050	171,574	0
Akören (known as Akviran)	45+900 - 49+000	53	17	70	282,329	106,660	388,989	0
Bekirli	48+000 - 48+100	49	7	56	179,110	17,934	197,044	0
	49+000 - 50+500							
Kurfallı	50+500 - 56+400	5	12	17	161,963	529,444	691,407	0
Buyuksinekli	56+400 - 59+900	0	1	1	0	230,238	230,238	0
Küçüksinekli	59+900 - 61+600	0	1	1	0	105,005	105,005	0
Çayırdere	61+600 - 73+500	64	37	101	370,575	601,963	972,538	0
Gazi Mustafa Kemal Paşa (GMK)	74+000 - 74+800	8	19	27	5,409	68,145	73,554	0
	75+200 - 75+900							
İstasyon	73+500 - 74+000	28	16	44	23,436	46,329	69,765	0
	74+800 - 75+200							
Total		904	352	1,256	2,477,538	2,649,930	5,127,468	263,683

- 5.2.7. As shown in **Table 5-1**, approximately 72% of the total number of land parcels impacted by the Project are in private ownership, compared with 28% being public land. The communities with the largest number of land parcels impacted by the Project are Altınşehir on the periphery of Istanbul (12%) and the rural community of Yeşilbayır (11%). However, the land parcels in Altınşehir will not be expropriated but rather subject to permanent easement as a tunnel will be routed beneath these land parcels.
- 5.2.8. The Project will connect with the Çerkezköy to Kapikule railway section, which is currently under construction, at a location adjacent to the east of Çerkezköy Station. There are land parcels within Çerkezköy that will be impacted by both the Project and the Çerkezköy to Kapikule railway section. Therefore, a large proportion of land parcels in Çerkezköy (in which İstasyon is located) will be impacted.
- 5.2.9. The total land to be expropriated is 5,391,151m²; 48% of this comprises private land and 52% is designated as public land. In addition, 263,683 m² of land will be acquired through permanent easement. The rural community of Çayırdere has the largest total land area to be expropriated for the Project (18%), in addition to, the largest proportion of private land area and public land to be expropriated by the Project. The community of Kurfalı (13%) has the second largest total land areas to be expropriated for the Project. Furthermore, the largest proportion of private land area to be expropriated along the Project expropriation corridor is located within the community of Çayırdere (15%), Akören (11%) and Ferhatpaşa (10%). In comparison, the largest percentage of public land area to be expropriated for the Project is situated in Çayırdere (23%), Kurfalı (20%) and İnceğiz (10%).

5.3 LANDOWNERS AND USERS

- 5.3.1. Title deed records were reviewed as part of the asset inventory update, which identified 3,228 Project affected households. It is not necessarily the case that all 3,228 would be economically-impacted, but this number was taken as a worst-case scenario for the purposes of this RAP.
- 5.3.2. **Table 5-2** shows the type of landowners and users impacted by the Project as identified in the asset inventory update in each of the communities.

Table 5-2 – Type of Landowners and Users within Each Community

Communities	Number of Landowners and Users				
	Owned (Single-Private)	Owned (Single-Business)	Owned (Shareholder)	Formal Renters	Informal Renters
Halkalı	0	0	0	0	0
Altınşehir	82	5	80	0	0
Firuzköy	15	1	83	2	0
Bahçeşehir2.Kısım	0	0	2	0	3

Communities	Number of Landowners and Users				
	Owned (Single-Private)	Owned (Single-Business)	Owned (Shareholder)	Formal Renters	Informal Renters
Şamlar	0	0	0	0	0
Deliklikaya	22	1	67	13	0
Ömerli	12	17	181	16	3
Yeşilbayır	71	6	117	23	0
Karaagaç	10	1	53	4	0
Bahşayış	10	1	39	11	0
Nakkaş	1	0	0	0	0
Ferhatpaşa	16	4	149	3	10
İzzettin	3	0	78	0	2
Kaleiçi	27	6	377	29	4
Gökçeali	0	1	0	30	3
İnceğiz	18	2	366	19	3
Kabakça	24	1	102	46	1
Akören	33	3	275	24	1
Bekirli	35	3	225	12	0
Kurfalı	2	0	0	3	1
Buyuksinekli	0	0	0	0	0
Küçüksinekli	0	0	0	0	0
Çayırdere	24	2	142	26	9
GMK	31	0	520	11	14
Istasyon	24	0	4	13	8
Total	460	54	2,860	285	62

- 5.3.3. The majority of the PAPs are private landowners as either a shareholder (77%) or single landowner (12%). A small proportion of PAPs are formal renters (8%), informal renters (2%) and single business owners (1%). The largest proportion of landowners that are shareholders³⁹ is in GMK (18%) followed by Kaleiçi and İnceğiz (both 13%).

5.4 LAND OWNERSHIP DEMOGRAPHICS

- 5.4.1. An overview of the acquisition of land and structures of the 1,256 land parcels identified in the asset inventory update are presented in **Table 4-1** in **Chapter 4: Affected People and Assets**.
- 5.4.2. 56% of households surveyed confirmed that they have property (land and/or housing) elsewhere, in addition to the land that is likely to be acquired by the Project. 322 (44%) of the respondents to the household surveys stated that the title deed records in the official Land Registry are out of date and are not reflective of current ownership. AYGM will support these PAPs with the updating of their title deeds (as part of the RAP) as defined in **Chapter 8: Eligibility and Entitlements**.
- 5.4.3. AYGM based the 2020 asset inventory update on data collected from the Turkish Land Registry in September 2020, and updated registry entries where relevant. **Table 5-3** below presents the updated number and area of the land parcels that are owned for each of the communities.

³⁹ Shareholders are individual owners who share in the ownership of a land parcel by formal arrangement and are all registered in the land registry.

Table 5-3 – Land Parcels in Private Ownership

Community	Area of Land Parcels Privately Owned								
	Privately Owned (Single – Private)			Privately Owned (Single – Business)			Privately Owned (Shareholder)		
	Number	Expropriation Area (m ²)	Easement Area (m ²)	Number	Expropriation Area (m ²)	Easement Area (m ²)	Number	Expropriation Area (m ²)	Easement Area (m ²)
Halkalı	0	0	0	0	0	0	0	0	0
Altınşehir	82	0	24,583	5	0	1,641	62	0	23,403
Firuzköy	15	46,076	29,878	1	0	1,435	14	39,394	26,378
Bahçeşehir2.Kısım	0	0	0	0	0	0	1	397	0
Şamlar	0	0	0	0	0	0	0	0	0
Deliklikaya	22	20,198	0	1	351	0	10	11,920	
Ömerli	12	2,924	3,895	17	2,135	6,998	25	11,565	13,963
Yeşilbayır	71	117,184	4,555	6	572	6,881	34	71,655	3,000
Karaagaç	10	5,783	0	1	5,682	0	13	5,826	0
Bahşayış	10	52,942	0	6	52,584	0	8	42,469	0
Nakkaş	1	1,514	0	0	0	0	0	0	0
Ferhatpaşa	16	39,106	0	4	16,193	0	25	168,270	0
İzzettin	3	4,498	0	0	0	0	7	28,922	0
Kaleiçi	27	35,349	0	6	11,762	0	32	46,816	0
Gokçeali	0	0	0	1	2,981	0	0	0	0
İnceğiz	18	92,955	0	2	15,394	0	17	63,539	0
Kabakça	24	83,038	0	1	4,950	0	15	60,951	0
Akören	33	111,020	0	4	23,637	0	16	147,672	0
Bekirli	35	138,096	0	3	7,089	0	12	34,249	0
Kurfallı	2	5,560	0	0	0	0	0	0	0
Buyuksinekli	0	0	0	0	0	0	0	0	0
Küçüksinekli	0	0	0	0	0	0	0	0	0

Community	Area of Land Parcels Privately Owned								
	Privately Owned (Single – Private)			Privately Owned (Single – Business)			Privately Owned (Shareholder)		
	Number	Expropriation Area (m ²)	Easement Area (m ²)	Number	Expropriation Area (m ²)	Easement Area (m ²)	Number	Expropriation Area (m ²)	Easement Area (m ²)
Çayırdere	24	114,818	0	2	42,307	0	28	167,285	0
GMK	31	87,412	0	0	0	0	27	113,817	0
Istasyon	24	18,304	0	0	0	0	1	800	0
Total	460	976,778	62,911	60	185,637	16,954	347	1,015,545	66,743

- 5.4.4. The asset inventory update identifies 867 privately-owned land parcels that will be affected by the Project. Of these 867, 347 land parcels are currently owned by multiple shareholders. In total, 2,860 shareholders own shares in these 347 land parcels.

5.5 LAND RENTAL

- 5.5.1. **Table 5-4** presents the number and area of the land parcels both formally and informally⁴⁰ rented for use from the asset inventory update.

Table 5-4 – Land Parcel Rental

Community	Number and Area of Land Parcels Rented			
	Rented (Formal)		Rented (Informal)	
	Number	Expropriation Area (m ²)	Number	Expropriation Area (m ²)
Halkalı	0	0	0	0
Altınşehir	0	0	0	0
Firuzköy	2	6,988	0	0
Bahçeşehir2.Kısı m	0	0	3	3,208
Şamlar	0	0	0	0
Deliklikaya	13	15,249	0	0
Ömerli	16	17,270	3	5,587
Yeşilbayır	23	55,746	0	0
Karaagaç	4	5,384	0	0
Bahşayış	11	61,959	0	0
Nakkaş	0	0	0	0
Ferhatpaşa	3	6,967	10	40,822
İzzettin	0	0	2	5,096

⁴⁰ Informally rented refers to land being rented on an informal basis with no formal contract agreed.

Community	Number and Area of Land Parcels Rented			
	Rented (Formal)		Rented (Informal)	
	Number	Expropriation Area (m ²)	Number	Expropriation Area (m ²)
Kaleiçi	29	52,477	4	7,943
Gokçeali	30	144,252	3	15,840
İnceğiz	19	49,260	3	15,189
Kabakça	46	197,339	1	1,798
Akören	24	122,561	1	48,097
Bekirli	12	36,258	0	0
Kurfallı	3	5,120	1	129,164
Buyuksinekli	0	0	0	0
Küçüksinekli	0	0	0	0
Çayırdere	26	151,024	9	91,500
GMK	11	7,066	14	38,902
Istasyon	13	9,919	8	4,181
Total	285	944,839	62	407,327

- 5.5.2. It should be noted that shareholders that use the land have further entitlements as described in **Chapter 8: Eligibility and Entitlements** in relation to compensation for non-residential buildings, secondary structures and/or crops/trees, in addition to compensation for land lost.
- 5.5.3. In relation to rented land parcels, the asset inventory update indicates that approximately 70% of rented land area affected by the Project is subject to a formal legal agreement, whilst informal arrangements are in place for remaining 30% of rented land area.
- 5.5.4. Kabakça has the largest area of formally rented land area comprising 46 land parcels affected by the Project (16%), followed by Gokçeali with 30 land parcels (11%), Çayırdere with 26 land parcels (9%) and Akören with 24 land parcels (8%).
- 5.5.5. Kurfallı has the largest informally rented land affected by the Project (32%) comprising one land parcel, with the second largest informally rented area within Çayırdere (23%) comprising nine land parcels.

5.6 PROJECT IMPACTS

- 5.6.1. This section describes the Project impacts related to land acquisition, resettlement and access during the construction and operation phases. These have been identified as relevant to the Project based on the household survey, Mukhtar survey, focus group discussions (including women-only focus groups) and a site drive through. The results of the Mukhtar surveys and focus group discussions are presented in **Chapter 4: Project Affected People and Assets**.

CONSTRUCTION

Primary and Secondary Structures

- 5.6.2. **Table 5-5** provides a breakdown of the primary and secondary structures to be acquired by the Project through land expropriation. **Table 5-5** also details if the household has been previously subject to expropriation.

Table 5-5 – Project Impacted Primary and Secondary Structures

Community	Primary Structures (residential houses ⁴¹)	Secondary Structures (non-residential buildings)	Total Structures	Households Previously subject to Expropriation ⁴²
Halkalı	0	0	0	-
Altınşehir	0	0	0	-
Firuzköy	0	0	0	-
Bahçeşehir2. Kısım	2	2	4	-
Şamlar	0	0	0	-
Deliklikaya	0	2	2	No
Ömerli	11	57	68	Yes (2)

⁴¹ These primary structures (residential houses) are a permanent primary (a weekend house or summer house is also included in this group) place of residence for these households.

⁴² Where there is a “Yes” relating to prior expropriation, this refers to the actual households identified in the household survey as having been subject to expropriation previously at a different location (i.e. a different land parcel at a different location). These cases of previous expropriation do not relate to the land affected by the Project currently being acquired.

Community	Primary Structures (residential houses ⁴¹)	Secondary Structures (non-residential buildings)	Total Structures	Households Previously subject to Expropriation ⁴²
Yeşilbayır	1	30	31	Yes
Karaağaç	1	8	9	No
Bahşayış	2	5	7	No
Ferhatpaşa	0	2	2	Yes
İzzettin	0	0	0	-
Kaleiçi	6	48	54	No
Gökçeali	5	86	91	No
İnceğiz	0	0	18	-
Kabakça	22	151	173	Yes (1)
Akören	1	16	17	-
Bekirli	0	9	9	No
Buyuksinekli	0	0	0	-
Küçüksinekli	0	0	0	-
Kurfallı	0	7	7	No
Çayırdere	2	24	26	No
GMK	3	24	27	-

There are no provisions in Turkish national laws preventing double expropriation of land or structures provided in these situations.

Community	Primary Structures (residential houses ⁴¹)	Secondary Structures (non-residential buildings)	Total Structures	Households Previously subject to Expropriation ⁴²
Istasyon	3	20	23	-
Total	59	509	568	-

- 5.6.3. Overall, the asset inventory update identified 59 residential houses that will need to be expropriated by the Project. The household surveys indicate that approximately 5 households have been subject to previous expropriation. The community of Kabakça is significantly affected by the Project, with 22 residential houses likely to be expropriated followed by Ömerli with 11. During the household surveys, the respondents from these potentially affected households expressed their preferences to be resettled as close as possible to their current location. The PIU Social and Resettlement Specialist will assist in the process of finding nearby in-kind compensation where possible (See **Chapter 8: Eligibility and Entitlements**).
- 5.6.4. Most of the 59 houses likely to be affected by the Project have less than 4 rooms, are primarily constructed of bricks/stone or concrete/cement and are surrounded by a wire fence around the perimeter of the land parcels.
- 5.6.5. The household survey indicated that 2 of the 59 houses do not have mains electricity supply; the rest are connected to the electricity grid. Only 1 structure does not have direct access to a piped water supply. With regards to the water sources of these affected houses, 31 have access to a public pump or well, whilst 19 have a piped connection to the house (the remaining 9 houses did not provide any details during the household surveys).
- 5.6.6. In addition to the 59 residential houses affected by the Project, there are 509 secondary structures identified by the asset inventory update are likely to be affected by the Project. The majority of the non-residential buildings and secondary structures are situated in Kabakça (151) followed by Gökçeali (86), Ömerli (57) and Kaleiçi (48).
- 5.6.7. The most common of these secondary structures are listed below:
- 143 fences;
 - 52 iron gates;
 - 42 tanks (ranging from 500 litres to 10,000 litres);
 - 36 walls;
 - 29 floors;
 - 21 containers;
 - 21 water wells;
 - 17 external toilets (privies);
 - 13 poultry coops;
 - 11 warehouses;
 - 10 pergola;
 - 9 canopies;

- 9 arches/key stones;
- 7 barns;
- 6 garages;
- 6 porches;
- 6 tile stones;
- 5 pools; and
- 5 ruined/derelict buildings.

Industrial and Manufacturing Businesses

5.6.8. The asset inventory update identified that 60 formal industrial and manufacturing businesses⁴³ will be affected by the Project due to land acquisition. **Table 5-6** below presents the number and area of formal industrial and manufacturing business land parcels that will need to be expropriated.

Table 5-6 – Project Impacted Formal Industrial / Manufacturing Business

Community	Number	Land Acquisition Area (m ²)	Permanent Easement Area (m ²)	Title Deed Area (m ²)
Halkalı	0	0	0	0
Altınşehir	5	0	1,641	4,076
Firuzköy	1	0	1,435	22,077
Bahçeşehir2 .Kısım	0	0	0	0
Şamlar	0	0	0	0
Deliklikaya	1	351	0	351
Ömerli	17	2,135	6,998	106,518
Yeşilbayır	6	572	6,881	88,640
Karaagaç	1	5,682	0	48,151
Bahşayış	6	52,584	0	130,573
Nakkaş	0	0	0	0
Ferhatpaşa	4	16,193	0	51,534
İzzettin	0	0	0	0

⁴³ These businesses do not include business activities which may be registered at PAP's houses (i.e. individual entrepreneurs). Further information provided on informal business activities is included in paragraphs 5.6.31 to 5.6.36.

Community	Number	Land Acquisition Area (m ²)	Permanent Easement Area (m ²)	Title Deed Area (m ²)
Kaleiçi	6	11,762	0	79,314
Gokçeali	1	2,981	0	8,105
İnceğiz	2	15,394	0	70,908
Kabakça	1	4,950	0	4,950
Akören	4	23,637	0	98,450
Bekirli	3	7,089	0	22,950
Kurfallı	0	0	0	0
Buyuksinekli	0	0	0	0
Küçüksinekli	0	0	0	0
Çayırdere	2	42,307	0	109,576
GMK	0	0	0	0
Istasyon	0	0	0	0
Total	60	185,637	16,954	846,174

- 5.6.9. During the household surveys, 29 respondents stated that they use their own land and/or rent land and/or structures to carry out business activities (other than agriculture), such as the use of vegetable gardens for selling crops locally to neighbours and in their communities and animal husbandry. When asked about the key potential challenges if their household needs to be moved/resettled, they advised that access to their businesses was the key concern. 9% of survey respondents also stated that they require access to a specific location regularly to undertake business activities.
- 5.6.10. During the household surveys, 59 survey respondents also stated that they employ workforce on the affected land parcels. The employed workforces usually involved a small number of people; the largest hired workforce mentioned during the survey was 7 employees. The Entitlement Matrix in Section 8.6 of **Chapter 8: Eligibility and Entitlements** includes livelihood assistance for these employed workers who may be economically displaced as a result of the Project's land expropriation (such as job seeking assistance and retraining).

Agricultural Land and Crops

- 5.6.11. **Figure 5-2** below shows the range of expropriation percentages of agricultural land. It shows that whilst over a third of land parcels will only have 0-20% of the land expropriated, approximately one fifth of land parcels will have 80%, or more, of their land expropriated.

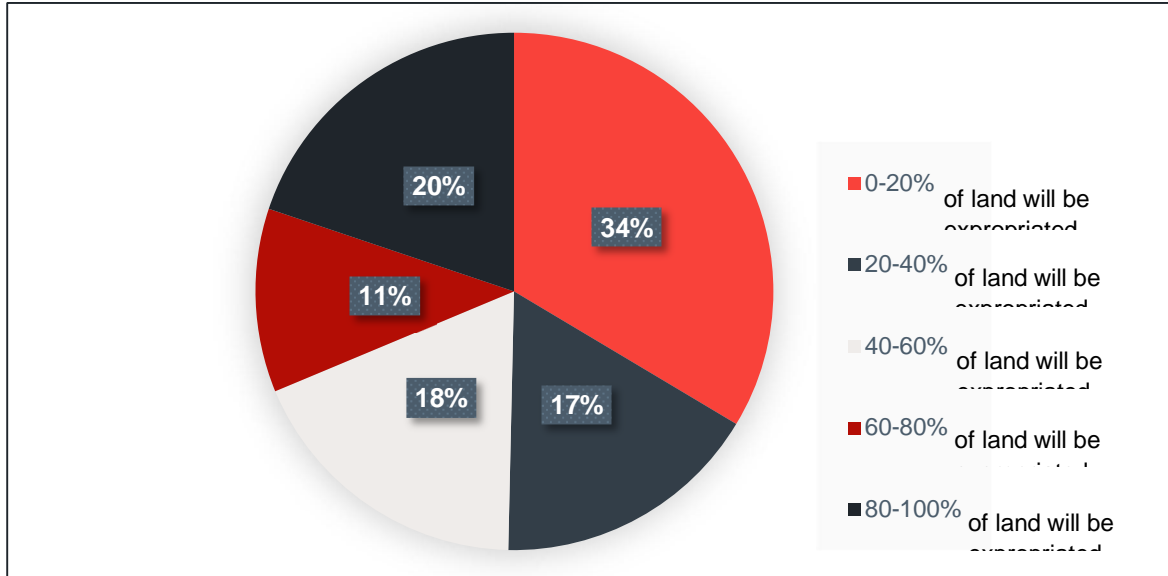


Figure 5-2 - Land to be Expropriated from Individual Agricultural Parcels (% range)

- 5.6.12. Compensation will be provided to all agricultural landowners impacted by the Project in the form of cash or in-kind (land-for-land) compensation. They may also be eligible for further compensation for loss of crops and trees.

Crops

- 5.6.13. **Table 5-7** below provides further details on the affected land parcels used for agriculture and the crops grown (data obtained from the household surveys).

Table 5-7 – Use of Impacted Agricultural Land Parcels

Crop	Number of Plots	Total Area (m ²)	Average Area of Land Parcel
Barley	241	561,625	2,330
Beans	7	55,400	7,914
Canola	2	4,000	2,000
Chickpea	2	24,100	12,050
Clover	11	58,438	5,313
Dry Farming	5	400	80
Fig	12	92,237	7,686

Crop	Number of Plots	Total Area (m ²)	Average Area of Land Parcel
Maize	19	111,671	5,877
Meadow	2	4,500	2,250
Melon/Watermelon	10	14,737	1,474
Oat	2	62,791	31,396
Sugar Beet	35	9,138	261
Sunflower Seed	75	1,444,574	19,261
Unknown/blank	21	669,570	31,884
Vegetables from Garden	7	4,600	657
Wheat	26	563,187	21,661
Total	477	3,680,968	7,717

5.6.14. **Table 5-7** shows that sunflower seeds, wheat, barley and maize (corn) occupy the largest area of agricultural lands. This corresponds to **Figure 5-3** below, with the Mukhtar surveys, showing that the same 4 basic crops planted in the communities were of the highest importance.

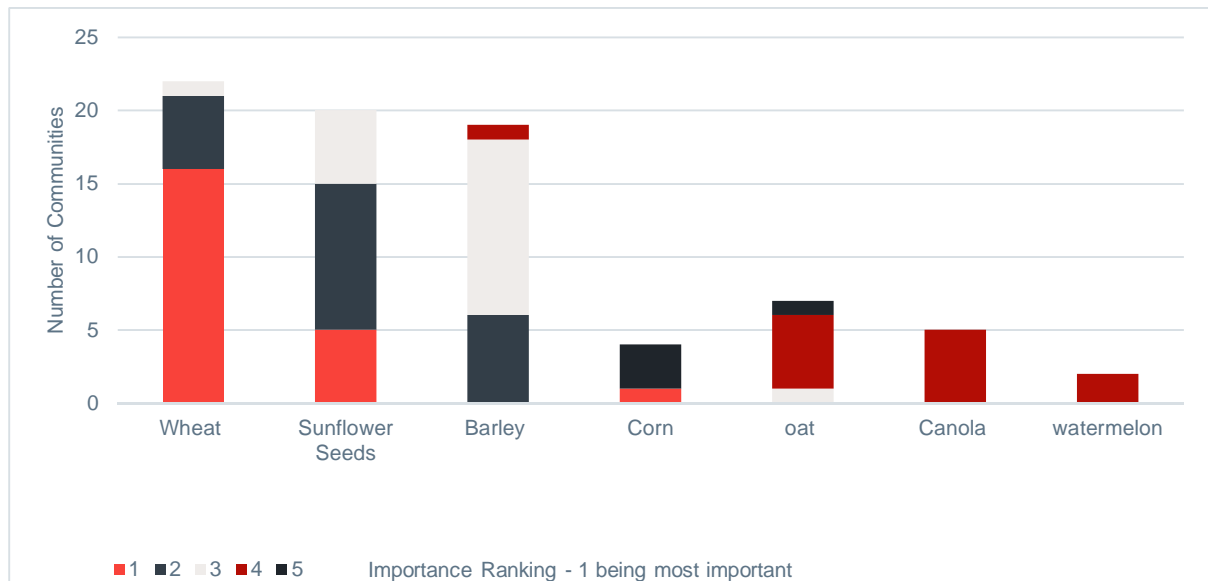


Figure 5-3 – The Most Common Basic Crops Planted in the Community (in order of importance)

- 5.6.15. Furthermore, there are agricultural credit cooperatives (community-based unions) operating in Ömerli, Kaleiçi, Kabakça and B. Sinekli, as well as a market in the centre of İnçeğiz. The other community-based union identified during the household survey was the İnçeğiz Neighborhood Development Association. When possible and chosen by the PAP, the Project will provide in-kind compensation and support to those PAPs affected by the loss of agricultural land through establishing connections to relevant institutes to relocate and provide them with alternative land in areas where they can still operate as part of the cooperative as described in the Entitlement Matrix in Section 8.6 of **Chapter 8: Eligibility and Entitlements**.
- 5.6.16. In addition, traders travel to Bahçeşehir 2. Kısım, Gökçeali and the communities from Kabakça to İstasyon to purchase agricultural products to then sell in bulk elsewhere.
- 5.6.17. The most important crops for those undertaking subsistence farming, identified by the PAPs during the household surveys, were wheat, barley, sunflower seeds, sugar beets, maize, beans, canola, oats and clover.
- 5.6.18. Where possible, AYGM will allow agricultural producers to harvest their crops for that year/season prior to expropriation. However, when this is not possible compensation will be provided to all agricultural landowners impacted by the Project in terms of land expropriation as described in the Entitlement Matrix presented in **Chapter 8: Eligibility and Entitlements**.

Trees

- 5.6.19. Overall, the asset inventory update identifies that PAPs own 1,150 land parcels which will be impacted by the Project, these contain approximately 9,174 trees. **Table 5-8** summarises the number of different species of tree owned/used by PAPs, as well as an indication of their age.

Table 5-8 – Tree Species Owned/Used by PAPs⁴⁴

Type of Tree	Number of Land Parcels (accommodating these specific trees)	Young ⁴⁵	Middle ⁴⁶	Old ⁴⁷	Total
Acacia	19	325	12	19	356
Alder	5	166	0	29	195
Almond	18	35	1	0	36
Apple	87	238	36	0	274
Apricot	49	86	33	0	119
Bay	1	1	0	0	1
Black Mulberry	1	1	0	0	1
Bonito	1	13	0	0	13
Carob	7	5	0	32	37
Cypress	2	37	0	0	37
Cherry	36	61	9	0	70
Chestnut	8	18	0	0	18
Cranberry	11	84	1	0	85

⁴⁴ Young, medium or old is dependent on the species of tree. The precise age and value of individual trees will be determined during valuation verification and negotiations.

⁴⁵ A young tree is aged 1-10 years.

⁴⁶ A middle tree is aged 11-23 years.

⁴⁷ An old tree is 24+ years.

Type of Tree	Number of Land Parcels (accommodating these specific trees)	Young ⁴⁵	Middle ⁴⁶	Old ⁴⁷	Total
Elm	12	122	473	0	595
Eriobotrya	10	11	1	0	12
Fig	49	130	42	0	172
Grape	1	0	5	0	5
Green Plum	6	41	0	0	41
Hawthorn	1	1	0	0	1
Hazelnut	12	17	10	0	27
Hornbeam	1	0	0	1	1
Horse Chestnut	5	4	2	8	14
Jujube	12	22	5	0	27
Kavlan	12	647	5	15	667
Kiwi	2	3	0	0	3
Lemon	5	5	0	0	5
Linden	11	11	5	0	16
Mandarin	2	2	0	0	2
Maple	1	7	0	0	7
Medlar	8	13	0	0	13
Morning	1	1	0	0	1

Type of Tree	Number of Land Parcels (accommodating these specific trees)	Young ⁴⁵	Middle ⁴⁶	Old ⁴⁷	Total
Mulberry	53	100	24	4	128
Oak	54	244	438	182	864
Olive	10	13	0	0	13
Orange	2	3	0	0	3
Oriental Hornbeam	3	29	13	0	42
Palm	1	0	2	0	2
Past	1	7	0	0	7
Peach	29	54	12	0	66
Pear	85	258	45	3	306
Persimmon	14	16	10	0	26
Pine	89	1,213	1,197	204	2,614
Plane	4	3	3	0	6
Plum	103	314	137	4	455
Pomegranate	31	146	46	0	192
Poplar	23	152	88	12	252
Quince	39	97	12	0	109
Raspberry	1	2	0	0	2
Rose	1	2	0	0	2

Type of Tree	Number of Land Parcels (accommodating these specific trees)	Young ⁴⁵	Middle ⁴⁶	Old ⁴⁷	Total
Silverberry	1	1	0	0	1
Sour Cherry	37	92	8	0	100
Sumac	3	16	24	0	40
Vine Leaf	29	230	59	0	289
Walnut	106	578	100	7	685
Wild Medlar	1	8	0	0	8
Wild Pear	1	0	1	0	1
Willow	33	38	65	7	110
Total	1,150	5,723	2,924	527	9,174

5.6.20. These trees are used as livelihood source and/or ornamental and are primarily important as a source of:

- Subsistence for families;
- Providing income through production and selling of fruit, timber, firewood etc; and
- Shade.

5.6.21. The income lost from these trees will be compensated, and replacement land and saplings (or equivalent) will be provided, where appropriate⁴⁸. PAPs affected by this should be compensated in

⁴⁸ Replacement value of trees is determined based on the loss of income in the period between planting of the seedling and the time it reaches a level of productivity equivalent to that of the affected tree, plus cost of maturing the tree (i.e. inputs and labour costs of planting and tending a new tree to relevant level of maturity). Fruit trees will take years to produce fruit and reach maturity, taking between two to five years to produce fruit and six to ten years to reach full production (13 in the case of citrus trees). Any new tree crops that are not ready for harvest before the start of construction

line with compensation and assistance measures described in **Chapter 8: Eligibility and Entitlements**.

Irrigation of Cultivated Land

- 5.6.22. The household surveys demonstrated that the majority of agricultural land is not irrigated, as shown in **Figure 5-4**. 71% of the survey respondents also stated that there was a lack of irrigated agricultural land in their area.

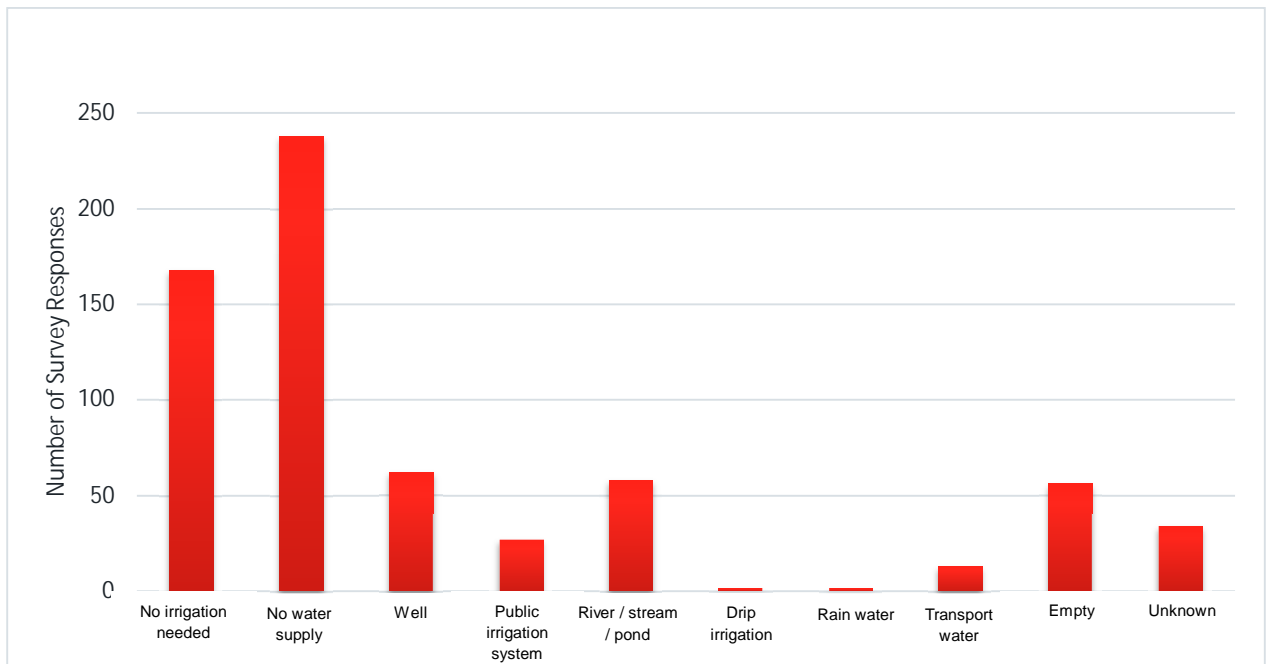


Figure 5-4 – Source of Water Used for Project Affected Land Parcel

- 5.6.23. Most of the land parcels within the communities are not irrigated (with some minor exceptions in Şamlar and Kabakça). During the Mukhtar surveys, every Mukhtar stated that finding replacement cultivated agricultural land (both owned and rented) will be difficult due to scarcity of available productive land. The Project will compensate affected land users with the land of similar or improved water availability as described in **Chapter 8: Eligibility and Entitlements**.

Owned Cultivated Land

- 5.6.24. According to the Mukhtars (during the Mukhtar surveys), the average sale price for 0.1 ha of cultivated land in the communities (i.e. not sloped, irrigable and accessible) is shown in **Figure 5-5**

will also be compensated for, but households should be allowed to harvest their crops before construction, and this will not affect their compensation payment.

below⁴⁹. It should be noted that the average sale price of cultivated land presented in **Figure 5-5** was provided by each of the 22 Mukhtars which were surveyed.

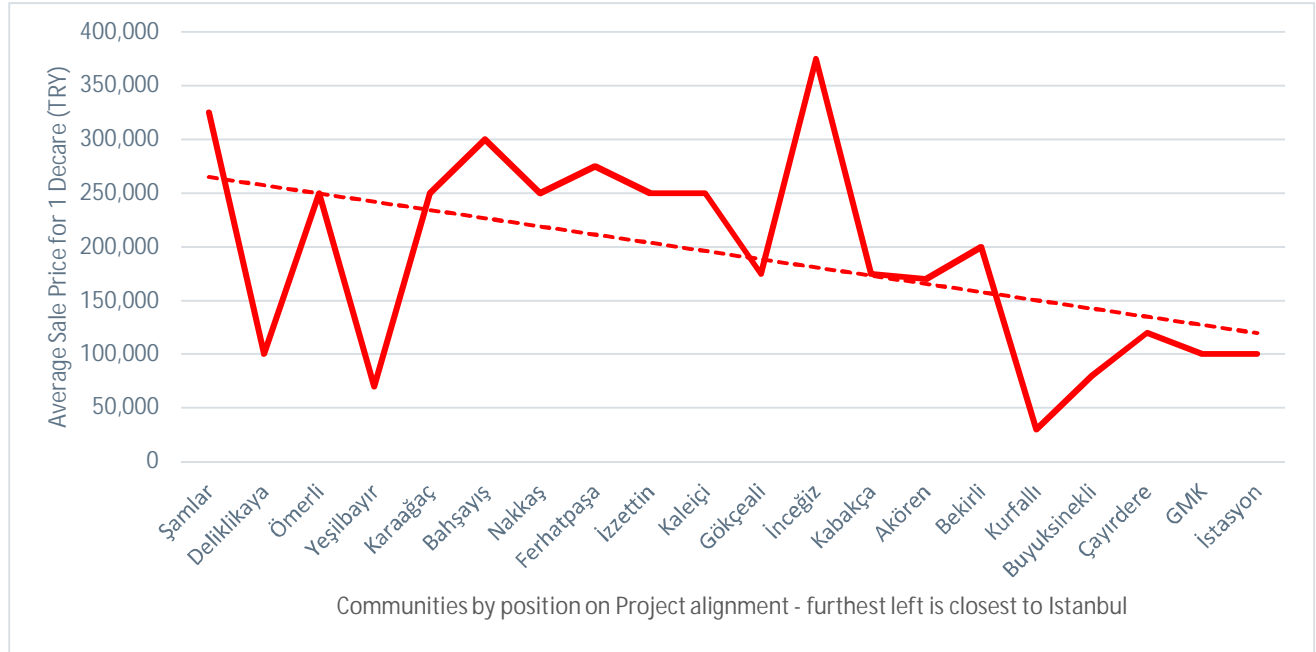


Figure 5-5 – Average Sale Price for 0.1 ha of Cultivated Land (by Community)

5.6.25. The Mukhtars for the communities of Bahçeşehir 2. Kısım and Küçüksinekli did not provide an average sale price for 0.1 ha of cultivated land as part of the Mukhtars surveys. Some communities provided a price range for sale prices rather than a specific price per decare⁵⁰, and for these particular communities the median price has been used. For 9 out of the 22 communities, the current average sale price for one decare of cultivated land in the community (i.e. not sloped, irrigatable and accessible), as estimated by the Mukhtars, is between 250,000-400,000 TL. The overall trend is that the price of cultivatable land decreases the further away from Istanbul, with the exception of the highest price being observed in İnçeğiz (midway along the Project).

Rented Cultivated Land

5.6.26. Overall, the Mukhtars thought that it will not be too difficult to locate alternative cultivated land to rent in the communities (although the outcome cannot be guaranteed). The average rental price for 0.1 ha of cultivatable land in the communities is presented in **Figure 5-6**.

⁴⁹ Dotted lines provided to demonstrate general pricing trend.

⁵⁰ 1 decare is equivalent to 0.1 ha.

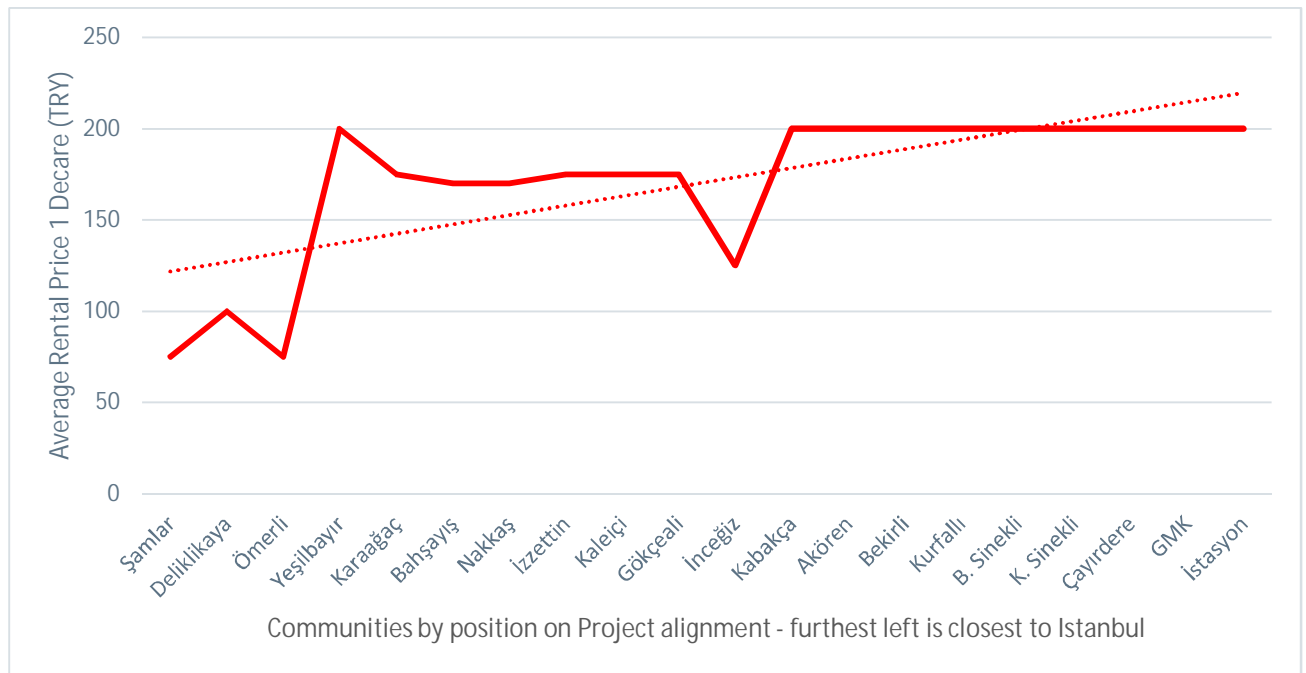


Figure 5-6 – Average Rental Price for 0.1 ha of Cultivated Land (by Community)

- 5.6.27. The Mukhtars for the communities of Bahçeşehir 2. Kısım and Ferhatpaşa did not provide an average rental price for 0.1 ha of cultivated land as part of the Mukhtars surveys. The other Mukhtars did provide an estimate of the average monthly rental price for 0.1 ha of cultivated land in the communities as between 75 TL to 250 TL. The rental price by community does not follow the general sale price, as rental prices of cultivated land increase as you move away from Istanbul. As such, the PAPs renting land (formally and informally) will need to be supported to obtain access to alternative land of similar or improved quality (not exceeding the current rental value), in order to ensure a similar or improved quality of life for affected households as described in **Chapter 8: Eligibility and Entitlements**.

Animal Rearing

- 5.6.28. The animals reared for subsistence purposes by PAPs, identified during the household surveys, are presented in **Table 5-9** below, with the most popular and therefore important being chickens, sheep, cattle and beehives.

Table 5-9 – Animals Reared for Subsistence Purposes in PAP households

Animals (reared for subsistence)	Amount	No. of Households Rearing Animals
Chickens	1,924	50
Sheep	1,672	34

Animals (reared for subsistence)	Amount	No. of Households Rearing Animals
Cattle	801	47
Beehive	427	13
Goats	69	5
Goose	66	3
Turkey	17	1
Rabbit	3	1
Duck	2	1

- 5.6.29. The Mukhtar surveys also showed that chickens, cattle and sheep were the animals primarily raised in the communities, and that communal pastureland is used by local agricultural landowners for grazing.
- 5.6.30. During the household surveys, multiple households undertaking animal husbandry were interviewed. A particular land parcel located within Gazi Mustafa Kemal Paşa was being informally used for the rearing of sheep. However, this land parcel is public land, and these animal breeders do not have permission to use this land for this purpose.

Employees and Informal Workers of Small Businesses

- 5.6.31. The data gathered during the household surveys showed that there are some land parcels with informal businesses which will be impacted by the Project. These include beekeeping businesses with approximately 100-250 beehives each (on land parcels that will need to be acquired by the Project). The beekeeping businesses do not have a formal rental contract.
- 5.6.32. In addition, during the household surveys, 37 households stated that they employ people to work on their land parcels. 47 household survey respondents stated that they hire members of their own household to work within their small business on their land parcel(s) (137 workers in total). Of these households, small businesses employ on average 2.9 workers. In addition, it was reported that 19 household survey respondents hire employees from outside of their household to work on the Project affected land parcels (59 employees in total). For those small businesses employing workers from outside the household, they employ on average 3.1 workers.
- 5.6.33. Impact on small business activities could include the loss of income through disruption to business activities, and the associated loss of employees' income during the period of unemployment up until the point when the business resumes its activities.

Informal Users of Land

5.6.34. The asset inventory update identified 63 informal users of communal and public land that will be affected by the Project. This land is being predominantly used by informal users as pastureland for grazing. **Table 5-10** provides this information for each community along the Project.

Table 5-10 – Informal Users of Communal / Public Land

Community	Number of Users of Communal / Public Land
Halkalı	0
Altınşehir	0
Firuzköy	0
Bahçeşehir2.Kısım	3
Şamlar	0
Deliklikaya	0
Ömerli	3
Yeşilbayır	0
Karaagaç	0
Bahşayış	0
Nakkaş	0
Ferhatpaşa	10
İzzettin	2
Kaleiçi	4
Gökçeali	3
İnceğiz	4
Kabakça	1
Akören	1
Bekirli	0
Kurfallı	1
Buyuksinekli	0
Küçüksinekli	0

Community	Number of Users of Communal / Public Land
Çayırdere	9
GMK	14
Istasyon	8
Total	63

5.6.35. The focus groups identified at least 10 households that rely to an extent on charcoal manufacturing in Büyüksinekli. In addition, there are 50 households in Çayırdere who use the forest and sell charcoal. The primary concerns of the charcoal makers in Büyüksinekli were associated with crossing the Project. Whilst the Project will not affect the supply of charcoal in this (or any other affected) community, the charcoal producers will require safe passage across the Project alignment. Underpasses and overpasses are included as part of the Project design, with 3 underpasses in Büyüksinekli (at chainages 56+226, 56+495 and 59+845) and 7 underpasses (at chainages 62+008, 64+410, 64+935, 66+450, 67+065, 67+535, 68+170, 68+230, 69+012, 70+650 and 71+340) and 2 overpasses (at chainages 63+221, 63+830) in Çayırdere.

5.6.36. No seasonally visiting workers will be affected by the Project as the accommodation provided for them at farms will not be affected by the Project.

Common Resources

5.6.37. A common resource is any scarce resource, such as water or pasture, that provides users with tangible benefits, but which no person / organisation owns, or has exclusive claim to. A major concern with common resources is overuse, especially when there are poor social-management systems in place to protect the core resource.

5.6.38. Overall, 4% of the household survey respondents stated that they use common natural resources. The following common resources were listed as being used:

- Water from streams;
- Water from springs;
- Water from village fountain;
- Pastureland for animal grazing;
- Collecting firewood from a forest;
- Charcoal production from a forest;
- Hunting in a forest;
- Fishing in streams/lakes;
- Forest land for timber supply; and
- Forest land for picnics.

5.6.39. According to the household surveys, 14 households' fish in nearby bodies of water/rivers, primarily for self-subsistence purposes (only 1 household using their catch as a source of income). Horse mackerel and turbot were cited as being regularly caught, with 8 out of the 14 households stating that they require a license to fish in these locations.

- 5.6.40. 9 households stated that they hunt in the forests for self-subsistence purposes (1 household using their catch as a source of income). Quail, partridge, rabbit, duck and wild boar were stated as being hunted, with all 9 respondents stating that a license is required to hunt, and such licences are held by these respondents.
- 5.6.41. 21 households also stated that they collect wood locally, with four of these households selling the collected wood (rather than purely for self-subsistence purposes).

Devalued Land and House Prices along Tunnel Areas

- 5.6.42. Along the Project alignment, 8 tunnels will be constructed due to the land topography and to minimise physical resettlement. This includes the construction of a 3km tunnel from chainage 16+765 to 19+635 in Ömerli Village, to avoid the Hadımköy Organized Industrial Zone (OIZ). Overall, the tunnels will require 206,417m² of land to be expropriated and will total 5,498m in length.
- 5.6.43. However, while the tunnels avoid significant physical resettlement, it is possible that the presence of the tunnel could devalue the land and structures directly above it. The proposed tunnels may lead to an owner being unable to realise the market value that would have been obtainable had the owner's land not been affected by the tunnels because prospective purchasers either will not proceed with the purchase or, having learned of the planning proposals, will only offer a lower price.
- 5.6.44. Though AYGM believe the impacts from Project tunnelling and other underground excavations will be minimal, they are nevertheless committed to ensuring that any owners of land or structure losing value due to the Project are appropriately compensated. As presented in **Chapter 7: Valuation Methodology**, 'before and after' surveys will be carried out to identify any Project impacts on property values above the tunnels.

Vulnerable Groups

- 5.6.45. The following categories of vulnerable groups have been identified as potentially being impacted by this Project from the vulnerability analysis presented in **Chapter 4: Affected People and Assets**. These are summarised as:
- People that have no literacy that will be further affected due to lack of access to written Project information;
 - Informal businesses and residents whose land use rights are not recognised by national legislation;
 - Residents who may need to relocate and may find the move difficult as they have traditional/family ties to their place of residence, particularly the location dependent elderly. A number of households that reside and/or use the land in the expropriation corridor contain elderly persons. The health of some of these elderly persons may be negatively affected by the act of relocation;
 - People with health conditions (including those relating to COVID-19), the elderly who are poor, the disabled who would be exposed further to the impacts of the Project due to their sensitive physical and well-being status;
 - Women headed households – widowed women with no provision of social security, or, women headed households if they are categorised as "poor";
 - People with lack of access to basic infrastructure, mainly relating to water;
 - People that have been affected by previous land expropriation (including loss of land rights) under national legislation and who have not been fully compensated to replacement value;

- People that are significantly affected in terms of income and loss of agricultural land (including animal husbandry) by the Project;
- People who live below the poverty line and are therefore categorised as poor, defined as those earning less than a 1/3 of the minimum wage (minimum wage in Turkey is 2,825.90 TL net per month as of 2021); and
- Households with at least one member that is elderly (65+), has a chronic illness or is disabled.

Land for Construction Compounds

- 5.6.46. The Contractor will be responsible for negotiating agreements with landowners, to temporarily use land for the construction compounds. The construction compounds will include construction workers accommodation, as well as offices, healthcare facilities, sport facilities, parking, storage areas, fuel stores, waste segregation facilities, and catering / canteen facilities.
- 5.6.47. As the Contractor had not been commissioned at the time of preparing this RAP, the compound locations are not yet known. However, 3 potential locations have been identified based on assumptions from the adjacent, under construction, Çerkezköy to Kapikule railway section. These locations are described in **Chapter 2: Description of the Project** of the **ESIA**.
- 5.6.48. In order to assess the potential impacts of the construction compounds on local communities, a number of assumptions have been made, using information from the under construction Çerkezköy to Kapikule railway section. These assumptions are described below:
- All 3 construction compounds will cover an area of between 5,000m² and 9,000m².
 - All 3 construction compounds will be located alongside existing road infrastructure.
 - On average the occupancy of the construction workers' accommodation at each compound will be 350 personnel.
 - Electricity will be provided from mains supplies with back-up generators available in an emergency.
 - Non-potable water will be pumped from groundwater, this will be used for dust suppression and non-portable workforce provision, such as flushing toilets.
 - Drinking water for construction workers will be sourced from bottled containers which will be delivered to the construction compounds.
 - Municipal waste will be segregated and collected by the relevant municipality.
- 5.6.49. As the land required for the construction compounds are expected to be unused (barren land with no residential houses), as specified in the construction compound selection criteria in the **ESMP**, and is likely to be situated on public land, it is not expected that there will be any impacts associated with temporary physical and economic displacement. However, in case of temporary physical and economic displacement being needed for the construction compounds, the RAP principles and mitigation measures will be followed by the Contractor responsible for setting up these construction compounds. These requirements are included in the **ESMP** in addition to this RAP for the Project.

Construction Community Access Rights

- 5.6.50. There will be a large amount of construction works undertaken for the Project as detailed in **Chapter 2: Description of the Project** of the **ESIA**. It will be necessary to have some temporary closures of the existing railway, notably where the Project will pass over or under the existing railway. Local

users of the existing railway will be informed about all alternative transport methods, in advance of works commencing.

- 5.6.51. The construction phase will also include the use of machinery for excavation and ground works. The presence of machinery, equipment and construction workers, and temporary rail and road closures, may provide obstacles and reduce the ability of local agricultural landowners and businesses to operate as normal.
- 5.6.52. The impact on access in community areas, where the Project alignment will be adjacent to the existing railway ('online'), will be less than the areas where the Project will be diverted from the existing railway ('offline'). In addition, **Chapter 2: Description of the Project** of the **ESIA**, shows the access roads along the Project alignment which will likely be impacted during the construction phase (those where the Project is not tunnelled). In total it is expected that approximately 137 access tracks / roads will be impacted.
- 5.6.53. The Project has the potential to temporarily restrict access for the local community to residential and farming lands during construction, which could lead to loss of local income and livelihood during this period.
- 5.6.54. The following focus areas have been identified with regard to access and nuisance:
 - Local concerns raised in Büyüksinekli with regard to the potential impact of construction activities on existing level crossings used by local agricultural landowners and charcoal businesses;
 - Local concerns raised in Yeşilbayır with regard to access to agricultural lands and crossings required for animals during construction;
 - Residential areas nearby Halkali Station (within the initial 2km of the Project);
 - Ömerli where the proposed Project tunnel does not follow the existing railway;
 - The agricultural lands which will have tunnel entrances / exits and the high-speed railway in Ömerli, Bahşayış and Yesilbayi; and
 - The areas where the Project does not run parallel to the existing railway, notably in İnceğiz, Kabakça (partially) and Bekirli.
- 5.6.55. Specific consultation on community access will be undertaken with each landowner and community in the vicinity of the Project as described in the **SEP**.

OPERATION

Physical and Economic Displacement

- 5.6.56. There are no Project impacts associated with physical and economic displacement in relation to the operational phase as the land acquisition process and RAP implementation will be completed prior to the construction phase.

Community Access Rights

- 5.6.57. Throughout the Project, fencing, that is between 1.5 and 2m in height, will be constructed in the expropriation corridor. This is a safety measure to prevent people and fauna having access to the Project and therefore will reduce the risk of collisions with trains.

- 5.6.58. After the expropriation of Project affected land, 37% of household survey respondents stated that access may become an issue during operation.
- 5.6.59. Site observations and the results of the household surveys identified areas which could potentially be obstructed as a result of the Project. Local concerns have been raised in relation to community access rights mainly in relation to access to agricultural lands and businesses. The following potential impacts are anticipated:
- Lack of access to agricultural lands where the Project will divide the agricultural lands and where there are no suitable crossings proposed; and
 - Reduced access to businesses and residential houses where the Project would sever access routes.
- 5.6.60. There is the potential that the Project could permanently restrict access to residential and agricultural lands, resulting in the loss of local income and livelihood. However, there is not expected to be a reduction in local access at the locations/areas where the Project is adjacent to the existing railway. The key areas which are anticipated to be affected and highly sensitive to reduced access are those locations where the alignment diverges from the existing railway, namely in Ömerli, Yeşilbayır and Bahşayış. These access issues will be addressed through the provision of underpasses, overpasses, viaducts and bridges, which will be large enough to allow the passage of agricultural machinery, in the design. These structures and other design-related mitigation measures are described in **Chapter 2: Description of the Project** of the **ESIA**. Specific consultation on community access will be undertaken with each landowner and community in the vicinity of the Project as described in the **SEP**. It is expected that local communities will be able to use the main access, local access and agricultural underpasses and overpasses and therefore no significant impacts are expected.
- 5.6.61. No access issues were identified by the household survey respondents (for those households who responded to this question) regularly visiting primary schools and secondary schools, leisure facilities, health and hospital facilities, places of worship, places of work and transport infrastructure. However, when asked if the Project will inhibit access to these facilities / infrastructure types, most respondents left the answer box empty in the questionnaire. This was due to the respondents stating that they were still unsure of the full impacts of the Project. In total, 3 households stated that access to leisure facilities will be impacted.
- 5.6.62. The tunnels are not expected to affect local access during the operational phase.

5.7 LOCAL COMMUNITY OPINION

PROJECT PERCEPTIONS

- 5.7.1. Overall, 72% of the household survey respondents (521 out of 724 household survey respondents) were aware of the Project, with 64% initially finding out from other residents in the communities (334 out of 724 household survey respondents), and 19% through the municipalities (including the Mukhtars) (101 out of 724 household survey respondents). However, only 2% of the survey respondents (11 out of 724 household survey respondents) stated that they had attended a public meeting held by the municipality since 2017.

5.7.2. **Figure 5-7** below demonstrates the overall opinion of the household survey respondents on the Project.

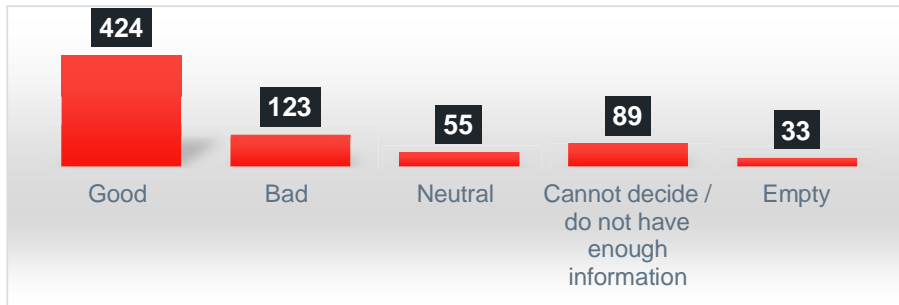


Figure 5-7 – Respondent's Overall Attitude Towards the Project (Household Surveys)

5.7.3. Every Mukhtar surveyed was aware of the Project, with 5 having attended public meetings held by municipalities since 2017. **Figure 5-8** provides an overview of the Mukhtar's overall attitude towards the Project.

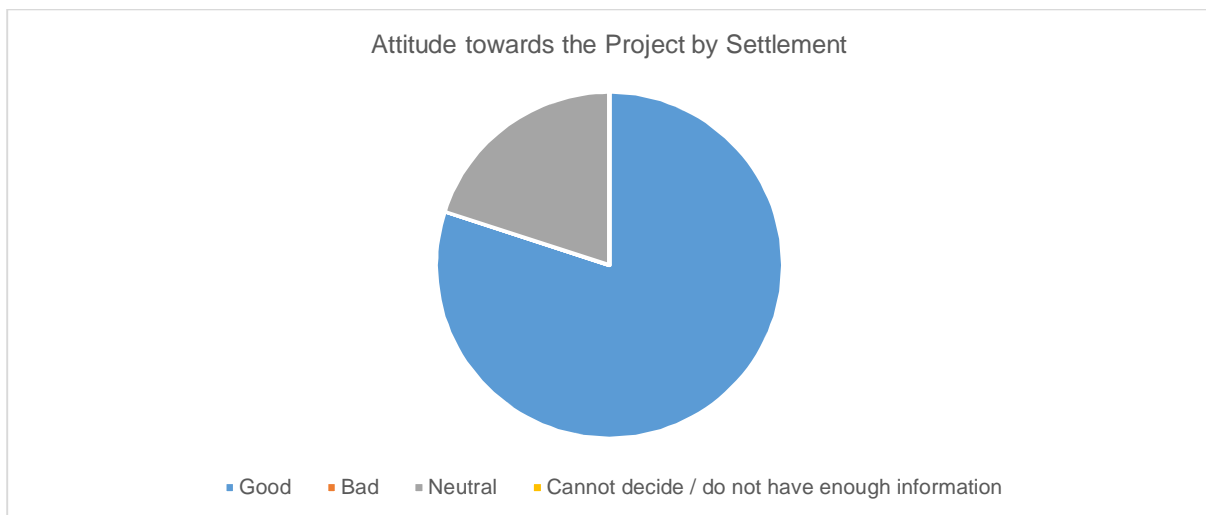


Figure 5-8 – Attitude Towards the Project by Community (Mukhtar Surveys)

- 5.7.4. During the surveys the Mukhtars were questioned about their attitude to the Project; 16 communities (73%) have a positive attitude towards the Project, a further 4 communities (18%) are neutral and 2 Mukhtars did not provide a response for their community (9%).
- 5.7.5. From the 16 communities with a positive attitude, the reasons cited for this opinion were that the Project will bring a solution to transportation issues in the area and improve the local economy.
- 5.7.6. The communities with neutral attitudes towards the Project stated that they thought there would be a contribution to the country's economy, but they do not think it will benefit their community directly. Of the communities that provided a neutral response (75%), the majority of these communities are located closer to Çerkezköy than Istanbul.

PUBLIC UNDERSTANDING OF PROJECT BENEFITS

- 5.7.7. The Mukhtars most common perceived benefits of the Project were quicker commuting (25%) and improved economy (17%). However, 32% of the respondents stated that there would be no advantage associated with the Project. This is due to the Mukhtars being unsure of the extent of the expropriation and the possibility of PAPs being disadvantaged through this process. **Figure 5-9** shows the types of Project benefits perceived by the Mukhtars on the local community.



Figure 5-9 – Perceived Project Benefits (Mukhtar Surveys)

- 5.7.8. The majority of Mukhtars (82%) believe there will be benefits of some description from the Project, with many respondents (41%) citing multiple potential benefits. Only 18% of Mukhtars think that there will be no benefits from the Project. It should be noted that all of these respondents are located in the western half of the Project, further from Istanbul (Gökçeali, İnceğiz, Büyüksinekli and Küçüksinekli). A further 18% cited "other" in their response to the question, and in the corresponding text made a request for a station to be positioned within their communities. These communities are Yeşilbayır, Karaağaç, Nakkaş and Akören.
- 5.7.9. Although the Mukhtars raised concerns around unemployment in previous questions, this response indicates that many Mukhtars do not expect the Project to bring the benefit of job creation / employment. Although, they did note the benefit of easier and quicker commuting to outlying areas for employment.

PROJECT PERCEIVED DISADVANTAGES

- 5.7.10. When asked about the most important issues facing their communities at present, 48% of household survey respondents stated that there were no particular issues. However, of the issues that were

mentioned, crime and drug abuse were cited as the key issues (followed by unemployment and alcohol abuse).

- 5.7.11. A variety of issues were stated when PAPs were asked about their concerns about the Project. The most common concerns stated were as follows:
- Land expropriation;
 - Construction noise;
 - Train noise;
 - Disruption to roads and access; and
 - Community safety around the Project.
- 5.7.12. The Mukhtars also stated construction noise to be the most important concern, followed by construction dust, construction traffic and disruption to roads and access. The lack of respondents concerned about longer-term, operational impacts (e.g. train noise, disruption to sense of community, falling house prices due to proximity of rail and loss of rural character) may be because the Project will primarily follow the existing railway, with nearby residents being understanding and already being acclimatised to the presence of railway infrastructure, due to living close to the existing railway.
- 5.7.13. The primary means of community members voicing their concerns to the Mukhtars is through phone calls, community meetings and one-to-one meetings. When asked if any individuals/groups in their communities had already voiced their concerns about the Project, the following points were raised:
- Details about expropriation price;
 - Concerns about loss of land, and if the route of the Project can be changed;
 - Requests for a station to be placed in their community; and
 - Requests for overpasses / underpasses for cattle and charcoal activities.
- 5.7.14. Concern over the price of expropriated lands was cited during the household surveys, as well as concerns that some grazing areas will be affected, if no crossings were to be provided. The bridges, viaduct and tunnels included as part of the Project will provide locations where the existing railway, vehicles, people and fauna can pass either under or over the Project alignment. Crossings will be provided which are suitable for the use animals. For example, cattle may not use narrow, dark tunnels, so the final design of the animal crossings will be discussed and agreed specifically with grazers as part of the final design. This item is included in the **ESAP** and **SEP**. However, it should be noted that once the surveyor explained the proposed underpasses and overpasses to be introduced as part of the Project, these concerns were substantially reduced.
- 5.7.15. Some focus group attendees stated their concerns about the financial values of their houses decreasing due to the presence of the tunnel under their land. They had concerns that they will not be able to obtain construction permits to build multi-storey buildings on their land if the tunnel passes beneath their land parcel.
- 5.7.16. Under Article 4 of the Turkish Expropriation Law, “In place of the expropriation of immovable property, easement rights concerning certain parts, height, or depth of the immovable property or resources can be created through expropriation if they are appropriate for the relevant objectives.” Furthermore, Article 11 of the same Law stipulates that “in cases of the creation of easement rights through expropriation, the devaluation of the immovable property or resource arising from the act of expropriation should be stated clearly. This forms the basis for fixing the expropriation price” (T.C.

Resmi Gazete 1983). In addition, Article 780 of the Turkish Civil Code reads as follows: “In order for easement rights to obtain, the registration of the property in the landbook is a precondition” (T.C. Resmi Gazete 2001). Therefore, there is provision under Turkish Law to meet PR5 requirements to provide compensation through easements to landowners whose land may decrease in value due to the presence of the Project tunnels.

MITIGATION MEASURES SUGGESTED BY PAPS

- 5.7.17. The household surveys, Mukhtar surveys and focus groups asked the PAPs to provide some key mitigation measures that would improve the land acquisition and compensation process for the Project.
- 5.7.18. The household surveys identified the key suggestions of those being expropriated by the Project. It was found that the PAPs mostly desired the assurance that they would not be resettled again after the Project. After this, respondents most frequently requested to be provided with a house through the resettlement process, and for their title deeds to be updated. These suggestions have been analysed and included in **Chapter 8: Eligibility and Entitlements** as options for in-kind compensation, where relevant.
- 5.7.19. The Mukhtar surveys asked each Mukhtar to identify 3 key mitigation measures that would improve the quality of life for people in their community. A breakdown of their responses is provided in **Figure 5-10**.

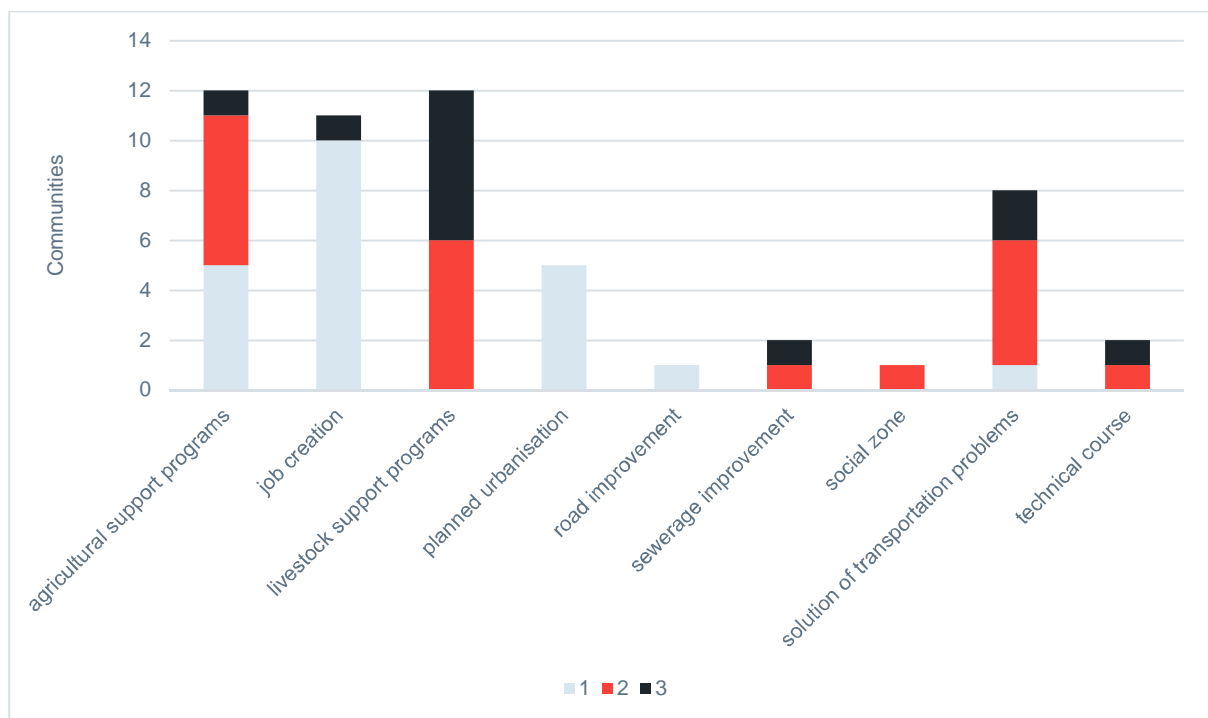


Figure 5-10 – 3 Mitigation Measures to Improve Community Quality of Life (Mukhtar Surveys)

- 5.7.20. When asked to select 3 measures which would improve the quality of life for people in the communities, the items with the most votes overall were for the implementation of both agricultural and livestock support programmes. These were closely followed by employment creation.

5.7.21. No additional mitigation measures were suggested during the focus group discussions.

CUMULATIVE IMPACTS

Çerkezköy to Kapikule Railway

PAPs Affected by Çerkezköy to Kapikule Railway and the Project

5.7.22. The Project will link to the Çerkezköy to Kapikule Railway, which is currently under construction. The Project will be fully integrated with the Çerkezköy to Kapikule railway and will have full interoperability. The interface between the Project and the Çerkezköy to Kapikule railway is a location to the east of Çerkezköy.

5.7.23. Owners of 2 land parcels at Gazimustafakemalpaşa (GMK) and Istasyon are affected by both the Çerkezköy to Kapikule Railway and this Project (the boundary of these phases is shown in **Figure 5-11**). These two parcels are owned by the same landowners. These land parcels were discussed with the Mukhtar. However, he could not provide any information in relation to the landowners or the land parcels. The Mukhtar reported that this area is used for farming, with some hobby gardens and summer huts surrounding the area.

PAPs Affected by Çerkezköy to Kapikule Railway

5.7.24. The Çerkezköy to Kapikule Railway has also expropriated multiple land parcels and structures in Çerkezköy according to Turkish legislation (not to PR5 requirements). There are land parcels that are affected by the Çerkezköy to Kapikule Railway only but living in same community of Çerkezköy as those affected by this Project with different entitlements. These are shown in **Figure 5-11** below.

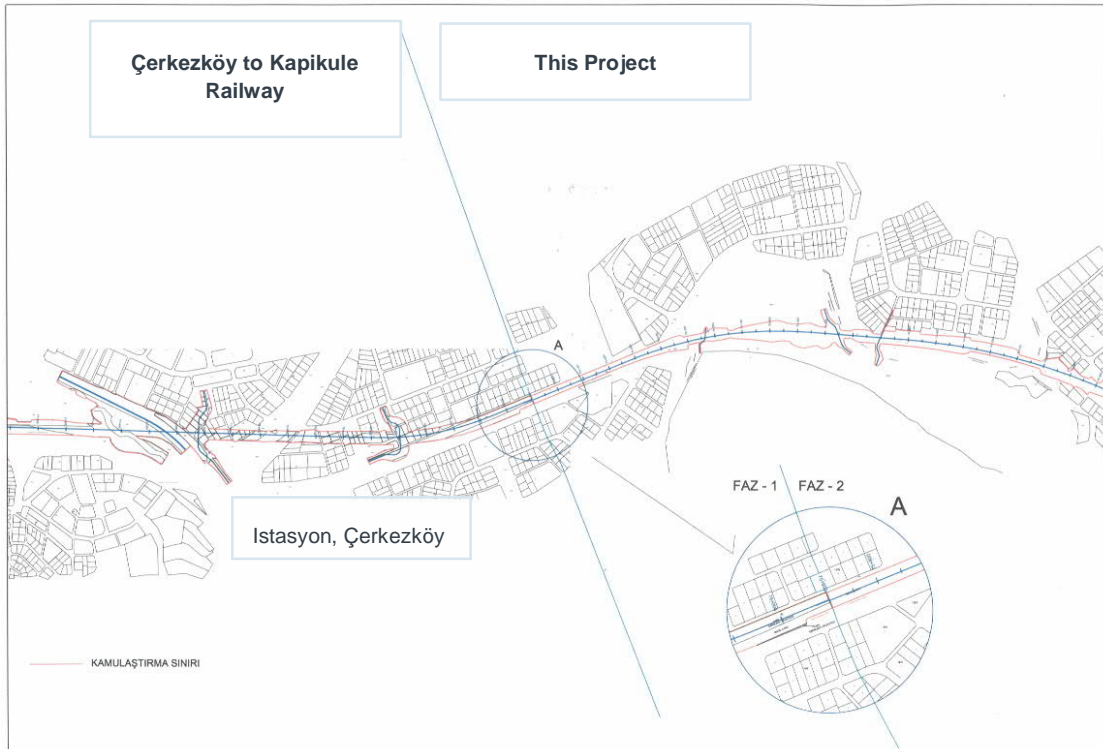


Figure 5-11 – Interface between Çerkezköy to Kapikule Railway and this Project

- 5.7.25. AYGM evaluated the impact of land parcels affected by the Çerkezköy to Kapikule Railway only within Çerkezköy focusing on the two communities in common: Gazimustafakemal and İstasyon. The Çerkezköy to Kapikule Railway valuation was completed by TCDD in December 2017 and compensated PAPs on the basis of, on average, 444.82 TL/m² for Gazimustafakemal and 375 TL/m² for İstasyon. For the land parcels appealing these amounts, the court proceedings changed these values to an average of 500TL/ m² for Gazimustafakemal and 306 TL/ m² for İstasyon. A further valuation in April 2019 by TCDD calculated an average of 419.63 TL/ m² for both communities. The valuation made by AYGM in December 2020 for this Project calculated a higher average of 575 TL/ m² for Gazimustafakemal and 546.49 TL/m² for İstasyon. This valuation under Turkish legislation, as well as the entitlements allowed under PR5, demonstrates that landowners affected by this Project will be entitled to increased compensation.
- 5.7.26. Those households whose land was expropriated as part of the Çerkezköy to Kapikule Railway in the central area of Çerkezköy (Gazimustafakemal and İstasyon) can apply to the livelihood restoration programme for this Project as described in **Chapter 9: Livelihood Restoration Plan**, if affected households can provide evidence that their household income has decreased due to expropriation activities associated with the Çerkezköy to Kapikule Railway. This will ensure that members of the community living around this boundary between the projects are not disadvantaged, and there is less inconsistency between compensation measures within these communities.

5.8 SUMMARY OF PROJECT IMPACTS AND MITIGATION

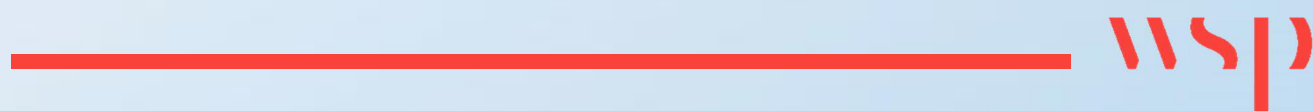
- 5.8.1. The Project will require land acquisition and provision of replacement land, as well as primary structures, secondary structures and business structures. In some cases, the Project may also cause the temporary restriction on use of land and access during the construction of the Project.
- 5.8.2. Potential Project impacts related to land acquisition prior to construction include:
- Loss of 59 houses and 509 secondary structures by landowners, tenants and informal users;
 - Loss of privately-owned land and land used by tenants and informal users and loss of livelihoods derived through this land;
 - Loss, damage and significant access restrictions to private and public land, including those used as pastureland, forest and land that becomes unviable. This will lead to the loss of livelihoods associated with this land, such as farming;
 - Loss in annual farming crops leading to loss of income;
 - Loss in trees and plants (including vineyards, cultivated plots, etc.) leading to loss of income;
 - Impact on business activities – this includes (1) the loss of income between business activities ceasing prior to expropriation and recommencing up to the previous level of business income; and (2) if employment is affected, loss of employee income during the period of unemployment up until the point that the business restarts its activities;
 - Impact on vulnerable households, including people that have no literacy, informal businesses and residents which their land use rights are not recognised by national law, residents who may need to relocate and may find the move difficult (particularly location dependent elderly), people with health conditions, the poor, female-headed households, people with lack of access to basic infrastructure, those who are cumulatively and significantly impacted by this Project and households taking care of at least one family member who is elderly, sick or disabled, in addition to, those households that have been expropriated previously; and

- Temporary physical and economic displacement could be required for the development of the construction compounds.

- 5.8.3. Potential impacts on the owners and users of agricultural land will be dependent upon the availability of suitably productive replacement land, as well as the potential loss of crop (depending on the time of the year when the construction begins). Remaining land may also be made unusable and redundant, either by the lack of continuous land to make farming profitable or the lack of efficient access over or under the Project. Overpasses, underpasses and bridges are planned along the Project to avoid this potential impact, as described and shown in **Chapter 2: Description of the Project of the ESIA**.
- 5.8.4. Potential impacts on the owners of houses and structures along the Project will be caused by the expropriation and relocation of these structures, potentially causing a temporary reduction of income (if business activities are impacted) and emotional stress when moving, despite improved in-kind housing offered to these PAPs. In addition, some PAPs may need to be temporarily rehoused during the construction.
- 5.8.5. Based on the current Project alignment, the Project may cause physical displacement of individuals with legal and/or customary rights to lands, as was confirmed during the household surveys.
- 5.8.6. The household survey data indicated that there are also informal businesses within the land parcels which will be impacted by the Project and will need to be acquired. These include 2 beekeeping businesses with approximately 100-250 beehives each in the community of Deliklikaya and Yeşilbayır, which are informal users with no formal lease agreements in place for the use of the land parcels. The regulated traditional charcoal manufacturers may be affected due to limitations to access to forested areas if crossings are not appropriately designed and constructed. The bridges, viaduct and tunnels included as part of the Project will provide locations where the existing railway, vehicles, people and fauna can pass either under or over the Project.
- 5.8.7. Animals such as sheep are also raised on a land parcel located within Gazimustafakemalpaşa. Despite this being done illegally (no permission obtained) for this land parcel, this group will be entitled to compensation in accordance with PR5.

6

ORGANISATIONAL ARRANGEMENTS AND LAND ACQUISITION APPROACH



6 ORGANISATIONAL ARRANGEMENTS AND LAND ACQUISITION APPROACH

6.1 INSTITUTIONAL ARRANGEMENT

- 6.1.1. The planning, preparation and implementation of this RAP involves distinct processes and different responsible parties. This chapter details the organisations involved, as well as their roles and responsibilities to ensure that PAPs and affected communities are resettled and compensated for any losses, so that their livelihoods and standards of living are restored to at least pre-Project levels.
- 6.1.2. In August 2020, AYGM took over the role of the detailed designer and developer for the Project from TCDD. TCDD had been responsible for the design and development of the Project prior to August 2020. AYGM is a Directorate of the Turkish government, with responsibilities that include the development and construction of railways, ports, airports and logistics centres.
- 6.1.3. AYGM will be responsible for the development and delivery of Project until the completion of the construction phase. AYGM will have ultimate responsibility for the Project and will oversee the implementation of the Lender's requirements during design and construction. AYGM will establish a Project Implementation Unit (PIU) to implement the Project and will be responsible for overseeing the implementation of this RAP.
- 6.1.4. AYGM's organisational structure for the Project is shown in **Figure 6-1**.

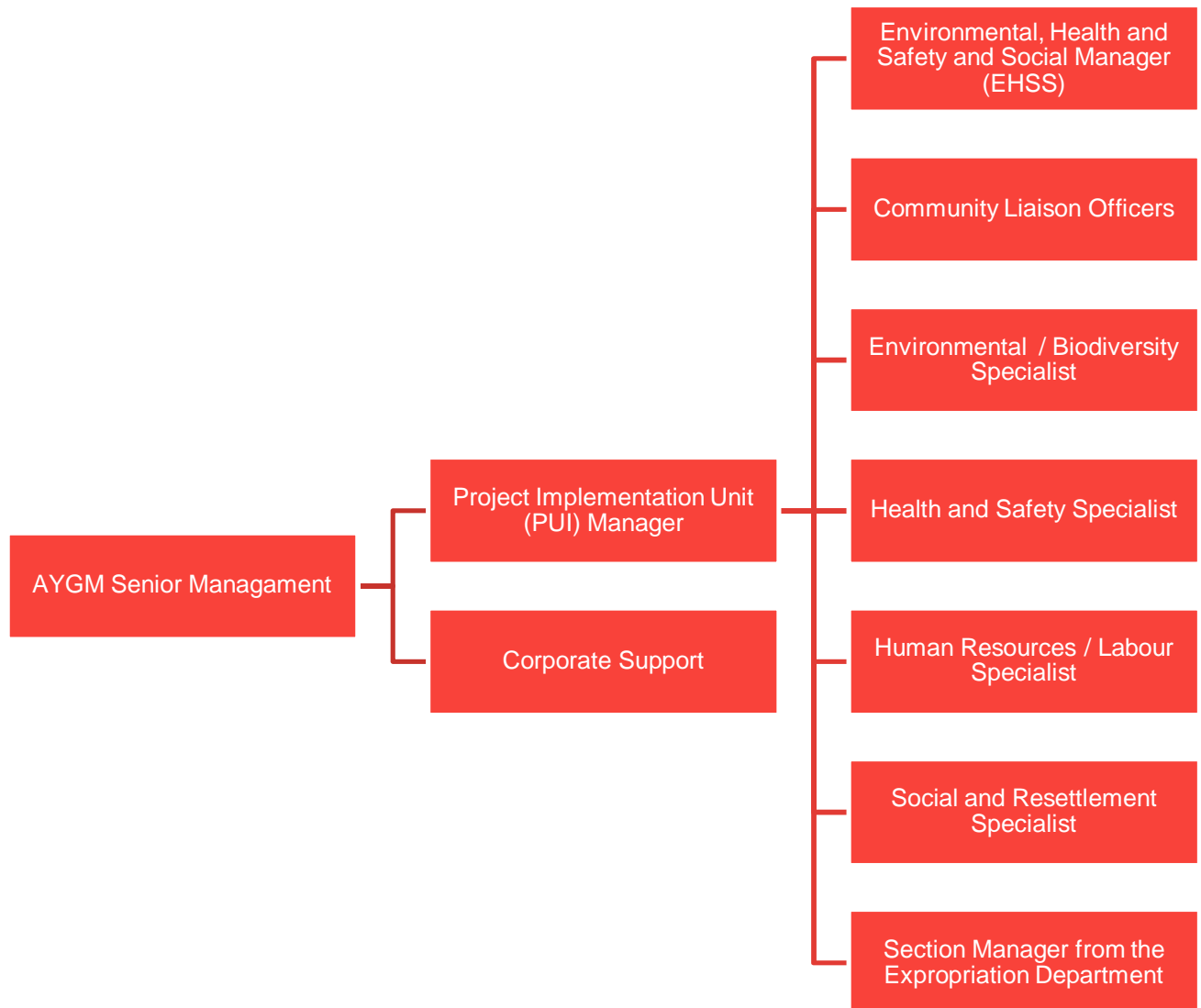


Figure 6-1 - AYGM's PIU Organisational Structure

- 6.1.5. The Section Manager presented in **Figure 6-1** will be responsible for the resettlement and compensation required for the Project in accordance with national requirements. The Social and Resettlement Specialist will be responsible for the resettlement and compensation in accordance with PR5 requirements and will have experience of working on internationally funded projects, ensuring compliance with international Lender's requirements in resettlement and compensation. The role and responsibilities of the Section Manager and the Social and Resettlement Lead is described in **Table 6-1** below.

6.2 COORDINATION ARRANGEMENTS

- 6.2.1. The following diagram provides an organogram of the resettlement process, and the interface between the different organisations involved in the process:

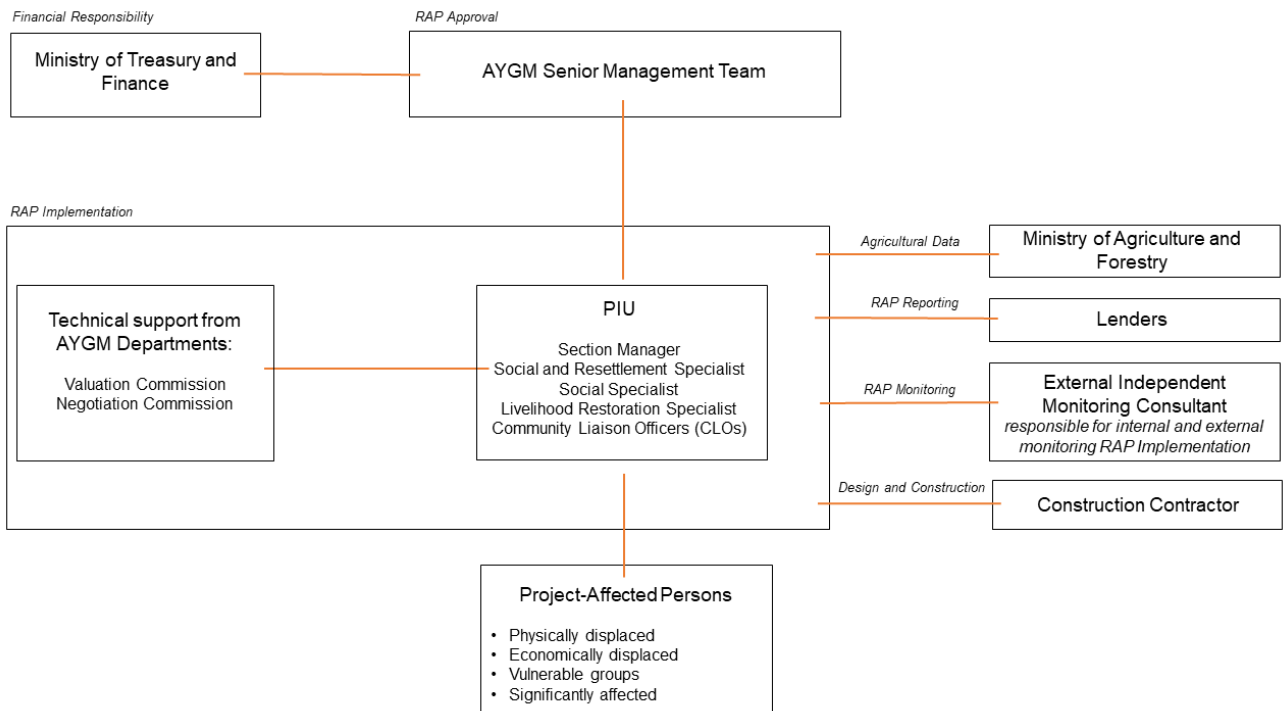


Figure 6-2 - Resettlement Organogram

6.3 ROLES AND RESPONSIBILITIES FOR LAND ACQUISITION

- 6.3.1. AYGM's Senior Management and the PIU Manager will have ultimate responsibility for the effective implementation of this RAP. **Table 6-1** depicts the organisations involved in resettlement and compensation for the Project and describes specific roles and responsibilities.

Table 6-1 - Roles and Responsibilities for Land Acquisition

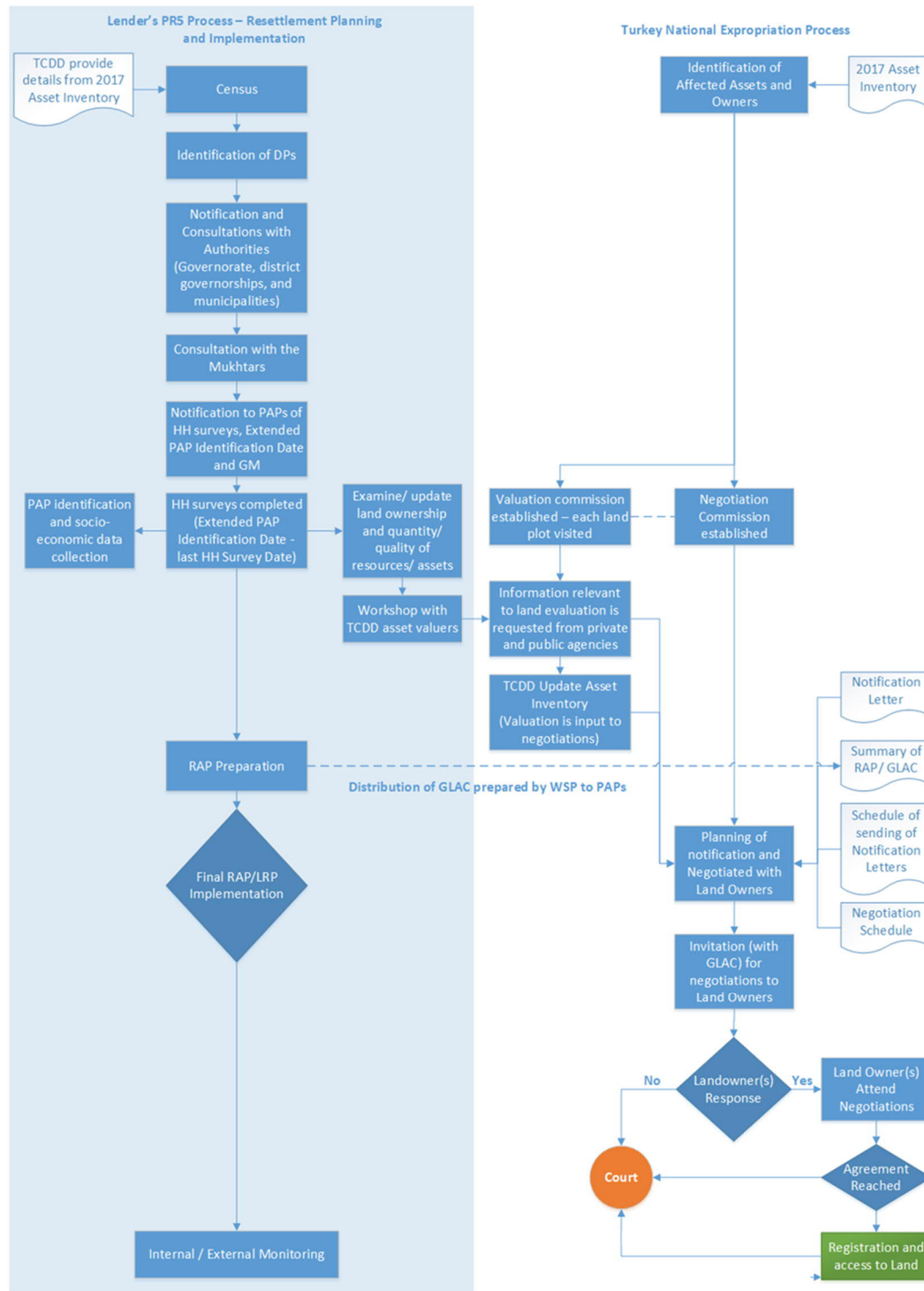
Entity	Roles and Responsibilities
AYGM Senior Management	<p>AYGM Senior Management will review and approve reports and documents associated with Project implementation. They will be responsible for establishing the PIU and appointing technical specialists to effectively audit the implementation of environmental, social and health and safety measures and processes, including this RAP. They will ensure that all relevant activities are executed in line with relevant national legislation and PR5 requirements. With specific regards to this RAP, AYGM Senior Management will:</p> <ul style="list-style-type: none"> ■ Approve the RAP (after Lender's approval); ■ Establish a PIU to implement the Project; and ■ Ensure availability of sufficient budget for resettlement and compensation through both national legislation and the RAP Fund (refer to Table 6-2 for a description of the funding sources adopted for this Project).
PIU	<p>The PIU will be responsible for the overall implementation, financial management and overall delivery of the Project. The role of the PIU is detailed in the ESMP for the Project. The PIU will:</p> <ul style="list-style-type: none"> ■ Ensure land acquisition and resettlement activities comply with the PR5 and this approved RAP; ■ Ensure engagement of other technical specialists to assist in implementation of the RAP, including valuation, monitoring and evaluation activities; ■ Ensure coordination and liaison across AYGM departments, local municipalities and district governorships involved in implementation of all RAP activities; ■ Support local municipalities and district governorships; and ■ Support the PIU Section Manager in high level decision-making, if required. The Community Liaison Officers (CLOs) within the PIU will also conduct regular inspections of records relating to grievances received and their resolution.
PIU Section Manager	<p>The PIU Section Manager will be responsible for leading expropriation activities in accordance with national legislation. They will be supported by experts within the PIU, and other departments, as required. The Section Manager will be responsible for:</p> <ul style="list-style-type: none"> ■ Notification and follow up (if required) with PAPs on upcoming land/property acquisition; ■ Preparing documents for the negotiation of compensation with PAPs, including additional compensation/allowances in accordance with PR5 requirements; formalising agreements with PAPs, processing of timely and correct compensation payments to meet national requirements and PR5 to PAPs, following up with registration of land / property titles; ■ Representing AYGM during any expropriation court cases, when necessary; and ■ Assisting in receiving, recording, resolving and reporting of grievances related to land / property acquisition process related to the Project.
PIU Social and Resettlement Specialist	<p>The PIU Social and Resettlement Specialist is responsible for overseeing the implementation of the RAP and PR5 matters in relation to expropriation, with support from the Livelihood Restoration Specialist. The PIU Social and Resettlement Specialist will be responsible for:</p> <ul style="list-style-type: none"> ■ Collecting the data for the preparation of the bimonthly RAP internal monitoring reports; ■ Overseeing RAP related grievance management; ■ Monitoring and managing any immediate issues of non-compliance with the RAP and remedial action required; ■ Appointing the External Independent Monitoring Consultant, who will also be taking on an internal monitoring review role of the RAP for AYGM; ■ Monitoring the temporary land acquisition activities of Contractor(s), and the implementation of associated RAP activities; and ■ Overseeing the implementation of the SEP, with support from the social specialist.
Social Specialist	<p>The Social Specialist will be responsible for implementing the Stakeholder Engagement Plan (SEP), including responsibility for the preparation of consultation material for, and supporting in, the consultation and engagement with PAPs.</p>
Livelihood Restoration Specialist	<p>Responsible for implementing the RAP, livelihood restoration plan and PR5 matters in relation to expropriation.</p>
PIU Community Liaison	<p>PIU Community Liaison Officers (CLOs), one male and one female, will be appointed to be responsible for supporting the implementation of the SEP, by conducting regular consultation with affected communities on any concerns regarding the Project. CLOs will also have responsibility for disseminating the Project disclosure package as described in the SEP.</p> <p>They will also conduct regular inspections of records relating to grievances received and their resolution.</p>

Entity	Roles and Responsibilities
Officers (CLOs)	
Ministry of Treasury and Finance (National Expropriation Budget)	<p>The Ministry of Treasury and Finance has the overall financial responsibility for the Project; it also has responsibility for allocating the compensation budget for government projects. The total RAP budget⁵¹ and compensation payments will be endorsed by the Ministry of Treasury and Finance. The Ministry of Treasury and Finance acts on requests from AYGM (as detailed in this RAP) and transfers funds to AYGM for compensation purposes. The majority of the budget required to implement the RAP will be funded through the compensation amounts delivered through national legislation.</p> <p>A designated RAP Fund will be created to cover the costs of the compensation that is not covered by the national expropriation budget. This RAP Fund will be managed by the PIU Social and Resettlement Specialist, who will oversee its disbursement to PAPs by the Independent RAP Implementation Consultant.</p>
Ministry of Agriculture and Forestry	<p>The Ministry of Agriculture and Forestry has the responsibility, together with its Provincial Administrations, to provide data on crops and trees, productivity of lands and other data relevant for calculation of compensation for loss of right to use land, crops and trees (as outlined in Chapter 7: Valuation Methodology).</p>
External Independent Monitoring Consultant	<p>The External Independent Monitoring Consultant (appointed by AYGM) will review the internal monitoring undertaken by AYGM every 2 months to RAP completion, in addition to, the in-depth external monitoring reviews, and report progress against the RAP every 6 months as described in Chapter 10: Monitoring and Reporting. This consultant will also complete a spot check of a sample of valuation reports developed by AYGM.</p>
Construction Contractor	<p>The Contractor will be responsible for finalising the Project design centreline and expropriation corridor boundaries. They will elaborate the construction related measures in the ESMP for the Project, inclusive of preparing and implementing the CESMP.</p> <p>The Contractor, supported by their Social Lead and CLOs, will be responsible for recording all public complaints related to their work in accordance with the Grievance Mechanism for the Project, detailed in the SEP. The Contractor will be responsible for appointing a Project Manager and specialists to ensure environmental, social, health and safety mitigation is implemented correctly, and is in line with best practice, national and international requirements, as detailed in the ESMP.</p> <p>The Contractor will appoint a Land and Permits Officer, responsible for temporary land acquisition during construction, in accordance with the processes and compensation measures in the RAP, including land entry and exit protocols, and permissions to enter permanently acquired land for the Project. The Land and Permits Officer is also responsible for the return of land to either AYGM or landowners, and the resolution of any grievance related to the Contractor's land acquisition processes, and for obtaining any permits required from the provincial authorities.</p>
Lenders	<p>The EBRD and AIIB (collectively known as 'the Lenders') are considering financing the Project. The Lenders will require the submission of reports that monitor the environmental and social performance of the Project against their specific policies for mitigating environmental and social issues and impacts. This will include the implementation of this RAP. The Lenders role is to provide their approval of the RAP, as well as, to issue a no objection letter to start construction. The Lender's will be provided with regular information that confirms AYGMs monitoring of the land acquisition process and compliance with the Lender's policy requirements, national legislative requirements and EU legislative requirements, as described in Chapter 3: Legislative Framework, Policy and Guidance.</p>

⁵¹ The total RAP budget includes the compensation amounts delivered through national legislation, together with the supplementary RAP Fund that is required to meet PR5 requirements.

6.4 LAND ACQUISITION APPROACH

- 6.4.1. This section describes the procedures AYGM will follow for acquiring the land, structures, crops and trees affected by the Project. In the case of this Project, a public interest decision was taken by TCDD and approved by the Ministry of Transport, Maritime Affairs and Communication on 30th May 2017. This decision gave TCDD the lawful right to expropriate lands required for this Project. The Public Interest Decision received by TCDD as of 2017 is valid for its own execution programme. However, as the Project is now being led by AYGM, this decision does not apply to AYGM's land expropriation.
- 6.4.2. AYGM will therefore obtain a new Public Interest Decision from the Ministry of Transport and Infrastructure. This is subject to the approval and sign-off of the Ministry upon application following which AYGM will be legally entitled to proceed with the land expropriation for this Project.
- 6.4.3. The land acquisition process involves numerous steps and has been supplemented with the requirements of EBRD PR5. The flow chart below provides an overview of the land acquisition and RAP implementation process and compares the national expropriation process and the process required to meet the requirements of PR5.



** The Lender's Resettlement and Planning Process has been aligned with the national expropriation procedure in Turkey to the extent possible for the Project.

Figure 6-3 - Comparison between National Expropriation Process in Turkey and PR5⁵²

⁵² DPs (Displaced persons); GM (Grievance Mechanism); GLAC (Guide to Land Acquisition and Compensation).

- 6.4.4. In order to follow the above diagram, a number of key steps will be followed by AYGM in order to appropriately acquire private land parcels. These are shown in the **Table 6-2** below:

Table 6-2 - RAP Land Acquisition and Compensation Process

Step	Action	Description
Step 1	RAP disclosure	The ESIA , RAP , GLAC and SEP will be publicly disclosed by AYGM as described in the SEP .
Step 2	Acquisition of Public Interest Decision and Expropriation decision	AYGM submits application for Public Interest Decision from the Ministry of Transport and Infrastructure Investment (planned for 15 th April 2021). Once approved by the Minister, AYGM will issue the Expropriation Decision for the parcels that are identified within the expropriation corridor, allowing the commencement of land acquisition.
Step 3	Valuation verification and development of expropriation files	<p>Before notifying PAPs of the Project's expropriation requirements and impacts on landowners and users, AYGM will verify the valuations undertaken in the 2020 asset inventory update and prepare expropriation files for each affected landowner of structures, crops and trees.</p> <p>A key aspect of this verification will be to check that the cost of replacement materials excluding depreciation is sufficient to buy an equivalent property on the market.</p> <p>The expropriation files constitute the basis for expropriation decisions. They will be drawn up for each local community and include the following:</p> <ul style="list-style-type: none"> Decision on public interest; Expropriation map; Land survey record; Technical documentation (Drawings Calculations, Reports); Registration Record; Title Deed or Ownership Record; Address records; Birth registration as per inheritance certificate for deceased owners; and The identification number of the absentee owners together with the official records proving the absenteeism as defined by the Law.
Step 4	PAP consultation and notification	<p>AYGM will organise and implement the community meetings, meetings with vulnerable PAPs and other stakeholder engagement in parallel to this land acquisition and compensation process, as described in the SEP. Once the individual expropriation files are ready for PAPs, AYGM will contact the owners of affected assets and invite them to negotiate.</p> <p>AYGM will inform each owner with an official announcement locally at least 15 days prior to any negotiation meetings as defined by law (this time period can be extended depending on the project schedule). This same approach will be carried out for users of land and assets (formal and informal). These letters are addressed to the registered landowners and users individually to notify them that there will be a meeting with regard to their particular land parcel and any associated structures and assets on that land on a specified date and location.</p> <p>The landowners would report any structures, assets or trees on their land that they do not own. If this is the case and there are separate owners of structures, assets and trees on the land (but they are not the landowner), these parties are then invited to participate in the negotiation meetings, which they are notified of through general local announcements.</p>
Step 5	Negotiations with PAPs	<p>During the negotiation meeting (attended by men and women of the household where possible), owners are presented with the offer price for land and/or assets (e.g. structure, trees and crops). The owners of the structures, assets and tree owners become part of the negotiation process, where relevant. If the registered landowners agree that these structures, assets or trees belong to the claiming owner, then they are paid to owner of those structures, assets or trees.</p> <p>Those using the land (both formally and informally) will be invited to separate negotiations on the affected land parcel. They will be provided with their entitlements – compensation and/or access to the Livelihood Restoration Plan. Refer to Chapter 9: Livelihood Restoration Plan for further details on how PAPs can apply for these entitlement measures.</p> <p>The payment conditions and evacuation schedule will then be made available to both the landowners and the owners of the structures, assets and trees and their users. After the negotiation, AYGM will allow the landowner at least 3 months to vacate the expropriated land, allowing for removal arrangements and alternative accommodation to be procured by the PAP.</p>
Step 5A	Non-Agreement Case	In the event of disagreement (e.g. valuation not deemed suitable by the owner or land user), AYGM and/or the PAP will submit this as a complaint and a solution will be provided through the two-stage Grievance Mechanism described in the SEP . Solutions can be agreed between AYGM and the PAP virtually (e.g. through discussions using video chat software or telephone) to facilitate the quick response and resolution of these grievances.

Step	Action	Description
		<p>If a solution is still not acceptable to either party, AYGM will apply to the court by submitting the existing information and documentation in relation to the land and/or structure, trees and crops subject to expropriation, together with the evaluation reports, requesting re-valuation of the affected assets by the court-appointed expert commission.</p> <p>Although the Project has acquired the right to expropriate land where needed, including expedited (immediate) expropriation, AYGM will seek to establish negotiated settlements with PAPs through ongoing transparent communication. Triggering of immediate expropriation will be avoided by AYGM. Where this is not possible, the compensation principles in the RAP will still be followed, e.g. payment made to PAPs prior to land entry.</p> <p>However, if immediate expropriation would lead to cases of forced eviction, the immediate expropriation process will not be permitted (i.e. eviction without due process).</p>
Step 5B	Agreement Case	When an agreement is reached between AYGM and the owner/user, an agreement protocol is prepared and signed between both parties, stating acceptance of the compensation amounts.
Step 6	Disbursement of compensation	<p>Compensation for this Project will be financed through two separate funding sources:</p> <ul style="list-style-type: none"> Funds allocated from the Ministry of Treasury and Finance for implementation of the Expropriation Law ("National Legislation"): This source will provide compensation to PAPs in line with Turkish legislation (see Chapter 3: Legislative Framework, Policy and Guidance). Compensation provided through national legislation will be disbursed by the AYGM PIU. RAP Fund: A separate RAP Fund, financed by the Lenders, as part of the agreed loan, will be established to ensure cash and in-kind compensation meets full replacement value in accordance with PR5 requirements. Compensation provided through this RAP Fund will be disbursed by AYGM. <p>Payment of the compensation through national legislation (see Chapter 11: Implementation Costs and Budget) to owners and users will be paid within 45 days of title deed transaction. Due to the timing of the loan, the additional compensation provided through the RAP Fund may be disbursed to PAPs after the funds from the Ministry of Treasury and Finance. However, both allocated compensation amounts will be provided before the PAP must leave the expropriated land and the land is transferred to the Contractor.</p> <p>Construction will not commence unless the payment process is completed, certified attempts are made to negotiate the transfer of ownership or use rights from private owners, and full payment in cash is made to the account of the owners.</p> <p>AYGM will <u>deposit the agreed compensation</u> amounts in a general bank account under the name of the entitled rightsholder. <u>In order to avoid the mismanagement of these compensation amounts</u>, there is a clause in the agreement protocol allowing the PAP to grant permission to the account for their partner for the specific land/asset. AYGM will also inform partners of PAPs of the expropriation process through the planned engagement activities, including women-only meetings.</p> <p>Compensation paid through court decisions will be deposited into to the court announced bank accounts.</p> <p>Landowners will not have any involvement in opening bank accounts or be required to pay any fees charged by the bank for opening such accounts.</p>
Step 7	Transfer of land titles	Land titles will be transferred from the PAP to the Treasury at the Title Deed Office after an agreement is reached and full compensation is paid. The official land use will also be changed, giving AYGM the legal right to use the land for the construction of the railway.
Step 8	Land Delivery Protocol	<p>After land is acquired by AYGM, it will be transferred to the Contractor. Land delivery will be regulated by a Land Delivery Protocol that will be signed by the representatives of AYGM and the Contractor. The Land Delivery Protocol shall clearly identify each land parcel in the expropriation corridor and/or any other sites that shall be transferred to the Contractor. The Land Delivery Protocol shall contain the following attachments:</p> <ul style="list-style-type: none"> Land acquisition drawings identifying the exact location of the Project alignment and centreline, the boundaries of the acquired expropriation corridor that are subject to transfer, the identification of parcel boundaries and land parcel numbers for all land affected land parcels; List of coordinates to allow the setting out of the expropriation corridor boundaries in the field; and List of landowners and land users or tenants for all transferred land parcels. <p>In cases that land acquisition activities have not yet been completed for individual land parcels within a section of the expropriation corridor subject to delivery to the Contractor, these individual land parcels shall be listed on the relevant Land Delivery Protocol and upon availability shall then be transferred by another, individual Land Delivery Protocol.</p> <p>The Contractor shall under no circumstances enter into land that has not been delivered through a Land Delivery Protocol or for which they have not established rights through a rental agreement with the relevant landowner.</p>

Step	Action	Description
Step 9	Re-seeding avoidance	In agricultural areas, AYGM will disburse crop compensation payment for the actually seeded crop type shortly prior to land delivery to the Contractor or will wait until harvesting, depending on the construction schedule. In order to avoid re-seeding and potential claims by the landowners, the Contractor shall stake out all delivered land sections within 4 weeks after land delivery.
Step 10	Land entry	<p>Following the possession of the site by the Contractor through the Land Delivery Protocol, or rental agreement, the Contractor shall notify the affected landowners and/or tenants and sign a Land Entry Protocol at least 3 days prior to physically entering any land in the expropriation corridor. The Land Entry Protocol shall be signed between the landowner/land user of the land and the representative of the Contractor, being witnessed by representatives of AYGM and the Mukhtar. Once the Land Entry Protocol has been signed, the Contractor will stake out the construction site and prepare construction plans and procedures to be submitted to AYGM.</p> <p>After AYGM has approved the stake out and the Construction Supervising Engineer has agreed on the construction plans, the Contractor will be able to commence with the construction works.</p>
Step 11	Land acquisition and impacts during construction	<p>The Contractors will require temporary access to land for construction compounds and construction access roads. The Contractor will establish rental agreements with landowners to access these additional lands. The Contractor will follow the valuation methodologies and entitlements matrix presented in this RAP when making these agreements.</p> <p>The Contractor will ensure the construction works are planned to minimise congestion, road safety risks, disruption for all road users and ensure continued access to pasture areas. Prior to detailed design, grazers will be consulted on the location of temporary crossings during Project construction and permanent crossings over/under the Project alignment; this is included as an ESAP item.</p> <p>Overall, the Contractor will carry out the following additional procedures:</p> <ul style="list-style-type: none"> ■ Identification of additional required construction areas (construction compounds and access roads), including site survey and staking out and mapping of required areas; ■ Environmental and social screening of additional areas to be used by the Contractor on a temporary basis during construction, outside of the expropriation corridor; ■ Sanctioning of additional areas by the Supervision Consultants' Land and Permit Supervisor; ■ Sanctioning of additional areas by AYGM; and ■ Land Entry Protocol carried out in accordance with the RAP. <p>The construction activity may also impact additional land, standing crops, and other immovable assets including trees and structures outside of the expropriation corridor and temporarily land. The contractor will therefore prepare and maintain an inventory of the additional assets impacted through the construction phase. In addition, the Contractor shall provide official document on payment made to PAP to AYGM to confirm that payment has been made as required under PR5. If payments are not made via bank account transfer, a statement signed by the landowner shall be provided to close-out land exit.</p>
Step 12	Exit of temporary land	<p>After completion of the construction activities, the Contractor is responsible for the return of the land temporarily used to its original state and to the original owner and/or land tenant. The return of the land shall be documented in a Land Exit Protocol that shall be concluded between the Contractor and the original owner and/or the land tenant. The signing of the protocol shall be witnessed by an authorised representative of AYGM (e.g. CLO).</p> <p>In the Land Exit Protocol, it will be confirmed by the landowner/tenant that all eventual claims of the landowner or tenant towards the Contractor have been addressed and settled. During the land exit, the landowner/tenant shall receive and confirm the receipt of an information pamphlet or paper addressing the operation and emergency procedures for the Project and specifically any restrictions that may be imposed onto the land. The process is presented below:</p> <ol style="list-style-type: none"> 1. Completion of all construction, installation and testing works and site clean-up works; 2. Completion of all reinstatement work (e.g. slope stabilisation and erosion and surface reinstatement); 3. Formal Request for Land Exit by Contractor with completion of works to AYGM's Social and Resettlement Specialist; 4. Distribution of land re-use conditions pamphlet to landowners/land users; and 5. Signing of Land Exit Protocol with landowner/land user in the presence of AYGM representative (e.g. Supervision Consultant).
Step 11	Transfer of rights from AYGM to TCDD	<p>The process of transferring rights from AYGM to TCDD is defined below for when the construction is completed, and operations can begin:</p> <ol style="list-style-type: none"> 1. AYGM requests authorisation to perform land rights transfer, through a district-based umbrella protocol;

Step	Action	Description
		<ol style="list-style-type: none"> 2. Authorisation from the General Directorate of Title Deed and Cadastre allowing the transfer of acquired land rights (ownership and easement rights) by the above umbrella protocol; 3. Transfer of land rights through the umbrella protocol: <ol style="list-style-type: none"> a. Attachment to umbrella protocol containing all individual Title Deed Records showing AYGM as Right Holder of the acquired Rights to land (easement or full Land Title); b. Initiation to update the official Title Deed and Cadastral Information System (TAKBIS) and resubmission of all Title Deeds showing TCDD as the relevant rights holder; c. Submission of all updated Title Deeds showing TCDD as the rights holder for all acquired land rights; and 4. Transfer of Final Documentation of Land Acquisition Process.

6.5 CHALLENGES RELATED TO PRIVATE LAND ACQUISITION

- 6.5.1. There are many situations where challenges may be encountered during land acquisition activities. The main issues have been analysed by AYGM, and the following solutions have been provided:

Table 6-3 - Land Acquisition Issues Identified and Proposed Solutions

Issue	Solution
Title deeds may not reflect changes in ownership due to sale of property / landowner or deceased, and heirs are not motivated to register their inheritance claims as their compensation expectations are low.	The Project will offer to cover the costs of the power of attorney and registration cost of land rights of heirs in title deed offices – see Chapter 8: Eligibility and Entitlements . During consultations, AYGM will also emphasise the necessity of naming heirs, regardless of gender.
Land may be cultivated by one of the joint owners and non-users may have little interest in attending negotiation meetings or providing the user with power of attorney to sell or rent the property. Absentee owners may be reluctant to provide their resident co-owners a power of attorney to act on their behalf. Absentee PAPs with small amount of affected land may not be interested in incurring the cost of travelling to negotiation meetings.	The Project will offer to cover the costs of the power of attorney and registration cost of land rights of heirs in title deed offices – see Chapter 8: Eligibility and Entitlements . AYGM recognise that even when promises made to reimburse owners for such transaction costs, arrangements are difficult to make, and the monetary motivation may be too small for co-owners to spend time and incur costs travelling to attend negotiation meetings. In these cases, AYGM will reiterate that power of attorneys are provided to an available shareholder or other representative to sign expropriation agreements on their behalf.
The local courts may have limited capacity to respond to expropriation applications made simultaneously by several institutions. Further, there may be existing lawsuits on affected assets which might delay the land acquisition process.	AYGM will undertake meetings with local courts prior to carrying out negotiations with PAPs to establish the current capacity of each court. AYGM will stagger the expropriation court proceedings, if required, keeping PAPs informed of the process and their likely court dates. All unsettled negotiations will also first be submitted through the Grievance Mechanism as described in the SEP . This process should attempt to provide a solution before requesting court proceedings, however this may not always be possible.
Land plots might have multiple owners where some cannot be reached, or some might not share similar views.	The land acquisition process to be followed in cases of joint ownership is provided in Figure 6-5 below.
A large percentage of owners do not have connections to their land due to high rates of rural exodus and outmigration for social (e.g. marriage) and economic (employment) reasons.	The Project will offer to cover the costs of the power of attorney and registration cost of land rights of heirs in title deed offices – see Chapter 8: Eligibility and Entitlements .

Issue	Solution
Further, land may be fragmented as the share of heirs get smaller and heirs who do not cultivate it are reluctant to register their inheritance claims in order to avoid taxes.	
Some title deeds might be in the name of a deceased person.	The land acquisition process to be followed in cases of the title deeds in the name of a deceased person is provided in Figure 6-6 below.
The individual rights of the heirs might not be registered.	AYGM will work with the affected households to determine the rights of the heirs. The Project will offer to cover the costs of the power of attorney and registration cost of land rights of heirs in title deed offices – see Chapter 8: Eligibility and Entitlements .
Families delay title deed changes for shares inherited.	In consultations with affected households, AYGM will emphasise the necessity for the title deeds to be up-to-date, in order for the suitable heirs to receive the appropriate compensation. The Project will offer to cover the costs of the power of attorney and registration cost of land rights of heirs in title deed offices – see Chapter 8: Eligibility and Entitlements .
The liable owners avoid paying inheritance taxes.	The Project will offer to cover the costs of the power of attorney and registration cost of land rights of heirs in title deed offices – see Chapter 8: Eligibility and Entitlements .
In identifying landowners and land users, owners are more easily identified than tenant farmers and other non-owners.	The 2020 Household Survey identified a number of formal and informal land users. These individuals will be consulted through the specific engagement activities provided in the SEP . Further users will also be identified through the disclosure of the RAP and public meetings being carried out. They will have the opportunity to claim entitlements and apply for measures within Chapter 9: Livelihood Restoration Plan .
Information about the Project and invitations for negotiations may not reach shareholders who may be away for seasonal work.	<p>The 2020 Household Survey found that some PAPs live away from the land to be expropriated, however Mukhtars and neighbours were largely able to find contact details for these owners and users. The RAP and supporting documents will also be circulated to these shareholders through AYGM's public disclosure of the ESIA documentation.</p> <p>The household survey also found that no seasonal workers use the land to be expropriated by the Project.</p>

Issue	Solution
<p>The necessity to find the addresses of a large number of absentee owners might require significant effort.</p> <p>This is considered as part of the address identification stage of the land acquisition process; through first requesting this information from the birth registry office for which any person should be registered to a permanent address given by Population Services Law, Law No. 5490. In addition, for those not registered, this will be investigated further through local municipalities, title deed offices, Mukhtars, etc.</p>	<p>The 2020 Household Survey found that some PAPs live away from the land to be expropriated, however Mukhtars and neighbours were largely able to find contact details for these owners and users.</p> <p>Nevertheless, a number of owners living away from the expropriation are yet to be identified. AYGGM has 8 months from RAP disclosure to the approximate beginning of construction to identify and negotiate with these persons. AYGGM has dedicated professionals in the RAP PIU to identify these owners. Compensation for PAPs that have not been identified will be transferred to an escrow account, ensuring that it is available for the PAP, if identified. This is also valid for disputed ownership.</p>
<p>The absentee shareholders (multiple owners) may refuse to go to a notary public and pay for a power of attorney in the name of the resident shareholder to attend negotiations on their behalf. Information required for a power of attorney may also be unavailable.</p>	<p>The Project will offer to cover the costs of the power of attorney and registration cost of land rights of heirs in title deed offices – see Chapter 8: Eligibility and Entitlements. The land acquisition process to be followed in cases of multiple ownership, provided in Figure 6-5 below, also includes the court procedure for shareholders which cannot agree on an expropriation agreement.</p>

6.6 LAND ACQUISITION PROCESS FOR DIFFERENT OWNERSHIP STATUS

- 6.6.1. The fundamental land acquisition process will be the same for all PAPs with some modifications depending on the current ownership status of private lands. These are presented below for single landowners (**Figure 6-4**), shareholders (**Figure 6-5**) and deceased owners (**Figure 6-6**). Please note that the 2020 Household Survey did not identify any ongoing land consolidation in the expropriation corridor.

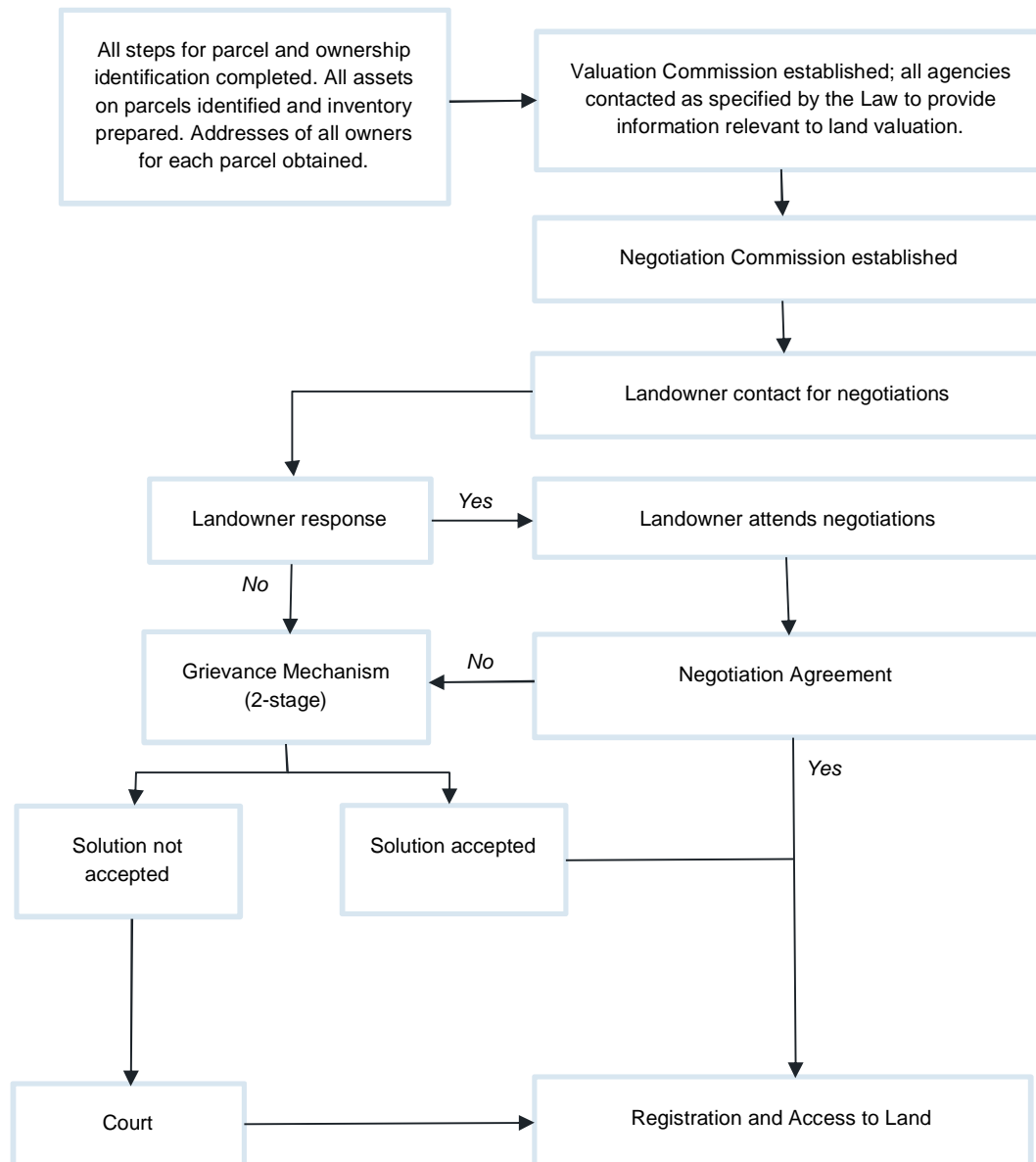


Figure 6-4 - Land Acquisition Process for Single Landowners

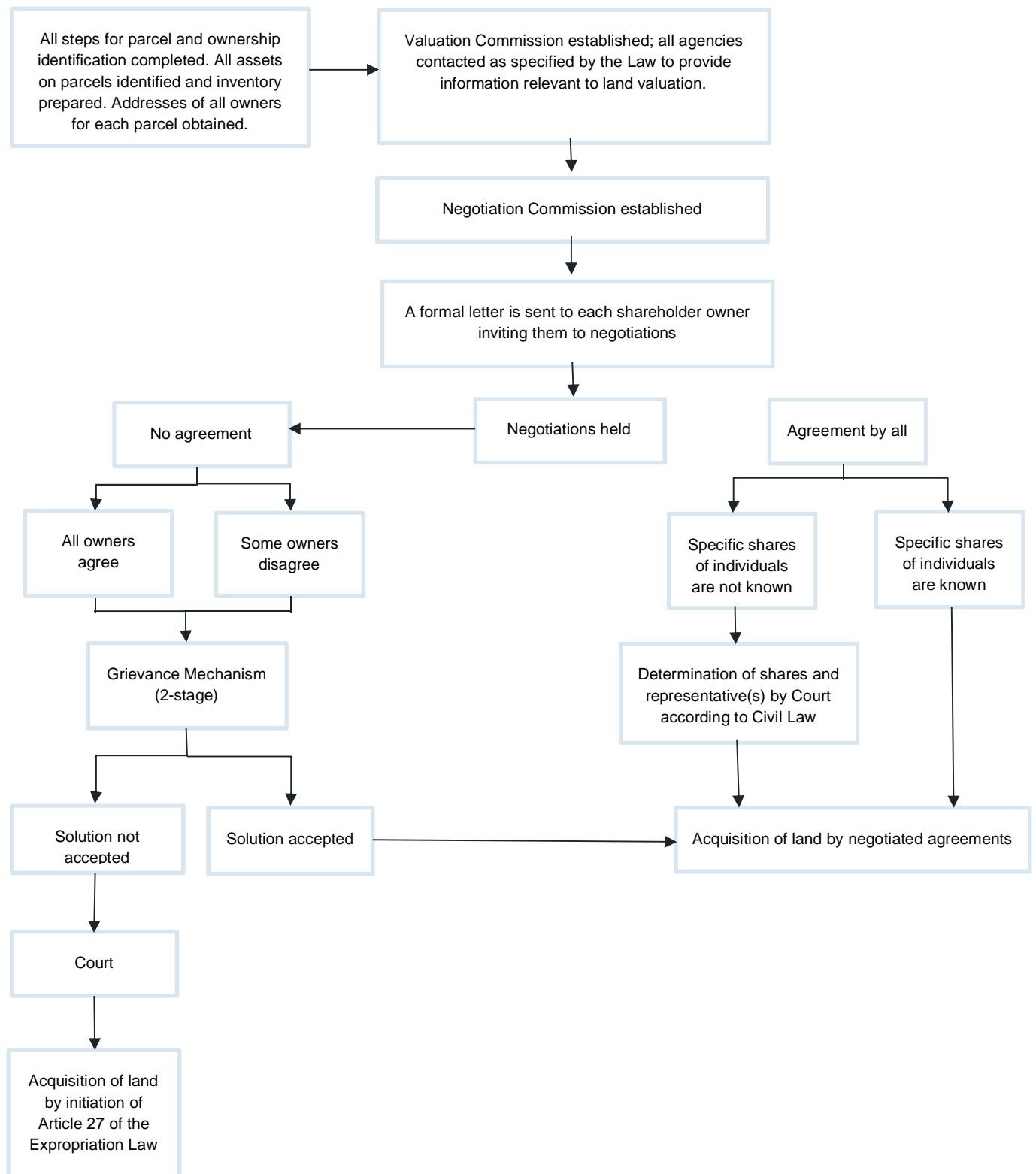


Figure 6-5 - Land Acquisition Process for Shareholders (multiple owners)

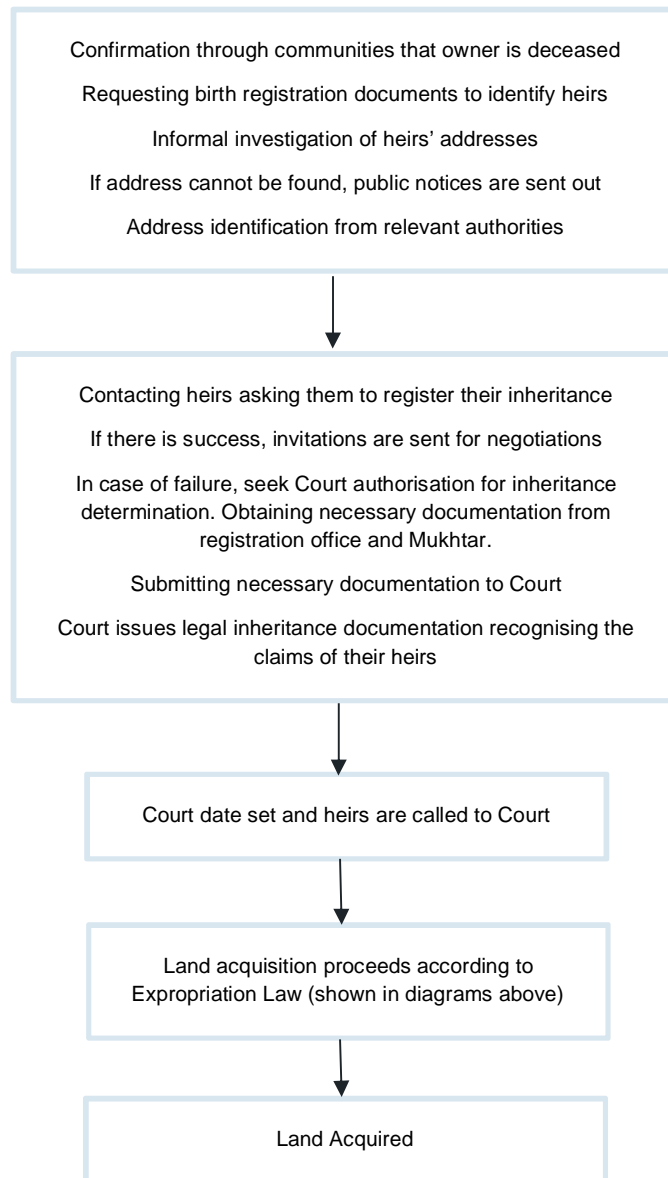


Figure 6-6 - Land Acquisition Process for Deceased Owners

6.7 COURT PROCESS

- 6.7.1. **Figure 6-7** overleaf presents the Court process for Article 10 of the Expropriation Law when PAPs and AYGM do not come to an expropriation agreement after negotiations.

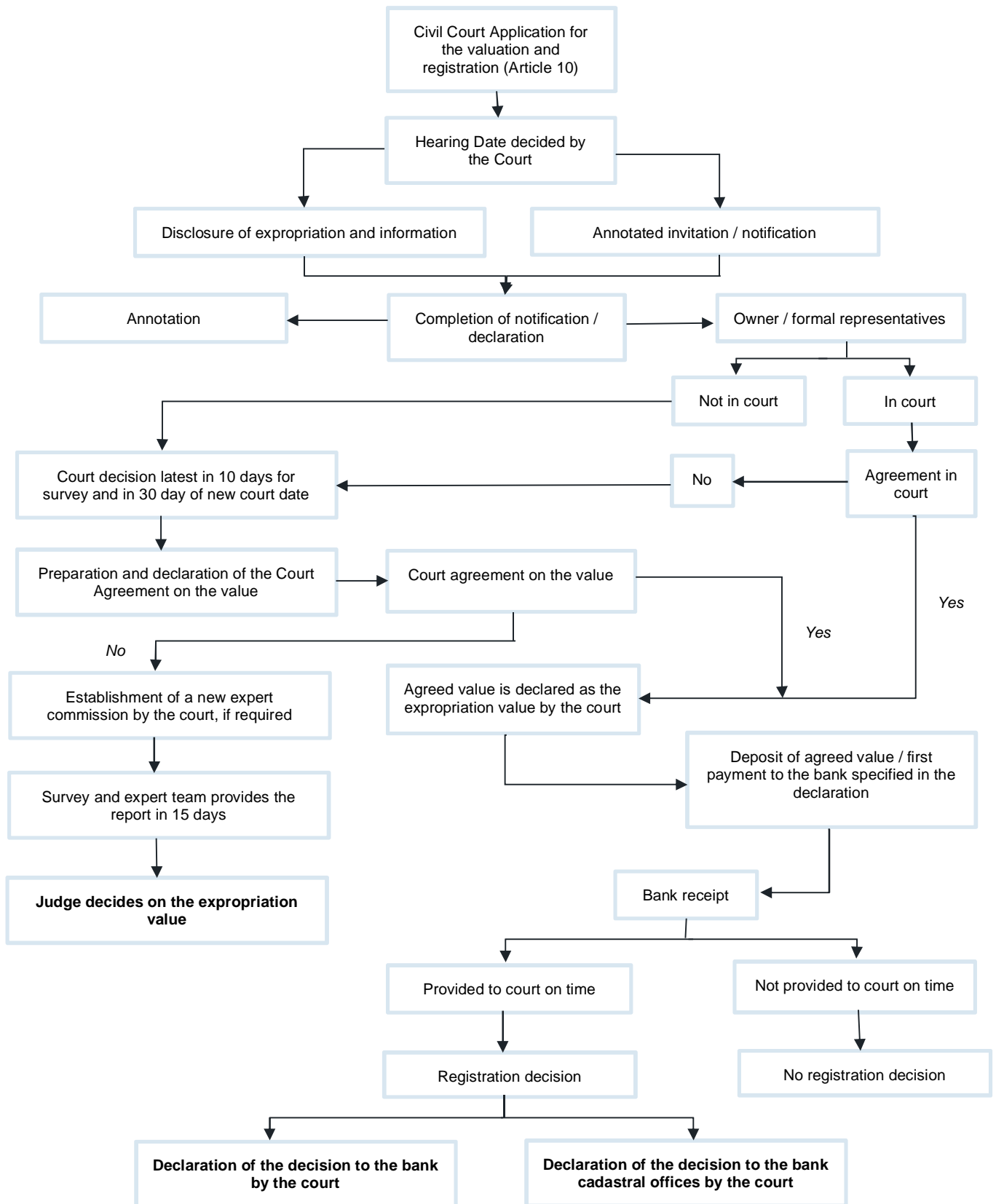
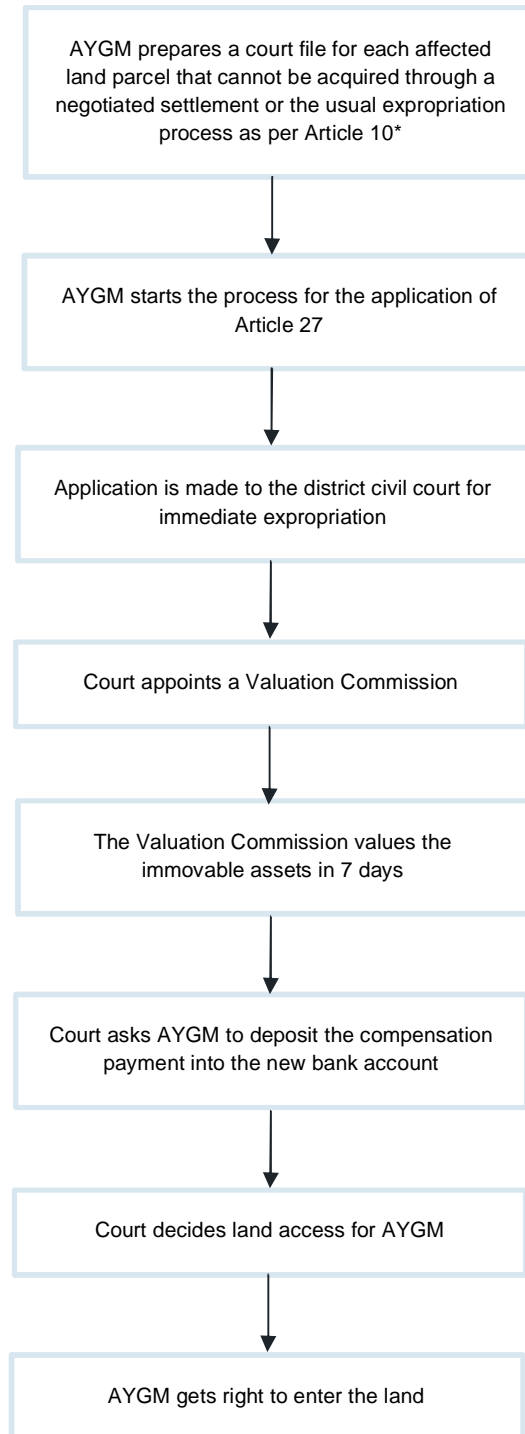


Figure 6-7 - Expropriation Law Court Process for Article 10



* This will include cases where expropriation of land parcels are required quickly (e.g. unforeseen expansion of expropriation corridor) and in cases where the usual expropriation process is significantly delayed (over 6 months).

Figure 6-8 - Expropriation Law Court Process for Article 27

6.8 ACQUISITION OF PUBLIC LAND

6.8.1. AYGM will also undertake the acquisition, transfer and entry of land registered to other state departments. This will include the following:

- **Forestry Land** – Forested land (all owned by the Ministry of Agriculture and Forestry) will be acquired through long term rental (49 years), agreed upon by the local Forest Directorates. Subsequent permits are obtained for AYGM.
- **Treasury Land** – Acquisition of Treasury land is processed through correspondence and no payment is made for such land.
- **Other State Authority Land** (e.g. TOKI, municipalities, etc.) – Land owned by other state authorities is subject to Article 30 of the Land Acquisition Law. This process is very similar to private land ownership, but the negotiation is carried out in written correspondence. If the price offer made by AYGM is accepted by the authority, meaning that agreement is reached, then payment is made and title deed transfer to AYGM is completed. In case the owner entity does not consent or respond within 60 days to the petition, AYGM shall approach the Council of State of Appeals (“Danıştay”) to resolve the issue within 60 days (in line with the Article 30 of the Expropriation Law). The relevant public landowner may accept the transfer of right but may object to the land value. In this case, the Article 10 court process will be applied.
- **Pastureland and Village Common Land** – Land allocated for pasture will be acquired through changing the status from pastureland to Treasury land and will be treated as Treasury land.
- **TCDD** – There will be no land acquisition of TCDD land, with the understanding the land will be transferred back to TCDD after the completion of construction.

6.9 PROTECTION OF COMPENSATION PAYMENTS AGAINST INFLATION

- 6.9.1. The local legal system allows property owners to receive interest on payments deposited on their behalf by the expropriation agency for assets expropriated for a Project declared to be in public interest. The rate of interest that accrues on the deposits is based on official government rates and is determined periodically based on economic conditions. Therefore, PAPs are protected against potential losses due to inflation as per Article 3 of the Expropriation Law.
- 6.9.2. Article 3 allows the PAPs to receive fair compensation in full and in cash in a timely manner. For cases that have been subject to court proceedings, the delays in having access to payments may result from a number of reasons, including the absence of the affected persons from the country and/or the region. This is valid whether the expropriation is paid in a lump-sum or in pre-determined equal instalments. The compensation payments are required to be made over a maximum of 5 years. When this happens, interest is applied to instalments. In addition, payments for owners of small farms are made in full and in cash; thus the small farmers are protected.
- 6.9.3. Another aspect of the recent legal changes also protects the PAPs by requiring interest payments to be made should legal response to court process not be completed within 4 months.

6.10 QUALITY CONTROL OF LAND ACQUISITION

- 6.10.1. To ensure smooth implementation of land acquisition activities, several proactive measures will be taken, including:
- Weekly progress reporting pertaining to the land acquisition process and measures taken to address any issues will be undertaken by AYGM. In addition, adherence to or departure from

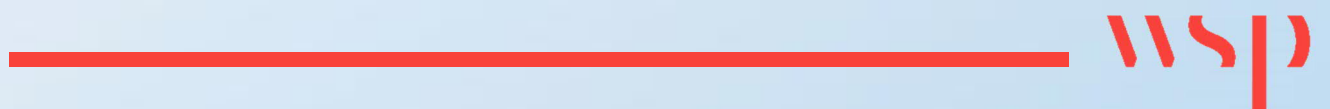
scheduled land acquisition activities will also be reported. A well-structured and functional reporting format will be developed by AYGM in collaboration with supporting organisations and Lenders;

- Consistent document numbering/coding – will be established for all documents, information and data. All documents and drawings shall be delivered as described in the document titled; and
- Regular Interface Meetings between the Contractor, AYGM, Lenders and External Independent Monitoring Consultant.

During the performance of the land acquisition programme, tracing the number of performed negotiations in relation to the number of obtained amicable agreements will be specifically monitored as described in **Chapter 10: Monitoring and Reporting**. This will allow AYGM to trace the effectiveness of performed negotiations and will also allow the application of corrective measures, where required.

7

VALUATION METHODOLOGY



7 VALUATION METHODOLOGY

7.1 INTRODUCTION

- 7.1.1. The valuation of all affected land and other structures impacted by the Project will be made in accordance with PR5, national legislative requirements and EU legislative requirements. In accordance with Article 8 of the Expropriation Law in Turkey, AYGM will internally establish a Valuation Commission, consisting of at least 3 people, in order to determine the replacement value of the land and other structures affected by the Project. Further information regarding legislation and requirements are provided in **Chapter 3: Legislative Framework, Policy and Guidance**.
- 7.1.2. The Entitlements Matrix presented in **Chapter 8: Eligibility and Entitlements** provides a complete list of entitlements for different groups of PAPs.
- 7.1.3. This chapter describes the valuation methodology adopted for the Project compensation and assistance measures. All PAPs will be compensated under the same defined valuation procedures.

7.2 LOSS OF LAND

VALUATION TO CALCULATE COMPENSATION FOR AGRICULTURAL LAND

National Valuation

- 7.2.1. 'Net Income Capitalisation' is the valuation method used for calculating compensation in relation to the loss of agricultural land in Turkey. This method calculates the value of the land based on the net income gained from the crops⁵³ over a defined period of time, and it is implemented prior to the construction phase of the Project commencing.
- 7.2.2. The net income from Project affected agricultural land is determined based on the following steps:
 - Gross income is calculated by multiplying the quantity of the annual crop produced by each land parcel with the crop unit price⁵⁴ (e.g. a price per kg⁵⁵) for the relevant valuation year.
 - Net income is obtained by subtracting the production costs associated with the annual crop from each land parcel, from the gross income for that crop.
- 7.2.3. The net income is then multiplied by the capitalisation rate, which is explained in section 7.2.5, to obtain the national valuation of the compensation.
- 7.2.4. The formula used during valuation of the agricultural lands is $R/f=K$, where:
 - R = Net income (gross income - production costs);

⁵³ Land valuation for annual crops is based on an annual yield. Whilst for perennial crops, it is based on total yield gained throughout their economic lives. No perennial crops were identified as being produced on a large scale during the household survey or asset inventory update in 2020. However, some may be being grown within the vegetable gardens of private households for subsistence purposes.

⁵⁴ The unit price of an annual crop is based on its market value, as determined by the Ministry of Agriculture and Forestry.

⁵⁵ For example, the average crop unit price for wheat in 2019 was 1.25 TL/kg.

- F = the capitalisation rate (risk related to the capital invested in agricultural land); and
- K = Value (national valuation of compensation).

- 7.2.5. The capitalisation rate is a key metric for the valuation of agricultural land. The net income of affected agricultural land is multiplied by this rate to determine its current value. The average capitalisation rate is calculated by dividing the yield of the crop (determined by the Ministry of Agriculture and Forestry, and its Provincial Administrations, each year) by the crop unit price. The independent asset valuation surveyors will then adjust the value of the land parcel depending on the specific characteristics (positive and negative) of the agricultural land being valued. Positive land characteristics will decrease the capitalisation rate, while negative characteristics will increase it.
- 7.2.6. Factors that positively affect the capitalisation rate (i.e. decrease the capitalisation rate) and therefore increase the calculated value of the agricultural land parcel are as follows:
- Proximity to a city or town;
 - Proximity to access roads (land, railway, airway);
 - Favourable transportation conditions;
 - Buildings (if any) in good condition;
 - Undivided land;
 - Smooth and well-shaped land;
 - Security and safety of land;
 - Ease of purchasing and selling;
 - Land having title deed registration;
 - Cadastral surveys⁵⁶ completed for land;
 - High population densities;
 - Easily changeable rotational cultivation system (applicability of crop diversity); and
 - Favourable irrigation conditions, if it is irrigated land.
- 7.2.7. Factors that negatively affect the capitalisation rate (i.e. increase the capitalisation rate) and therefore decrease the calculated value of the agricultural land parcel would be the inverse of those listed in paragraph 7.2.6.
- 7.2.8. To ensure the net income capitalisation valuation has been correctly implemented, the independent asset valuation surveyors will visit the land parcels to be expropriated to identify both the current land use, and to determine all the factors that may affect the final calculated value of the land parcel⁵⁷ as defined in national legislation. This approach identifies the final value required to provide compensation in accordance with national requirements, however, it does not meet full replacement value as required by PR5, and as such additional compensation is required to meet replacement value for agricultural land, as described in the section below.

⁵⁶ Cadastral surveys are generally performed to subdivide land into parcels for ownership under a land title and to re-establish boundaries of previously surveyed properties to determine the physical extent of ownership or to facilitate the transfer of the property title .

⁵⁷ In the case of shareholders of agricultural and non-agricultural land, each will be compensated proportionately to the percentage of land owned as registered in the title deed.

Additional Compensation Required for PR5 Replacement Value

- 7.2.9. If in-kind compensation is preferred by the PAP, and available in the form of replacement agricultural land, the replacement land will be offered to the PAP. If replacement agricultural land is not available, PAPs will be offered cash compensation. The in-kind agricultural replacement land will be equal to, or over, the full replacement cost of the agricultural land that is lost by the PAP.
- 7.2.10. On top of this replacement agricultural land, additional allowances may be required to make this replacement land suitable for agricultural use. These additional allowances, such as registration fees, will be provided by AYGM, and PAPs will be able to apply to relevant agricultural livelihood restoration measures, as described in **Chapter 9: Livelihood Restoration Plan**.
- 7.2.11. These additional allowances required to facilitate in-kind compensation will be considered on a case by case basis by AYGM when replacement land is requested by a PAP.

VALUATION TO CALCULATE COMPENSATION FOR NON-AGRICULTURAL LAND

National Valuation

- 7.2.12. 'Market Comparison Valuation Method' is the methodology used for calculating the value of non-agricultural land parcels in Turkey. This valuation method for non-agricultural land parcels, defined explicitly in national legislation, is calculated by comparing the land parcel being valued to the sale prices of non-agricultural land parcels with similar characteristics. To ensure the robustness of this approach, a large number of purchase and sale values are obtained and compared, to inform the calculation of the value of the specific land parcel to be expropriated.
- 7.2.13. Land parcels are evaluated either by Net Income Capitalisation (as described in Section 7.2) or by Market Comparison Valuation Method as explicitly defined in national legislation in Turkey. If the particular land parcel is in the zoning plan, or benefits from municipal services, or is available for urbanisation activities, it is evaluated using this Market Comparison Valuation Method (the land parcel may still be used for agricultural purposes, but the land parcel's land use is recorded in title deeds as non-agricultural). However, if a land parcel does not meet these specified conditions, meaning that the settlements they belong to are located outside the zoning plans, or they are not zoned for any further improvement or development as tourism areas, they are considered to be agricultural land and subject to the Net Income Capitalisation valuation (as described above).
- 7.2.14. In addition to the comparison with similar non-agricultural land parcels, further data related to market prices was collected and included into this valuation method for the Project. This includes:
- Expropriation values previously used by AYGM;
 - Tax values from the tax offices;
 - Real estate value statements from the local municipalities;
 - Purchase/sales values from the title-deed registry office;
 - Values based on the cadastral fee⁵⁸ for the works carried out, if any, from the cadastral offices;

⁵⁸ Cadastral fee is a fee charged by the General Directorate of Land Registry and Cadastre for any work or processing support, if required.

- Purchase/sales information from the Chamber of Industry and Commerce as well as other relevant professional organisations; and
- Purchase/sales values from real estate offices.

- 7.2.15. As part of the valuation method adopted, the independent asset valuation surveyors consider all the factors that may affect the land parcel value in their valuation. In settlements, proximity to the settlement centre and major roads are notable factors in determining the non-agricultural land parcel value. Non-agricultural land parcels close to settlement centres and major roads are more expensive than others which are located further away from these areas. Non-agricultural land value can also be affected by surface topography, soil properties (e.g. those that affect construction) and proximity to transport infrastructure.
- 7.2.16. The final value calculated using this valuation method meets national compensation requirements for non-agricultural land. However, it does not meet full replacement value as required by PR5, and as such additional compensation is required to meet replacement value for non-agricultural land as described in the section below.

Additional Compensation Required for PR5 Replacement Value

- 7.2.17. If in-kind compensation is preferred by the PAP, and it is available in the form of replacement non-agricultural land, then replacement land will be offered to the PAP in the first instance. The in-kind non-agricultural land will be equal to, or over, the full replacement cost of the non-agricultural land that is lost by the PAP. If such in-kind replacement land is not available, then the PAP will be compensated using the national valuation method defined by Turkish law.
- 7.2.18. In addition to this replacement land, additional allowances may be required to make this replacement land suitable for use. These additional allowances, such as registration fees, will be provided by AYGM, and PAPs will be able to apply to relevant livelihood restoration measures as described in **Chapter 9: Livelihood Restoration Plan**. These additional allowances required to facilitate in-kind compensation will be considered on a case by case basis by AYGM when replacement land is requested by a PAP.

VALUATION FOR COMPENSATION TO FORMAL TENANTS AND INFORMAL USERS OF LAND

- 7.2.19. Turkish legislation does not provide compensation under national legislation to informal land users public land that they use. Under PR5, these affected land users will need to be compensated for the loss of access to such land. This compensation will be met by the separate RAP Fund to meet PR5 requirements.
- 7.2.20. Rental allowance for formal tenants will be provided for a maximum of 3 months cost of rent, in accordance with the current tenancy agreement, as described in **Chapter 8: Eligibility and Entitlements**. The monthly cost will be determined based on the formal tenancy agreement, if available. Formal tenants are also entitled to reimbursement for the cost of any improvements made to land during their tenancy, if undertaken by themselves (e.g. installed irrigations systems and concreting). AYGM has calculated these costs as part of the 2020 asset inventory update. These improvement costs will be allocated to the formal tenant and reimbursed through the RAP Fund to meet PR5.

- 7.2.21. Under PR5, informal users of land are entitled to the reimbursement for the cost of improvements made to agricultural land during use (as determined by AYGM asset valuers and independent asset valuation expert). If required, this would be reimbursed through the RAP Fund.

VALUATION OF COMPENSATION FOR PERMANENT EASEMENT ON AGRICULTURAL AND NON-AGRICULTURAL LAND

National Valuation

- 7.2.22. Easements may be preferred to expropriation of land by AYGM. This will be determined by AYGM prior to compensation discussions with the PAP.
- 7.2.23. In accordance with national legislation, easement can be granted for a certain portion of a land parcel (or elevation/depth over/underground level) instead of expropriation. Easement agreements do not require the owner of the land to be changed, and the integrity of the land is maintained. Easements can potentially be agreed for areas requiring the construction of bridges, viaducts, tunnels, overpasses and underpasses which require long-term use by AYGM, provided that the PAPs use of the land, as well as the integrity of the land, is not permanently impacted.
- 7.2.24. The easement cost is calculated, in accordance with national legislation, as the difference between the value of the land before and after the investment. The loss in value of the land due to the easement will be derived from the lost economic potential of the land, such as through loss in total land area.
- 7.2.25. If there is no special circumstance significantly affecting the use of the land, the loss of land value (namely the easement value) will not exceed: 35% of the value of the total agricultural land parcel area affected (as a maximum), or 50% of the value of the total non-agricultural land parcel area affected (as at maximum). This condition is further amended in Expropriation Law as per Supreme Court Decision. If significant restrictions will be incurred by the current landowner due to the easement, AYGM will expropriate the land parcel instead under the Expropriation Law.

SUPPLEMENTARY VALUATION FOR UNVIABLE LAND

- 7.2.26. If the Project divides a land parcel to the extent that the remaining section(s) are not suitable for further use or access is restricted, the landowner has the right to request from AYGM that the remaining section(s) also be acquired. In order to prevent such situations, AYGM will proactively consider the remaining land prior to acquisition, and if this land is considered unviable, will include this land in the early compensation discussions. The compensation entitlements and valuations for unviable land will be the same as for agricultural and non-agricultural land parcels, as detailed in **Chapter 8: Eligibility and Entitlements**.

7.3 COMPENSATION VALUES FOR AFFECTED CROPS

- 7.3.1. Crops grown on affected land parcels along the Project include: pepper, cherry, vetch, clover, tomato, blackberry, mint, cucumber, lettuce, apple, corn, radish, melon, pumpkin, chard, barley, wheat, walnut, potatoes, nuts, cabbage, spinach, peaches, beans, broad beans, kiwi, cherries, chickpeas, onions, oats, grape, sunflower, plums, apricots, paddy (rice), leeks, watermelon, parsley, celery, almond, kidney bean, purslane, peas, canola, eggplant, dill, sugar beet, cress, blueberry, arugula, broccoli, raspberry, pear, okra, garlic, quince, triticale and pomegranate. The main crops grown in the areas surrounding the Project are wheat, barley, oats, sunflowers, corn, canola, melon and watermelon.

NATIONAL VALUATION

- 7.3.2. The valuation for affected crops is calculated based on the actual annual crop unit price values which can vary from year to year (e.g. the crop unit price values for 2019 are provided in **Appendix A**). The actual seasonal crop values are announced by the Ministry of Agriculture and Forestry and published in the official gazette annually. The crop values published take into account regional soil productivity.
- 7.3.3. The compensation amount is recalculated using the most recent published crop values, that are available at the time the land is required by the Contractor, in accordance with the method above. As part of this process, AYGM will use the 2021 rates in compensation calculations when they are published. Payments will be made in accordance with 2021 prices when published. If the 2021 prices are not announced at the time compensation is to be paid, then the 2020 crop prices (as the most recent published crop values) will be used for compensation.
- 7.3.4. However, as is general practice in Turkey, PAPs are expected to harvest crops before construction activities commence. If the construction activities must be undertaken before the harvest, the additional relevant compensation for the un-harvested crop will be paid for the crops that are currently planted at the time. Non-annual cultivated crops (e.g. grape vines) are included under perennial plants/trees – see relevant section in **Chapter 8: Eligibility and Entitlements**.
- 7.3.5. In relation to crops, the national valuation method is aligned to PR5 requirements.

7.4 COMPENSATION VALUES FOR AFFECTED TREES

NATIONAL VALUATION

- 7.4.1. A full tree count was carried out as part of the asset inventory update for each land parcel. This count recorded the type, age and diameter of all trees in the expropriation corridor for the Project. The national valuation method for compensating the value of a tree, is based on the following two criteria:
- Timber value; and
 - Amount of fruits produced by the tree.
- 7.4.2. The calculation of the timber value of a tree, and the average amount of fruit production, is informed by details such as the type, diameter, length and volume of the tree. The annual gross income from the tree is calculated based on the sum of the timber value and the income from the fruit sales (at average regional prices per standardised weight). The net income is then calculated by subtracting the cost of maintaining the productivity of the tree⁵⁹ and the surrounding area, from the annual gross income.
- 7.4.3. The compensation amount is then recalculated at the time the land is required by the Contractor, in accordance with the valuation method above. However, as is general practice in Turkey, PAPs are expected to harvest fruits before construction activities commence. If the construction activities must

⁵⁹ Similar to net income method, the cost of maintaining the productivity of the tree is calculated by agricultural experts of Provincial Administrations from data obtained throughout their area of responsibility.

be undertaken before the harvest, the additional relevant compensation for the un-harvested fruits will be paid.

- 7.4.4. The final value calculated for affected crops meets national requirements, however, it does not meet PR5 requirements, and as such additional compensation is required for affected trees as described in the section below.

ADDITIONAL COMPENSATION REQUIRED FOR AFFECTED TREES

- 7.4.5. National legislation does not make any provision to compensate for loss of income from affected trees during the period when replacement trees are being established, more specifically in the period between planting replacement seedlings and the point in time the tree(s) when the trees reach the same level of productivity as those they replaced. National legislation also does not cover the costs of purchasing replacement seedlings/saplings, cultivation, harvesting / felling and transportation. Additional compensation will be provided to reimburse PAPs for these losses to meet replacement value as defined in **Chapter 8: Eligibility and Entitlements**. These costs will be reimbursed through the separate RAP Fund to meet PR5.
- 7.4.6. Further, the national valuation methodology does not consider the additional cost of replacing ornamental trees. The RAP Fund will therefore provide any additional costs to purchase replacement ornamental trees as defined in **Chapter 8: Eligibility and Entitlements**.

7.5 VALUATION OF COMPENSATION FOR RESIDENTIAL AND NON-RESIDENTIAL STRUCTURES

NATIONAL VALUATION

- 7.5.1. The valuation of residential and non-residential structures to be expropriated will be carried out by independent asset valuation surveyors in accordance with national legislation using set unit prices. These valuations will be based on the official unit prices of structures made from different primary materials (such as stone, brick or wood) published annually by the Ministry of Environment and Urbanisation. These cost prices paid to the owner are prepared in line with the cost method which considers the completion ratio⁶⁰, cost of depreciation⁶¹ and debris⁶², and are included in **Appendix B**.
- 7.5.2. The final value calculated for residential and non-residential structures for payment to the owner meets national requirements, however it does not meet PR5 requirements, and as such additional compensation is required for residential and non-residential structures which are to be expropriated, as described in the section below.

⁶⁰ The completion ratio is how complete the structure is at the time of valuation.

⁶¹ Cost of depreciation refers to the actual condition of the structure.

⁶² Debris refers to the remnants of the demolished structure and all its debris left with its owner. Although there is no definitive method to calculate debris cost, it is a common legal precedent to insert such a cost to be deducted from the value of the structure. As the land acquisition institution does not get involved in collecting/storing the debris, the institution leaves the debris with the owner for their use.

ADDITIONAL COMPENSATION REQUIRED FOR RESIDENTIAL AND NON-RESIDENTIAL STRUCTURES

- 7.5.3. Under national legislation, structures that have lost value since they were built will be compensated in line with their current value, i.e. not the inflation-adjusted cost at which they were originally bought. The national valuation decreases the total value to take into consideration depreciation, however in order to meet replacement value as required by PR5, the cost of depreciation must not be deducted from the valuation. Additional compensation for depreciation will be provided to owners as defined in **Chapter 8: Eligibility and Entitlements** for the loss of residential and/or non-residential structures. AYGM has calculated the depreciation through the 2020 asset inventory update. This depreciation amount will be reimbursed through the separate RAP Fund to meet PR5.
- 7.5.4. If the PAP has also committed financially to the completion of structures prior to the Extended PAP Identification Deadline (31 December 2020), but this is not reflected in the completion ratio (such as through the procurement of building materials and services), AYGM will cover these costs through the RAP Fund. The exact costs will be calculated through receipts/invoices supplied by the PAP.
- 7.5.5. If in-kind compensation is preferred by the PAP, and appropriate replacement structures are available, the value of this replacement residential and/or non-residential structure will be equal to or over the full replacement cost of the structure that has been lost. The process for finding replacement structures is explained in **Chapter 8: Eligibility and Entitlements**.

VALUATION FOR COMPENSATION OF RENTING RESIDENTIAL AND NON-RESIDENTIAL STRUCTURES TO FORMAL TENANTS

- 7.5.6. National legislation does not make provision for the compensation of formal tenants for loss of access to residential or non-residential structures, and as this approach does not meet the requirements of PR5, additional compensation is required.
- 7.5.7. The compensation required for these PAPs will be reimbursed through the separate RAP Fund to meet PR5. **Chapter 8: Eligibility and Entitlements** describes the compensation allocated for formal tenants of residential and non-residential structures. Rental allowance will be provided for a maximum of 3 months cost of rent in accordance with the notice period of the current tenancy agreement to both the formal tenant and the owner, as described in **Chapter 8: Eligibility and Entitlements**. The monthly cost will be determined based on the formal tenancy agreement, if available. Formal tenants are also entitled to reimbursement of the cost of any improvements made to the residential or non-residential structure during their tenancy, if undertaken by themselves (e.g. kitchen improvements, tiling, installation of additional fittings etc.). AYGM calculated these costs through their asset inventory update. These improvement costs will be allocated for the formal tenant and reimbursed through the separate RAP Fund to meet PR5.

7.6 COMPENSATION FOR AFFECTED BUSINESS ACTIVITY

COMPENSATION FOR BUSINESS OWNER

- 7.6.1. National legislation does not make provision for the compensation of business owners for loss of income caused by expropriation, only the loss of property and/or structures.
- 7.6.2. To meet the requirements of PR5, if temporary or permanent land acquisition affects commercial structures and therefore a business activity, the affected business owner will be compensated for the following:

- The cost of re-establishing commercial activities elsewhere;
- Lost net income during the re-establishment period (to a replacement commercial structure); and
- The costs of the transfer and reinstallation of the plant, machinery or other equipment, as applicable.

- 7.6.3. Compensation will be equal to the lost net income during the re-establishment period of the business, and affected business owners will be compensated up to a maximum of 1 year of net income, plus the cost of lost certificates, licenses and/or patents, where relevant. The income will be based on an official tax declaration, or if tax declaration is unavailable, AYGM will analyse lost income on a case-by-case basis, assessing available data on the livelihood activity, such as market data, employee costs and supporting evidence from the local Mukhtar.
- 7.6.4. Assistance will also be provided by AYGM in effectively and sensitively relocating business activities, if required, through the livelihood restoration programme as described in **Chapter 9: Livelihood Restoration Plan**. This assistance will be agreed and calculated on a case-by-case basis, in line with PR5 (**Chapter 8: Eligibility and Entitlements**).

COMPENSATION FOR EMPLOYEES OF AFFECTED BUSINESSES

- 7.6.5. National legislation does not make provision to compensate employees of affected businesses for loss of income due to expropriation.
- 7.6.6. To meet the requirements of PR5, if a business is affected, the employee's loss of income will be compensated during the period between their employment ending prior to expropriation and their employment recommencing, up to a maximum of 3 months. This calculation of compensation will be based on an average of the employees 3 most recent payslips. If employment is no longer provided after expropriation, employees of affected businesses will have access to the livelihood restoration programme and assistance will be provided by AYGM as described in **Chapter 9: Livelihood Restoration Plan** in finding similar, nearby employment.
- 7.6.7. If the employee does not hold a formal employment contract presenting their salary/income, they can demonstrate their employment to AYGM, via applicable Mukhtars, who will confirm their employment.

7.7 COMPENSATION FOR DEVALUED PROPERTY ABOVE TUNNELS

- 7.7.1. National legislation provides compensation for land and structures that may be devalued due to the presence of an underlying tunnel. The diminished value of these land and structures will be calculated by AYGM through 'before and after surveys'.
- 7.7.2. Prior to construction commencement, the contractor and AYGM will use the detailed designs and studies presented in the **ESIA** chapters to identify properties most at risk of devaluation. Using the valuation methodologies presented above, AYGM will undertake asset valuation surveys of the lands and structures identified as being "at-risk" (within 30m of the tunnel both horizontally and vertically) before and after construction. As part of these surveys, AYGM engineers will also collect

information about local soil and groundwater conditions in order to calculate whether any settlement⁶³ is likely to occur and its potential impact.

- 7.7.3. Once tunnelling and other underground work in the local area has been completed, individuals who reasonably believe damage has occurred as a result of that work, or the value of their land or structures have diminished, will be able to request an 'after' survey. AYGM/TCDD will assess these requests on a case by case basis. Should any evidence of devaluation resulting from Project tunnelling, tunnel vibrations or other underground excavations be identified by comparing the 'before' and 'after' surveys, AYGM will assume responsibility for the cost of repairs.
- 7.7.4. As well as the above compensation for any loss in value or damage caused by the tunnelling, AYGM will also provide 'Settlement Deeds' to those owning lands and structures 30m from the Project tunnels (both horizontally and vertically). These deeds will provide legally binding confirmation regarding responsibility for resolving issues such as settlement, subsidence or vibration issues caused by tunnelling.
- 7.7.5. AYGM, and later TCDD during operations, will be named in the deeds as the responsible party in instances such as those laid out above. Any additional costs incurred by PAPs, including professional fees related to a claim against a deed, would also be covered by AYGM/TCDD.
- 7.7.6. These Settlement Deeds will be made available, on request, to all properties within 30m on plan of tunnelling works (both horizontally and vertically), including retained cuttings, shafts and box structures forming part of the works authorised to be carried out. The Settlement Deeds will be financed under national legislation, as shown in **Chapter 8: Eligibility and Entitlements**.

7.8 COMPENSATION FOR VULNERABLE GROUPS

- 7.8.1. National legislation does not provide special provisions or assistance to vulnerable groups who may be affected by expropriation. Additional assistance will be provided to households with vulnerable people to address specific needs, to meet the requirements of PR5, and it will be provided under the separate RAP Fund. Vulnerable groups include: the poor, female-headed and cumulatively affected households (including significantly affected PAPs⁶⁴) as described in Section 4.21 of **Chapter 4: Affected People and Assets**, and those households taking care of at least one person that is elderly, sick or disabled. Special assistance will be provided to these vulnerable groups, as detailed in **Chapter 8: Eligibility and Entitlements** and **Chapter 9: Livelihood Restoration Plan**.

7.9 VALUATION OF COMPENSATION FOR USE OF TEMPORARY LAND

- 7.9.1. The Contractor will obtain access to areas that are required on a temporary basis, during the construction phase, through a willing buyer-seller or rental agreement. AYGM will ensure that the Contractor provides a fair and transparent payment to the landowner as defined by the Entitlement Matrix (**Chapter 8: Eligibility and Entitlements**) based on the principles of PR5 and they will monitor payments. The landowner will be compensated for their restricted access and usage rights,

⁶³ Settlement in this context refers to subsidence of the ground or a structure built on it.

⁶⁴ Significantly affected PAPs are PAPs that have lost more than 20% of their total land holding/income.

as well as the loss of productivity and income from the land, during the period when the Contractor is using it.

7.10 COMPENSATION APPLICATION AND NEGOTIATION PROCESS

- 7.10.1. After AYGM completes all administrative procedures (such as determining the landowners, users, and heirs, updating land records and sending invitation letters for negotiations), the owner will be notified and invited for negotiation for declaration of compensation amount calculated for the affected land and/or other affected residential and/or non-residential structures and/or crops and trees. This will include the payment to be made under the national legislation, and the payment made through the separate RAP Fund.
- 7.10.2. The consultations on compensation values and methods will then be held in the area(s) where the land and residential and/or non-residential structures and/or crops and trees are located. These consultations will be carried out for all PAPs, including those covered under national legislation and also those not covered under national legislation, who will instead be covered by the measures in this RAP (such as formal tenants and informal users).
- 7.10.3. When a compensation agreement is reached (with no bargaining allowed according to national legislation), it is then signed between AYGM and the affected PAP. This will clearly state the compensation amounts (both in-kind and cash compensation) to come from either/both the compensation through national legislation and/or the separate RAP Fund. The relevant amount is deposited by AYGM to the bank account which is accessible to the PAP with proper documentation within 45 days of the title deed registration changing, as required by national legislation.
- 7.10.4. In case of failure to reach an agreement, where the PAP does not agree with the value determined by the independent asset valuation surveyors, or the PAP does not attend the consultations, the PAP and/or AYGM will submit the case as a grievance. The valuation will be reviewed through the Grievance Mechanism defined in the **SEP**.
- 7.10.5. However, if no agreement is made after review through the Grievance Mechanism, court proceedings will commence. AYGM will apply to the court (by presenting the appraisal reports and other supporting documents) to obtain access to the land. The court will re-evaluate the land parcel and assets (as explained in **Chapter 3: Legislative Framework, Policy and Guidance**), and the valuation will be determined through the court process.
- 7.10.6. The compensation determined by the court (in line with national legislation) will be deposited, by AYGM in accordance with the instruction given by the court to the bank account accessible to the PAP with proper documentation, as required by national legislation. The relevant amount will be kept in the account opened by AYGM for the PAPs that cannot be contacted or identified depending on the type of court. The additional entitlements provided through the RAP Fund will still apply and be provided to the PAP.
- 7.10.7. Partial agreements can also be reached with owners to whom compensation is offered for land parcels and assets. In this case, the PAP can choose to accept the compensation payment for land and reject compensation for assets (or vice versa). This situation requires the matter to be referred to court in relation to the entire compensations, both land parcels and assets (as explained in **Chapter 3: Legislative Framework, Policy and Guidance**).

PAYMENT THROUGH RAP FUND

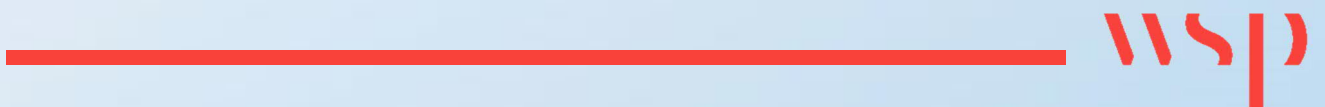
- 7.10.8. PAPs who are not entitled to compensation in accordance with national legislation (such as formal tenants, informal users, and vulnerable groups), and those requiring additional compensation to meet replacement value in accordance with PR5 requirements, will be paid through a separate RAP Fund, which will be disbursed through AYGM (refer to **Chapter 11: Implementation Costs and Budget** for further details).
- 7.10.9. No land parcel will be made available to AYGM, or passed to the Contractor, until full compensation is paid to PAPs (based on both national legislation and PR5 requirements).

VALUATION VERIFICATION

- 7.10.10. All valuation works to date have been performed by an independent survey contractor. Findings and reports of this contractor are internally verified and submitted to AYGM for review and approval. All further work will be carried out in a similar manner. The asset inventory update was carried out by certified independent asset valuation contractor appointed by AYGM. Valuation appraisal reports have been prepared for each land parcel or asset. Further valuations (such as for previously unidentified unviable land and compensation for formal tenants/informal users) will be verified through this same process.
- 7.10.11. As well as the above process to ensure fair valuation, the External Independent RAP Monitoring Consultant will also undertake a spot check of valuation reports to ensure alignment with the above methodologies, as described in **Chapter 6: Organisational Arrangements and Land Acquisition Approach**. In addition, since agricultural land and structures are not valued using market-based comparison, AYGM will confirm that the value calculated is sufficient to buy similar agricultural land/structures.

8

ELIGIBILITY AND ENTITLEMENTS



8 ELIGIBILITY AND ENTITLEMENTS

8.1 BACKGROUND TO ELIGIBILITY

8.1.1. This section defines who will be eligible to compensation and assistance programmes based on the established socio-economic baseline for the Project as described in **Chapter 4: Affected People and Assets**. PAPs have been categorised into different groups that will be entitled to different compensation measures. AYGM is committed to implementing these measures. These PAP groups depend on the PAPs' characteristics, how they will be affected and the significance of these Project effects.

8.2 ELIGIBLE PAPS

8.2.1. Eligible PAPs affected by the Project will be classified into one of the following 20 groups:

1. Owners / shareholders⁶⁵ of permanently affected agricultural private land parcels;
2. Formal tenants⁶⁶ / informal users of permanently affected agricultural private land parcels;
3. Formal tenants / informal users of permanently affected public land parcels which are currently used for agriculture;
4. Owners / shareholders of permanently affected non-agricultural private land parcels;
5. Formal tenants / informal users of permanently affected non-agricultural private land parcels;
6. Agricultural producers of crops;
7. Owners and agricultural producers of perennial plants/trees;
8. Owners of residential houses;
9. Formal tenants of residential houses;
10. Owners of non-residential buildings and secondary structures;
11. Formal users of non-residential buildings and secondary structures;
12. Informal users of structures (residential houses, non-residential houses and secondary structures);
13. Permanently-affected business activities (formal and informal);
14. Permanently-affected workers (formal employee and informal workers);
15. Vulnerable PAPs;
16. Formal and informal business owners temporarily affected by loss of working land and/or income due to interrupted business activities;
17. Formal and informal employees temporarily affected by loss of working land and/or income due to interrupted business activities;
18. Owners / formal tenants / informal users temporarily affected by loss of access to land or temporary land take (private or public) for construction phase;
19. Owners of land temporarily being rented by the Contractor for construction purposes; and

⁶⁵ Shareholders – the term often used by AYGM to refer to co-owners.

⁶⁶ A person who occupies land or property rented from a landlord.

20. Owners of land and/or structures losing value due to the underlying Project tunnels.

- 8.2.2. The compensation provided to these groups will be in accordance with national regulations and the requirements of PR5 (for further details refer to **Chapter 3: Legislative Framework, Policy and Guidance**). All PAPs, irrespective of their status or whether they have formal titles, legal rights or not, will be eligible for some kind of compensation if they occupied the land before the entitlement cut-off date (as described in section 8.4 below).

8.3 COMPENSATION RIGHTS OF ELIGIBLE PAPS

- 8.3.1. The Entitlement Matrix will include the PAP category and their eligible compensation rights described in **Table 8-1** below.

Table 8-1 – PAP Categories and Compensation Rights

No.	PAP Category	Compensation Rights
1	Owners / shareholders of permanently affected agricultural private land parcels	<p>Cash compensation to replacement value or in-kind replacement land, if available, to the same or improved quantity and quality⁶⁷.</p> <p>Land entry will be undertaken after harvest and prior to seeding wherever possible.</p> <p>If the land remaining after partial expropriation of a land parcel is not economically usable (unviable land), this remaining part of the land parcel will also be acquired at the request of the landowner in reference to AYGM's unviable land acquisition criteria (which takes in account the remaining land's current use, size, shape and access). Compensation will be paid (at full replacement price) as applicable.</p> <p>Access to the livelihood restoration programme for the shareholder(s) who use the land (Chapter 9: Livelihood Restoration Plan).</p>
2	Formal tenants / informal users of permanently affected agricultural private land parcels	<p>Coordination with relevant authorities and institutes in accessing similar alternative land for rent, moving / transportation allowance and rental allowance in accordance with the conditions of the rental agreement for 3 months.</p> <p>Replacement of cost of improvements made to agricultural land during tenancy and access to the livelihood restoration programme (Chapter 9: Livelihood Restoration Plan). Compensation is only for improvements in progress or completed before the RAP process has commenced.</p> <p>Compensation provided to ensure that tenants are not disadvantaged in the event they are fined under their lease agreement for terminating their lease early (i.e. this depends on the lease agreement but could be equal to one or two months of rent, the tenant may have to cover the rent for the remainder of the lease term or face a loss of a security deposit, if one was paid by the tenant).</p>
3	Formal tenants / informal users of permanently affected public land parcels which are currently used for agriculture	<p>Coordination with relevant authorities and institutes in accessing similar alternative land for rent and rental allowance in accordance with the conditions of the rental agreement for 3 months.</p> <p>Compensation is paid for the value of the investment in products and land (at full replacement value).</p> <p>Replacement of cost of improvements made to agricultural land during tenancy and access to the livelihood restoration programme (Chapter 9: Livelihood Restoration Plan). Compensation is only for improvements in progress or completed before the extended cut-off date (Thursday 31st December 2020).</p>
4	Owners / shareholders of permanently affected non-agricultural private land parcels	<p>Compensation to full replacement value (market prices plus transactions costs) for land, or in-kind replacement land, if available, to the same or improved quantity and quality.</p>
5	Formal tenants / informal users of permanently affected non-agricultural private land parcels	<p>Coordination with relevant authorities and institutes in accessing similar alternative land for rent, moving / transportation allowance and rental allowance in accordance with the conditions of the rental agreement for 3 months.</p> <p>Replacement of cost of improvements made to non-agricultural land during tenancy and access to the livelihood restoration programme (Chapter 9: Livelihood Restoration Plan). Compensation is only for improvements in progress or completed before the RAP process has commenced.</p> <p>Compensation provided to ensure that tenants are not disadvantaged in the event of an early lease termination.</p>
6	Agricultural producers of crops	<p>Cash compensation will be paid to the producers of affected crops or allowed to harvest their crops prior to Contractor's entry into land plot; the value of the crop (market price) and the amount of investment made for the crop (input, labour, age of trees). Each crop will be evaluated according to their own characteristics (annual or perennial, maturity, average yield of at least 3 years, etc.).</p>

⁶⁷ Priority of replacement agricultural land will be given to those whose household income and/or total land ownership is significantly affected, vulnerable PAPs and those with no possible alternative livelihood.

No.	PAP Category	Compensation Rights
7	Owners and agricultural producers of perennial plants/ trees	Cash compensation will be paid to the owners and/or producers of affected trees. This includes compensation for crops / trees; the value of the trees/plants (market price) and the amount of investment made for the trees/plants (input, labour, age of trees). Each tree/plant will be evaluated according to their own characteristics (annual or perennial, maturity, average yield of at least 3 years, etc.). Compensation for re-establishment costs and loss of income.
8	Owners of residential houses	Full compensation based on full replacement price in a similar / comparable area, and assistance in the administrative process of purchasing similar alternative adequate residential houses for sale, identified by the PAP (e.g. support in price negotiation and checking of purchase documents). Depreciation will not be deducted from the overall compensation. Note that AYGM will not be building replacement housing for PAPs but will provide support in finding replacement housing. Assistance with moving allowance and temporary allowance. Right to salvage all recoverable materials prior to demolition and compensation for loss of rental income for a period of 3 months if the structure is rented.
9	Formal tenants of residential houses	Assistance in the administrative process of renting similar alternative adequate residential houses, identified by the PAP (e.g. identifying a guarantor, checking of rental agreements etc.), and rental allowance in accordance with the conditions of the rental agreement for 3 months. Replacement of cost of improvements made to structure during tenancy. Compensation is only for improvements in progress or completed before the RAP process has commenced. Right to salvage all recoverable materials prior to demolition (if agreed with owner).
10	Owners of non-residential buildings and secondary structures	Acquisition of non-residential buildings and secondary structures at full replacement cost for owner. Depreciation will not be deducted. Assistance in the administrative process of purchasing similar alternative structures for sale, identified by the PAP, or support for dismantling and rebuilding such assets, including appropriate and relevant labour costs for the relocation of all and any affected structures. Right to salvage all recoverable materials prior to demolition and rental allowance in accordance with the conditions of the rental agreement for a maximum of 3 months' rent for users. Moving and transportation allowances will be provided.
11	Formal users of non-residential buildings and secondary structures	Assistance in the administrative process of renting similar alternative adequate non-residential buildings and/or secondary structures, identified by the PAP. Provision of support for dismantling and rebuilding such assets (including salvage of materials), if required, including appropriate and relevant labour costs for the relocation of all and any affected structures. Replacement of cost of improvements made to structure during tenancy. Compensation is only for improvements in progress or completed before the RAP process has commenced. Right to salvage all recoverable materials prior to demolition (if agreed with owner). Rental allowance in accordance with the conditions of the rental agreement for a maximum of 3 months' rent for users. Moving and transportation allowances will be provided.
12	Informal users of structures (residential houses, non-residential houses and secondary structures)	Assistance in the administrative process of renting similar alternative adequate structures, identified by the PAP for rent or rental allowance in accordance with the conditions of the rental agreement for 3 months. Replacement of cost of improvements made to structure during residency. Compensation is only for improvements in progress or completed before the RAP process has commenced. Right to salvage all recoverable materials prior to demolition (if agreed with owner).
13	Permanently-affected business activities (formal and informal)	Compensation for affected business operations will be paid to the business owner(s) equal to 6 month's net income plus cost of lost certificates/licenses/patents will be provided. Transitional assistance to re-establish the business at a suitable location.
14	Permanently-affected workers (formal employee and informal workers)	Loss of income in the period between ending employment prior to expropriation and recommencement of employment (up to 3 months) will be compensated.

No.	PAP Category	Compensation Rights
15	Vulnerable PAPs	Efforts will be made to bring livelihoods and living standards to levels prior to displacement. Additional support will be provided as described in the livelihood restoration programme (see Chapter 9: Livelihood Restoration Plan), such as priority in employment or mobility aid.
16	Formal and informal business owners temporarily affected by loss of working land and/or income due to interrupted business activities	AYGM will provide temporary assistance for the establishment of the business in a new place and, if necessary (depending on the situation and time lost), compensating the lost income.
17	Formal and informal employees temporarily affected by loss of working land and/or income due to interrupted business activities	In cases where business operations need to stop, compensation for the loss of monthly salaries; or if employment contract is terminated, additional measures such as severance pay, and other supportive allowances will be covered to avoid livelihood impacts. Maximum effort to relocate without having to stop operations will be made.
18	Owners / formal tenants / informal users temporarily affected by loss of access or temporary land take (private or public) for construction phase	The payment for rented land during construction will be based on the market rate rental under negotiated agreement between the PAP and Contractor. This market rate will be determined among themselves in relation to the current rental market. The contractor(s) will share the agreed price with AYGM for review to ensure that a fair agreement has been reached. After discontinuation of land use, the Contractor must return land in same original condition, or as per the documented agreement with the land rights holder.
19	Owners of land temporarily being rented by the Contractor for construction purposes	Market rental price to be paid for the lease term. The land must be returned to the affected persons in the condition that it was received. In case of loss of agricultural land and crops during the rental period, the landowner must be compensated for the loss of crops during the rental period.
20	Owners of land and/or structures losing value due to underlying Project tunnels	Compensation for the loss in value of their land/structures (according to 'before and after' survey) and Settlement Deeds.

- 8.3.2. As well as the compensation rights listed above, some PAPs will also be entitled to access the AYGM livelihood restoration programme as described in **Chapter 9: Livelihood Restoration Plan**, as shown in the Entitlement Matrix in section 8.6 below.

8.4 ENTITLEMENT CUT-OFF DATE

- 8.4.1. The entitlement cut-off date is usually the completion date of the Project's census⁶⁸ and asset inventory studies. The original cut-off date was set as 30th May 2017 – the date of the original Public Interest Decision when PAPs were first notified. However, it was agreed that this cut-off date should be extended in order to update the asset inventory and carry out the household surveys. The household surveys ensured that all previously unidentified households were included, and the asset inventory data are up-to-date, and cover informal users.
- 8.4.2. As such, the extended PAP identification deadline (updated cut-off date) was agreed to be the date of the end of the update of the Asset Inventory by AYGM on Thursday 31st December 2020. This date will also be used to initiate the one-year entitlement required by the law in Turkey.
- 8.4.3. Any person who occupies the land plot within the expropriation corridor after the cut-off date is not considered eligible for compensation. Similarly, compensation will not be provided for fixed assets (such as primary / secondary structures, crops and trees) that have been established after the cut-off date.
- 8.4.4. The surveys, interviews and focus groups undertaken during the summer of 2020 are summarised in **Chapter 4: Affected People and Asset**. This data was supplemented by the 2020 Asset inventory update survey to develop a full census of affected households and PAPs. The update was conducted by the AYGM Real Estate and Expropriation Department in December 2020.

8.5 ELIGIBLE PERSONS

- 8.5.1. Compensation and resettlement assistance eligibility, particularly when owners of assets and users of assets are shareholders, is defined below. This is based on the household survey data, Mukhtars and Governors data, focus group data and the asset inventory update.

Impacts on Private Land (Permanent)

- Where the owner and the user are the same individual, this person will receive compensation for all types of relevant affected land and assets as mentioned in the Entitlement Matrix (Section 8.6).
- Where land is cultivated by an individual who is not a landowner, then the compensation is split between the landowner and owners of the affected assets located on that land, as follows:
 - Compensation for affected land (direct impacts and any land access restrictions) will be paid to landowner(s);
 - Compensation for affected crops will be paid to crop owner(s);

⁶⁸ A census for this Project was developed through the combination of the asset inventory (identifying official owners in the Turkish land registry) and the household surveys (identifying those additional PAPs entitled to compensation in-line with EBRD PR5, such as tenants, informal users and vulnerable groups).

- Compensation for affected trees will be paid to the party who owns the trees;
 - Compensation for land users who harvest crops from trees;
 - Compensation for an affected residential house will be paid to the owner(s) of such residential house;
 - Compensation for other affected non-residential structures (such as barns, agricultural buildings, haystacks, garages, greenhouses) will be paid to the owner(s) of such structures;
 - Compensation for affected business activities will be paid to the business owner(s); and
 - Compensation for loss of income will be paid to affected employees.
- Compensation for any developments on the land (such as fences, water wells or irrigation systems – where this exists) will be paid to the owner(s) of such a development, this could either be the owner or land user depending on who paid for these developments.
 - Livelihood restoration programmes will provide support to identify replacement alternative private land for use by affected PAPs. AYGM will develop livelihood restoration measures as described in **Chapter 9: Livelihood Restoration Plan** that will describe the step-by-step process of how these will be achieved.

Impacts on Public / Treasury Land (Permanent and Temporary)

- Where public / treasury (state) owned land is used by a private party, such a party will receive the following elements of compensation:
 - Compensation for affected crops and trees;
 - Compensation for any developments on the land (such as fences, water wells or irrigation systems – where this exists) will be paid to the owner(s) of such a development, this could either be the owner or land user depending on who paid for these developments;
 - Livelihood restoration programmes (**Chapter 9: Livelihood Restoration Plan**) will provide support to identify replacement alternative public land for use by affected PAPs. AYGM will develop a livelihood restoration programme that will describe the step-by-step process of how this will be achieved, such as allocation of other nearby public land for pasture, and who is responsible.

Impacts on Private Land (Temporary)

- Where land that is used and/or owned by a private individual will be temporarily used (through a lease agreement) by the Contractor (such as for construction compounds / construction workers' accommodation and construction access roads), this category of PAP will be entitled to the following compensation:
 - The payment for rented land during construction will be based on the market rental value (under a negotiated agreement between the PAP and Contractor);
 - After discontinuation of land use, the Contractor must return land in the same original condition, or as per the agreement with the landowner ;
 - Compensation to be paid for lost crops and trees at market value by the RAP Fund; and
 - The cost of re-establishing affected crops and trees elsewhere and income lost during the period for the crop owner between the removal of crops and trees and the start of production for the re-established crops and trees.

8.6 ENTITLEMENTS MATRIX

- 8.6.1. **Chapter 7: Valuation Methodology** of this RAP details the land valuation methodology for private and public / treasury (state) owned land to be acquired for the Project. The methodology reflects the compensation and assistance provisions detailed within this chapter. The methodology aligns with national Turkish legislation and the requirements of EBRD PR5 (for more further details refer to **Chapter 3: Legislative Framework, Policy and Guidance**).
- 8.6.2. Details for the entitlements for compensation and resettlement assistance for the different types of Project impacts are summarised in **Table 8-2**.

Only the households that were covered by surveys before the updated cut-off date (31st December 2020), or those who can show proof of ownership or occupation before that date⁶⁹, are eligible to the entitlements.

⁶⁹ For owners, this would be upon presentation of title deed records. For tenants this would be upon presentation of a tenancy agreement and payment terms. Informal users can demonstrate their use of affected land / structures / trees to AYGM through applying to the Mukhtars and providing supporting statements from neighbouring parcels to confirm legitimacy of their claim.

Table 8-2 - Entitlement Matrix

Type of loss	PAP	Entitlement	
		Compensation to meet National Requirements	Compensation to meet PR5
Permanent Loss			
Loss of permanently affected agricultural private land parcels	Landowner	Cash compensation, in accordance with national requirements, for loss of land, calculated using net income capitalisation of the affected land area at the time of acquisition.	<p>AND</p> <p>Assistance in the provision of alternative land parcel identified by the PAP of equal replacement value / productivity to the land parcel to be acquired, if available. Refer to section 8.10 for further details.</p> <p>Other Allowances:</p> <p>Assistance through the RAP fund to be provided for legal costs for transactions, registration costs for replacement land, and transportation for moving to new location. Further details on legal costs are provided in section 8.8 below.</p> <p>Landowner has the right to request the purchase and compensation of any portion of the land if the remaining section of the land parcel is not economically usable (unviable land). and in compliance with AYGM’s unviable land acquisition criteria.</p> <p>If the owner actively uses the land for agriculture and no replacement land can be provided as in-kind compensation, or purchased from their cash compensation, then the livelihood restoration programmes will be offered to this individual. See Chapter 9: Livelihood Restoration Plan.</p>
	Shareholder	Cash compensation, in accordance with national requirements, for loss of land, calculated using net income capitalisation of the affected land at time of expropriation. This compensation is proportional to the percentage of land owned by the shareholder at the time of acquisition.	<p>AND</p> <p>Assistance in the provision of alternative land parcel identified by the PAP of equal value/productivity to the land parcel to be acquired. Shareholders will be provided the same proportion of land as per previous title deeds. Refer to section 8.10 for further details.</p> <p>Other Allowances:</p> <p>Assistance through the RAP fund to be provided for legal costs for transactions, registration costs for replacement land, and transportation for moving to new location. Further details on legal costs are provided in section 8.8 below.</p> <p>Landowner / shareholder has the right to request the purchase and compensation of any portion of the land if the remaining section of the land parcel is not economically usable (unviable land) and in compliance with AYGM's unviable land acquisition criteria.</p> <p>If one of the shareholders actively uses the land for agriculture and no in-kind replacement land is found, the livelihood restoration programmes as described in Chapter 9: Livelihood Restoration Plan will be made available.</p> <p>If replacement land is identified by the PAP and this is their preferred option, shareholders will be provided with funds to purchase the size equivalent to their current shareholding. Where possible, the current shareholding agreement of affected land parcels will be fully reallocated to the replacement land. However, this may not be possible for all shareholding agreements due to land availability. In addition, further assistance will be available to shareholders to address issues that may arise due to the Project such as difficulty accessing land. Refer to Chapter 9: Livelihood Restoration Plan.</p>

Type of loss	PAP	Entitlement	
		Compensation to meet National Requirements	Compensation to meet PR5
	Formal Tenant	-	<p>Rental allowance in accordance with the conditions of the rental agreement for 3 months at a maximum⁷⁰ (officially documented).</p> <p>Replacement of cost of improvements made to agricultural land during tenancy as determined by AYGM asset valuers.</p> <p>Coordination with relevant authorities and institutes in accessing similar alternative land for rent (ideally continuation of rental agreement from previous landlord for an alternative agricultural land parcel) with better or improved quality and security of tenure. Refer to section 8.10 for further details.</p> <p>Other Allowances:</p> <p>Three months advance notification (for construction) of the formal tenant to move (or special case by case provisions depending on the specifics of the tenancy agreement).</p> <p>Assistance through the RAP fund to be provided for legal costs (see section 8.8 below) and transportation for moving to new location, and any further costs associated with new tenancy registration.</p> <p>Livelihood restoration programmes will be developed as described in Chapter 9: Livelihood Restoration Plan.</p>
	Informal User	-	<p>Replacement of cost of improvements made to agricultural land during use as determined by AYGM asset valuers.</p> <p>Coordination with relevant authorities and institutes in accessing similar alternative land for rent to the same or improved quality. Refer to section 8.10 for further details.</p> <p>Other Allowances:</p> <p>Three months advance notification (for construction) to the informal user to move (same notice period as all other owners and users).</p> <p>Assistance to be provided for legal costs (see section 8.8 below) and moving to new location.</p> <p>Any further costs associated with new tenancy registration (if formal tenancy agreement preferred).</p> <p>Livelihood restoration programmes will be developed as described in Chapter 9: Livelihood Restoration Plan.</p>
Loss of permanently affected public land parcels which are currently used for agriculture	Formal Tenant, which includes charcoal makers and users of pasture land	-	<p>Rental allowance in accordance with the conditions of the rental agreement for 3 months at a maximum⁷¹ (officially documented).</p> <p>Replacement of cost of improvements made to agricultural land during tenancy as determined by AYGM asset valuers.</p> <p>Coordination with relevant authorities and institutes in accessing similar alternative land for rent (ideally continuation of rental agreement from previous landlord for an alternative agricultural land parcel) with better or improved quality and security of tenure. Refer to section 8.10 for further details.</p> <p>Other Allowances:</p> <p>Three months advance notification of the tenant to move (or special case by case provisions depending on the specifics of the tenancy agreement).</p>

⁷⁰ Vulnerable PAPs can request an extension to this period, if required, to a maximum of 5 months.

⁷¹ Vulnerable PAPs can request an extension to this period, if required, to a maximum of 5 months.

Type of loss	PAP	Entitlement	
		Compensation to meet National Requirements	Compensation to meet PR5
			<p>Assistance to be provided for legal costs (see section 8.8 below) and transportation for moving to new location.</p> <p>Any further costs associated with new tenancy registration.</p> <p>Livelihood restoration programmes will be developed as described in Chapter 9: Livelihood Restoration Plan.</p>
	Informal User, including some beekeepers	-	<p>Replacement of cost of improvements made to agricultural land during use as determined by AYGM asset valuers.</p> <p>Coordination with relevant authorities and institutes in accessing similar alternative land for rent to the same or improved quality. Refer to section 8.10 for further details.</p> <p>Other Allowances:</p> <p>Three months advance notification of the informal user to move prior to construction.</p> <p>Assistance to be provided for legal costs (see section 8.8 below) and moving to new location.</p> <p>Any further costs associated with new tenancy registration (if formal tenancy agreement preferred).</p> <p>Livelihood restoration programmes will be developed as described in Chapter 9: Livelihood Restoration Plan.</p>
Loss of non-agricultural private land parcels	Landowner	Cash compensation of land value (at market replacement cost), calculated by using peer comparison as specified by law.	<p>AND</p> <p>Assistance in the provision of alternative land parcel identified by the PAP of equal value to the land parcel acquired. Refer to section 8.11 for further details.</p> <p>Other Allowances:</p> <p>Assistance to be provided for legal costs (see section 8.8 below) and transportation for moving to new location.</p> <p>Landowner has the right to request the purchase and compensation of any portion of land if the remaining section of the land parcel to be acquired is not economically usable (unviable land) and in compliance with AYGM's unviable land acquisition criteria.</p>
	Shareholder	Cash compensation for loss of land, by using peer comparison as specified by law. This compensation is proportional to the percentage of land owned by the shareholder at acquisition.	<p>AND</p> <p>Assistance in the provision of alternative land parcel identified by the PAP of equal value to the land parcel to be acquired. Shareholders will be provided the same proportion of land as per previous agreement. Refer to section 8.11 for further details.</p> <p>Other Allowances:</p> <p>Assistance to be provided for legal cost (see section 8.8 below) and transportation for moving to new location.</p> <p>Landowner / shareholder has the right to request the purchase and compensation of any portion of land if the remaining section of the land parcel is not economically usable (unviable land) and in compliance with AYGM's unviable land acquisition criteria.</p>

Type of loss	PAP	Entitlement	
		Compensation to meet National Requirements	Compensation to meet PR5
	Formal Tenant	-	<p>Rental allowance in accordance with the conditions of the rental agreement for 3 months at a maximum⁷² (officially documented).</p> <p>Replacement of cost of improvements made to private non-agricultural land during tenancy as determined by AYGM asset valuers.</p> <p>Coordination with relevant authorities and institutes in accessing similar alternative land for rent (ideally continuation of rental agreement from previous landlord for an alternative agricultural land parcel) with better or improved quality and security of tenure. Refer to section 8.11 for further details.</p> <p>Other Allowances:</p> <p>Three months advance notification of the tenant to move prior to construction (or special case by case provisions depending on the specifics of the tenancy agreement).</p> <p>Assistance to be provided for legal costs (see section 8.8 below) and transportation for moving to new location.</p> <p>Any further costs associated with new tenancy registration.</p> <p>Livelihood restoration programmes will be developed as described in Chapter 9: Livelihood Restoration Plan and offered to this category of PAP in cooperation with relevant public institutions for farmers, and they will include access to temporary and permanent employment opportunities.</p>
	Informal User	-	<p>Replacement of cost of improvements made to non-agricultural land during use as determined by AYGM asset valuers.</p> <p>Coordination with relevant authorities and institutes in accessing similar alternative land for rent to the same or improved quality. Refer to section 8.11 for further details.</p> <p>Other Allowances:</p> <p>Three months advance notification to the informal user to move prior to construction.</p> <p>Assistance to be provided for legal costs (see section 8.8 below) and moving to new location.</p> <p>Any further costs associated with new tenancy registration (if formal tenancy agreement preferred).</p> <p>Livelihood restoration programmes will be developed as described in Chapter 9: Livelihood Restoration Plan.</p>
Loss of annual crops	Agricultural Producer (Crop Owner)	Cash compensation at market value of annual crops to crop owner determined by Ministry of Agriculture and Forestry and verified by independent and/or AYGM asset valuer.	<p>OR</p> <p>Crop owner allowed to harvest their crops prior to Contractor's entry into land plot.</p>
Perennial plants/trees (including vineyards,	Owner / Agricultural Producer	Cost for the Perennial Plants/Trees and its Crop: Cash compensation at market value of perennial plants / trees determined by Ministry of Agriculture and Forestry . Refer to Chapter	<p>AND</p> <p>Cost for Loss of Income: Cash compensation for loss of income in the period between planting of the seedling and the time tree(s) reaches a level of productivity equivalent to that of the affected tree. This is calculated by integrating over a period of time the value at the local selling price of the lost harvests.</p>

⁷² Vulnerable PAPs can request an extension to this period, if required, to a maximum of 5 months.

Type of loss	PAP	Entitlement	
		Compensation to meet National Requirements	Compensation to meet PR5
cultivated plots, other trees used for subsistence and/or income and ornamental trees) ⁷³		8: Valuation Methodology for the valuation mechanism used for perennial plants / trees.	<p>Cost for Re-establishing Perennial Plants / Trees to Previous Production Level: This is costs replacement seedlings/saplings and agricultural input and maintenance costs (such as labour, fertiliser, etc.). This includes cost for smaller ornamental trees being replaced to the previous maturity.</p> <p>Other Allowances:</p> <p>Crop owner allowed to harvest produce prior to Contractor's entry into land parcel.</p>
Loss of residential houses	Owner	Cash compensation for all residential houses in their entirety will be compensated, as determined by AYGM asset valuers, without depreciation.	<p>AND</p> <p>Compensation for loss of rental income for a maximum of 3 months if the structure is rented (if replacement tenants are not in place) will be provided.</p> <p>Cash compensation for depreciation detracted from the national valuation total and improvements made to the structure.</p> <p>OR</p> <p>Coordination with relevant authorities and institutes in accessing similar alternative adequate⁷⁴ residential houses for sale, if in-kind compensation is preferred. These replacement residential houses are to be the same or of improved quality, and above minimum standards (refer to section 8.7 below).</p> <p>Other Allowances:</p> <p>After signing of expropriation contract between AYGM and the structure owner, the owner will be allowed 6 months to exit the property.</p> <p>Right to salvage affected building material.</p> <p>Assistance to be provided for legal costs (see section 8.8 below) and transportation for moving to new location.</p> <p>Communication and technical support will be provided by the Ministry of Environment and Urbanization in appointing a structural surveyor to provide advice and support relating to the loss of structures, if required.</p> <p>Assistance will be provided in disconnecting previous utilities and re-connecting replacement structures to necessary utilities, such as water, gas, electric, internet, if required.</p>
	Formal Tenant ⁷⁵	-	<p>Replacement of cost of improvements made to structure during tenancy as determined by AYGM asset valuers and consent of landowner.</p> <p>Coordination with relevant authorities and institutes in accessing similar alternative structures for rent (ideally renting from previous landlord).</p> <p>Rental allowance in accordance with the conditions of the rental agreement for a maximum of 3 months' rent.</p>

⁷³ Replacement Value of trees is the full loss of income in the period between planting of the seedling and the time it reaches a level of productivity equivalent to that of the affected tree, plus cost of maturing the tree (i.e. inputs and labour costs of planting and tending a new tree to relevant level of maturity).

⁷⁴ This can be measured by quality, safety, affordability, habitability, cultural appropriateness, accessibility and locational characteristics. It should allow access to employment options, markets and basic infrastructure and services, such as water, electricity, sanitation, health care and education.

⁷⁵ Those with official, legally binding tenancy documents, demonstrating their right to use land owned by another entity.

Type of loss	PAP	Entitlement	
		Compensation to meet National Requirements	Compensation to meet PR5
			Other Allowances: 3 months advance notification prior to construction of the tenant to move from signing of the expropriation contract between AYGM and the affected tenant. Right to salvage all recoverable materials prior to the building's demolition provided that the tenant and the owner have their own agreement to do so. Assistance will be provided in disconnecting previous utilities and re-connecting replacement structures to necessary utilities, such as water, gas, electric, internet, if required. Assistance to be provided for legal costs (see section 8.8 below) and transportation for moving to new location. Any further costs associated with tenancy registration.
	Informal Users	-	Coordination with relevant authorities and institutes in accessing similar alternative residential building to rent (ideally renting from previous landowner) to the same or improved quality, and above minimum standards (refer to section 8.7 below). Other Allowances: Three months advance notification of the informal user to move prior to construction. Right to salvage affected material, with the agreement of the owner. Assistance to be provided for legal costs (see section 8.8 below) and transportation for moving to new location. Any further costs associated with new tenancy registration (if formal tenancy is required and preferred).
Loss of non-residential buildings and secondary structures	Owner	Cash compensation for all non-residential buildings and secondary structures (e.g. sheds, garages, etc.) in their entirety will be compensated, as determined by AYGM asset valuers , minus depreciation.	AND Cash compensation for depreciation detracted from the national valuation total and improvements made to the structure OR Coordination with relevant authorities and institutes in accessing similar alternative non-residential building and secondary structures for sale, if in-kind compensation is preferred. These replacement non-residential buildings and structures are to be of the same or improved quality, and above minimum standards (refer to section 8.7 below), suitable for business activities if required. OR Assistance in relocation of secondary structure to replacement land provided, where possible. Other Allowances: Right to salvage affected material. Assistance will be provided in disconnecting previous utilities and re-connecting replacement structures to necessary utilities, such as water, gas, electric, internet, if required. Assistance to be provided for legal costs (see section 8.8 below) and transportation for moving to new location. Livelihood restoration programmes will be offered as described in Chapter 9: Livelihood Restoration Plan to this individual to improve livelihood-supporting secondary structures.

Type of loss	PAP	Entitlement	
		Compensation to meet National Requirements	Compensation to meet PR5
	Formal User ⁷⁶	-	<p>Replacement of cost of improvements made to non-residential building/secondary structure during tenancy as determined by AYGM asset valuers.</p> <p>Coordination with relevant authorities and institutes in accessing similar alternative non-residential buildings and secondary structures for rent (ideally renting from previous landlord), where relevant. These non-residential buildings and structures are to be of the same or improved quality, and above minimum standards (refer to section 8.7 below), suitable for business activities.</p> <p>Rental allowance in accordance with the conditions of the rental agreement for a maximum of 3 months' rent.</p> <p>Other Allowances:</p> <p>Three months advance notification of the formal user to move prior to construction.</p> <p>Right to salvage affected material, with the agreement of the owner.</p> <p>Assistance to be provided for legal costs (see section 8.8 below) and transportation for moving to new location.</p> <p>Any further costs associated with new tenancy registration, if required.</p> <p>Livelihood restoration programmes will be offered as described in Chapter 9: Livelihood Restoration Plan to this PAP to improve livelihood-supporting secondary structures.</p>
	Informal User ⁷⁷	-	<p>Coordination with relevant authorities and institutes in accessing similar alternative non-residential building and secondary structure to lease (ideally renting from previous landowner) to the same or improved quality, and above minimum standards (refer to section 8.7 below).</p> <p>Other Allowances:</p> <p>Three months advance notification of the formal user to move prior to construction.</p> <p>Right to salvage affected material, with the agreement of the owner.</p> <p>Assistance to be provided for legal costs (see section 8.8 below) and transportation for moving to new location.</p> <p>Any further costs associated with new tenancy registration (if formal tenancy is required and preferred).</p>
Permanent loss of income for businesses and employees of those businesses.	Formal Business owner	-	<p>In case of permanent loss, cash compensation equal to 1 year's net income (lost profits) plus cost of lost certificates/licenses/patents. The income is based on the official tax declaration.</p> <p>Other Allowances:</p> <p>Transitional assistance (in-kind) will be provided to re-establish the business at a suitable location.</p> <p>Assistance from AYGM in effectively and sensitively relocating business activities through the AYGM Livelihood Restoration Programme as described in Chapter 9: Livelihood Restoration Plan.</p>

⁷⁶ Those with official, legally binding tenancy documents, demonstrating their right to use property owned by another entity.

⁷⁷ Those using land without official permission.

Type of loss	PAP	Entitlement	
		Compensation to meet National Requirements	Compensation to meet PR5
	Informal Business owner	-	<p>In case of permanent loss, cash compensation equal to 1 year's net income (lost profits) plus cost of lost certificates/licenses/patents. AYGM will organise a meeting with the affected informal business owner . The asset valuer will review informal business activities and determine the net income lost for 1 year.</p> <p>Other Allowances:</p> <p>Transitional assistance (in-kind) will be provided to re-establish the business at a suitable location.</p> <p>Assistance from AYGM in effectively and sensitively relocating business activities through the AYGM Livelihood Restoration Programme as described in Chapter 9: Livelihood Restoration Plan.</p>
	Formal Employee	-	<p>If employment is permanently affected, loss of income in the period between ending employment prior to expropriation and recommencement of employment (up to 3 months) will be compensated.</p> <p>Other Allowances:</p> <p>If employment is no longer provided after expropriation, access to AYGM Livelihood Restoration Programme⁷⁸ as described in Chapter 9: Livelihood Restoration Plan and assistance in finding similar, nearby employment, will be provided.</p>
	Informal Employee	-	<p>If employment is permanently affected, loss of income in the period between ending employment prior to expropriation and recommencement of employment (up to 3 months) will be compensated. AYGM will organise a meeting with the affected informal employee with the AYGM asset valuer. The asset valuer will review informal employee activities and determine the net income lost for the period of disruption.</p> <p>Other Allowances:</p> <p>If employment is no longer provided after expropriation, access to AYGM's Livelihood Restoration Programme as described in Chapter 9: Livelihood Restoration Plan and assistance in finding similar, nearby employment, will be provided.</p>
Loss of value of land and/or structures due to underlying Project tunnels	Formal and informal owners of land and structures	<p>Compensation for the loss in value of their land/structures (according to 'before and after' survey)</p> <p>AND</p> <p>Settlement Deeds providing legally binding confirmation that it is the responsibility of AYGM (then TCDD) for resolving issues such as settlement, subsidence or vibration issues caused by Project tunnelling.</p>	-

⁷⁸ AYGM Livelihood Restoration Plan to include provision of professional training, assistance in finding alternative employment (e.g. from contractors on the Project), access to microfinance, etc. It is expected that this programme will be available for 2 years upon commencement of the implementation of the RAP.

Type of loss	PAP	Entitlement	
		Compensation to meet National Requirements	Compensation to meet PR5
Impact on Vulnerable PAPs	Illiterate PAPs	-	<p>Additional assistance will be provided to these households to address specific needs. AYGM will support the implementation of all applications in accordance with the Regulation on Social and Economic Support Services of the Ministry of Family and Social Policies as described in Chapter 9: Livelihood Restoration Plan. Special assistance will include:</p> <ul style="list-style-type: none"> ■ Transactional assistance (bank account, assistance in reconstruction, and hiring of professional) budget preparation and follow-up; ■ Enrolment in Government social assistance, if not yet enrolled; ■ Social assistance (discussion groups); ■ Priority in Project-related employment for members of vulnerable households (if at legal working age); ■ Existing or new residential structures will be improved to minimum standards^{79 80}, including disability access where feasible (refer to section 8.7 below); ■ Access to AYGM Livelihood Restoration Programme as described in Chapter 9: Livelihood Restoration Plan for poor households; ■ Priority in choice of alternative land/structures for those affected by other current/previous expropriation; and ■ Further moving in-kind assistance (such as supply of care for disabled / elderly individuals).
	Clinically vulnerable to COVID-19		
	PAPs experiencing Water Supply Issue		
	PAPs with disabilities and chronic illness		
	Location-dependent elderly persons		
	Informal businesses and residents whose land use rights are not recognised by national legislation		
	PAPs experiencing reduced household income and/or emotional trauma due to prior expropriation (determined on a case-by-case basis)		
	Women headed households		
	Poor PAPs		
	PAPs taking on the role of primary carer for household member		
	Households whose primary income and total available land for income activities will be		<p>Access to AYGM Livelihood Restoration Programme as described in Chapter 9: Livelihood Restoration Plan to target PAPs that are significantly affected by the Project. The Programme aims to provide long-term support to these PAPs for rebuilding their livelihoods. The Livelihood Restoration Programme will include priority for employment during Project construction and implementation, agricultural support, support to livestock production, alternative income generation, training and capacity building.</p>

⁷⁹ AYGM will identify and propose replacement houses of the same (or improved) size and quality in a nearby location with secure tenure.

⁸⁰ Turkish Standards Institution Standard TS9 111 - Minimum Requirements in Buildings to Ensure Accessibility for Persons with Mobility Restrictions and/or Disabilities.

Type of loss	PAP	Entitlement	
		Compensation to meet National Requirements	Compensation to meet PR5
	significantly affected ⁸¹ (determined on a case-by-case basis)		
	Individuals who have not had regular wage-based income with a job at which they work more than one year.		Access to AYGM Livelihood Restoration Programme as described in Chapter 9: Livelihood Restoration Plan .
Temporary Loss			
Temporary loss of working place and/or income due to interrupted business activities	Formal Business Owner		In case of the temporary loss of a business, compensation equal to the net income for the period of disruption (<1 year). The income is based on the tax declaration. Other Allowances: Transitional assistance to temporarily re-establish business at the same location will be provided. Assistance (in-kind) will be provided by AYGM to effectively and sensitively temporarily relocate business activities, if financially viable given the length of disruption caused by construction activities.
	Informal Business Owners	-	In case of the temporary loss of a business, compensation equal to the net income for the period of disruption (<1 year). AYGM will organise a meeting with the affected informal business owner . The asset valuer will review informal business activities and determine the net income lost for the period of disruption. Other Allowances: Transitional assistance to temporarily re-establish business at the same location will be provided. Assistance (in-kind) will be provided by AYGM to effectively and sensitively relocate business activities, if required.
	Formal Employee	-	If employment is temporarily affected, loss of income in the period between ending employment prior to expropriation and recommencement of employment (up to 3 months) will be compensated. This will be determined through official pay slips of the affected employee. Other Allowances: If employment is no longer provided after expropriation, access to AYGM Livelihood Restoration Programme ⁸² as described in Chapter 9: Livelihood Restoration Plan and assistance in finding similar, nearby employment, will be provided.

⁸¹ Households will self-identify as being “significantly affected”. Each application will be evaluated by an independent valuator on a case-by-case basis who will assess if their primary income has been significantly affected. Significantly affected primary incomes can be assessed through the percentage of income lost, the percentage of land lost, impacts on the viability of income sources in the future, and reliability on this primary income source. All of these factors will be assessed by the independent valuator.

⁸² AYGM Livelihood Restoration Plan to include provision of professional training, assistance in finding alternative employment (e.g. from contractors on the Project), access to microfinance, etc. It is expected that this programme will be available for 2 years upon commencement of the implementation of the RAP.

Type of loss	PAP	Entitlement	
		Compensation to meet National Requirements	Compensation to meet PR5
	Informal Employee	-	<p>If employment is temporarily affected, loss of income in the period between ending employment prior to expropriation and recommencement of employment (up to 3 months) will be compensated. AYGM will organise a meeting with the affected informal employee . The asset valuer will review informal employee activities and determine the net income lost for the period of disruption.</p> <p>Other Allowances:</p> <p>If employment is no longer provided after expropriation, access to AYGM Livelihood Restoration Programme as described in Chapter 9: Livelihood Restoration Plan and assistance in finding similar, nearby employment, will be provided.</p>
Temporary loss of access or temporary land take (private or public) for construction phase ⁸³	Owner	-	<p>Compensation to be paid for lost structures, crops and trees at market value (as determined by Ministry of Agriculture and Forestry).</p> <p>The payment for rented land during construction will be based on the market rate rental under negotiated agreement between the PAP and Contractor. Prior to construction, AYGM will review this rental agreement to ensure that a fair price has been agreed.</p> <p>After discontinuation of land use, the Contractor must return land in same original condition, or as per the agreement with the land rights holder.</p> <p>Other Allowances:</p> <p>Assistance in locating and accessing similar alternative land for rent of the same or improved quality.</p> <p>Additional compensation for replacing lost trees (as described above) in order to meet full replacement value for lost crops and trees.</p>
	Tenant	Compensation for lost crops and trees at market value (as determined by Ministry of Agriculture and Forestry).	<p>Rental allowance in accordance with the conditions of the rental agreement for 3 months at a maximum (officially documented).</p> <p>Replacement of cost of improvements made to the land during use as determined by AYGM asset valuers.</p> <p>After discontinuation of land use, the Contractor must return land to the tenant in the original condition.</p> <p>Other Allowances:</p> <p>Three months advance notification prior to construction of the formal tenant to move (or special case by case provisions depending on the specifics of the tenancy agreement).</p> <p>Assistance (in-kind) in locating and accessing similar alternative land for rent to be of the same or improved quality.</p> <p>Additional compensation for replacing lost trees (as described above).</p>
	Informal User	Compensation for lost crops and trees at market value (as determined by Ministry of Agriculture and Forestry).	<p>Replacement of cost of improvements made to non-agricultural land during use as determined by AYGM asset valuers.</p> <p>After discontinuation of land use, the Contractor must return land to user in same original condition.</p>

⁸³ The Contractor will be required to set up and maintain appropriate access. In case this is not possible, appropriate compensation shall be determined on a case-by-case basis in accordance with the principles and objectives of this RAP. The Contractor should give priority to vacant lands not used for agricultural /residential purposes.

Type of loss	PAP	Entitlement	
		Compensation to meet National Requirements	Compensation to meet PR5
			Other Allowances: Three months advance notification of the informal user to move prior to construction. Assistance in locating and accessing similar alternative land for rent. Temporary land provided as in-kind compensation to be of the same or improved quality. Additional compensation for replacing lost trees (as described above).

8.7 MINIMUM HOUSING STANDARDS

8.7.1. There is no overarching legislation in Turkey which specifies minimum housing standards. However, there are a number of laws that provide details on housing standards that will need to be followed when AYGM provide in-kind compensation to those being physically displaced by the Project. These include the following:

- **Building Earthquake Code of Turkey:** The Building Earthquake Code of Turkey has been renewed in 2019 in view of both the developments in earthquake engineering and in line with social needs. According to this Code, various building classifications guide the minimum design requirements/standards.
- **Guidelines that set out minimum design standards for specific buildings in Turkey:**
 - Ministry of National Education has published the below minimum design standards guideline (http://erbaa.meb.gov.tr/meb_iys_dosyalar/2016_12/06090414_2015_egitim_yapilari_asgari_tasarim_standartlari_klavuzu.pdf).
 - Ministry of Health has published the below minimum design standards guideline (https://sbu.saglik.gov.tr/Ekutuphane/kitaplar/s.b.2010_klavuz_lowres_23092010.pdf).
- **Planned Areas Zoning Regulation:** This is Turkey's main regulation with respect to zoning for planned areas. It is delineating the procedures and principles for houses/buildings and the planning, technology, health and sustainable environment conditions of zoning areas. For example: minimum structure size of apartments, the minimum area of each independent section, the building coverage ratio (ratio of the building coverage to the zoning parcel), setback distance etc.
- **Law No. 4708 on "Building Inspection (the "Law") and the Regulation on Implementation of Building Inspection":** This Law and Regulation prescribes the required durability and service life but also construction of buildings in accordance with development plans, scientific and health-related rules. It makes references to TS 500 (Requirements for design and construction of reinforced concrete structures) and other related standards.
- **Ministry of Environment and Urbanization performs the duties assigned to the Ministry by the Law No. 4708** (<https://yapiisleri.csb.gov.tr/en/units/departments-of-building-control/2120>): This law encompasses the construction within the borders of municipalities and the area around them.
- **Law No. 3194 (Land Zoning Law):** This law contains some provisions regarding buildings that are not covered within Law No. 4708 above. For example, Article 27 and Article 8/ğ creates legal framework for specific "Village Design Guidelines". The purpose of these guidelines is to provide minimum design guidance of houses and areas to assess, promote and achieve appropriate development in villages.
- **Additional information from the Governmental Mass Housing Administration (TOKI) Policy:** TOKI guides the direction of housing policy in Turkey. The first priority of TOKI within the framework of the 2023 vision announced by the administration (11th Development Plan) is the construction of housing with increased quality and standards.

8.8 ASSISTANCE WITH LEGAL COSTS

8.8.1. In addition to the cash and in-kind compensation and other allowances as described in the Entitlements Matrix (**Table 8-2**) above, all PAP categories are entitled to cash or in-kind compensation to cover legal costs for all transactions relating to physical or economic displacement due to the Project, should they occur. These legal costs may include support with registering land

property (update of title deeds), correction of inheritance documents, court proceedings, etc. This includes the updating of title deeds to reflect marital property regimes, intended to assign spousal control over marital property.

8.9 TRANSPORTATION COSTS

8.9.1. When assets are required to be moved due to expropriation, AYGM will cover the costs of transporting these assets using local haulage, shipping and courier providers to replacement land or other locations provided by PAPs. Assets for transportation could include:

- Demolished material (debris);
- Fencing and gates;
- Household items, appliances and furniture;
- Sheds and containers;
- Water tanks;
- Outdoor cooking appliances (such as barbecues); and
- Animal shelters (such as chicken coops).

8.10 AVAILABILITY OF SUITABLE REPLACEMENT AGRICULTURAL LAND

- 8.10.1. The affected PAPs themselves will investigate the availability of suitable replacement agricultural land. If suitable replacement land is found by the PAP to the same or improved quality and quantity as the land being acquired by AYGM, then AYGM will ask for the availability of the land from the Asset Management Authority. If available, AYGM will assist the PAP to follow purchasing this replacement land.
- 8.10.2. AYGM will coordinate involvement of agricultural specialists from the Ministry of Agriculture and Forestry (and supporting provincial administrations) to assess the suitability of proposed replacement land for agricultural purposes to the best extent. The Ministry is expected to deploy its internal regulations by taking into consideration the quantity and quality of land as well as the location of the land related to the residence of the PAP'. These experts could include experienced soil scientists, agronomists and livestock specialists, and will specify any site preparation requirements (such as clearing, deep ploughing or initial fertilisation). In addition, as the location of replacement lands are unknown, the consideration of the effects of climate change on agriculture will need to be the responsibility of the agronomist.
- 8.10.3. AYGM will also support those renting agricultural land plots (formally and informally) to secure replacement lands to the same or improved quality and quantity, ensuring that rental prices are not greater than what was being originally paid.
- 8.10.4. It is acknowledged that replacement agricultural land to buy and rent are in short supply in the Project area and in-kind compensation will not be widely requested by PAPs.

8.11 AVAILABILITY OF SUITABLE REPLACEMENT NON-AGRICULTURAL LAND

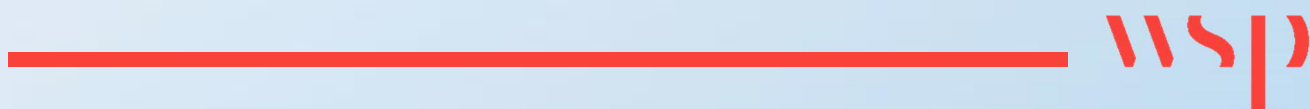
- 8.11.1. The affected PAPs themselves will investigate the availability of suitable replacement non-agricultural land. If suitable replacement land is found by the PAP, to the same or improved quality and quantity as the land being acquired by AYGM, then AYGM will ask for the availability of the land from the Asset Management Authority. If available, AYGM will then purchase this replacement land

on behalf of the PAP and transfer ownership to the PAP prior to acquiring the affected land parcel for the Project.

- 8.11.2. AYGM will also support those renting non-agricultural land (formally and informally) to secure replacement lands, ensuring that rental prices are not greater than what was being originally paid.

9

LIVELIHOOD RESTORATION PLAN



9 LIVELIHOOD RESTORATION PLAN

9.1 LIVELIHOOD RESTORATION OBJECTIVES

- 9.1.1. As presented in **Chapter 4: Affected People and Assets**, this Project will require the acquisition of land parcels from private owners and the physical and economic displacement of PAPs. Economic displacement will be caused by the direct expropriation of land currently used for livelihood⁸⁴ activities, the impact of the Project on surrounding land users and businesses, as well as temporary impacts during the construction phase.
- 9.1.2. This LRP provides a basis for AYGM to develop and implement a full livelihood restoration programme to support the livelihoods of PAPs that will be economically displaced due to Project activities. This includes support to maintain and improve current economic activities, as well as provide alternative livelihood opportunities, with the aim of ensuring that PAPs are not economically disadvantaged in the long-term as a result of the Project. Further, in situations where vulnerable PAPs will be economically displaced, this LRP provides a basis for AYGM to develop opportunities for these PAPs to improve their livelihoods.
- 9.1.3. This LRP is based on the information gathered during the asset inventory survey update and the household surveys. It sets out the key livelihood restoration measures to be applied by AYGM, addressing the gaps between national legislation and PR5 requirements in relation to livelihood restoration of PAPs. AYGM will review and apply the measures included in this Chapter to develop detailed Livelihood Restoration Assistance Packages (LRAPs) for PAP groups.
- 9.1.4. The LRAPs will be developed by AYGM prior to the implementation of this RAP (as described in **Chapter 12: Implementation Schedule**). The LRP and LRAPs will be reviewed and updated by AYGM PIU throughout its implementation.
- 9.1.5. Livelihood Restoration Eligible Groups
- 9.1.6. Chapter 8: Eligibility and Entitlements provides a full breakdown of the entitlements for compensation and resettlement assistance for the 19 PAP groups. Eligibility for LRAPs is included within the Entitlements Matrix (presented in **Chapter 8: Eligibility and Entitlements**).
- 9.1.7. It is expected that agricultural producers of crops and owners and agricultural producers of perennial trees/plants will be the most significantly affected by economic displacement, due to the loss of public and private land currently used for farming practises. This includes PAPs growing produce for their own consumption. These agricultural producers will therefore not only be provided cash compensation for their loss of produce (and loss of land if any is owned) but will also be entitled to additional livelihood support measures to ensure that they do not experience economic hardship due to the Project.

⁸⁴ "Livelihood" refers to the full range of means that individuals, families, and communities use to make a living, such as wage-based income, agriculture, fishing, foraging, other natural resource-based livelihoods, petty trade and bartering.

9.1.8. PAPs will be informed about their livelihood restoration entitlements by AYGM and the Project CLOs, during monthly consultation meetings, negotiations with landowners / users and ongoing engagement with PAPs (as detailed in the **SEP**). AYGM will explain to PAPs what is included in the LRAPs and provide eligible PAPs with the opportunity to apply for these packages. When applying for LRAPs, PAPs will need to provide the information in **Table 9-1**. AYGM will provide support and assistance to vulnerable PAPs with this process (such as completing paperwork, legalising leases, etc.), if needed, and details of this support will be communicated through consultation meetings, negotiation meetings and ongoing stakeholder engagement activities described in the **SEP**. This support can be provided through one to one sessions with vulnerable PAPs after consultation meetings.

Table 9-1 – Information Required per PAP Group to Prove LRAP Eligibility

PAP Group	Information Required
Owners / shareholders of permanently affected private agricultural land parcels	<ul style="list-style-type: none"> ■ Proof of residency ■ Ownership/use status ■ Proof of entitlement, such as title deeds ■ Details of the land and income loss ■ Whether the owners/shareholders are categorised as poor (yes or no) ■ Gender (female/male) ■ Age⁸⁵ ■ Whether the owners/shareholders have any disability (physical and/or mental) and/or have a family member with a chronic illness who is part of the affected PAP household
Formal tenants / informal users of permanently affected private agricultural land parcels	<ul style="list-style-type: none"> ■ Proof of use e.g. formal rental agreement or verbal agreements in place with owner ■ Details of the land and income loss (i.e. if 20% or more of their productive land is affected, etc.) ■ Whether the owners/shareholders are categorised as poor (yes or no) ■ Gender (female/male) ■ Age ■ Whether the owners/shareholders have any disability (physical and/or mental) and/or have a family member with a chronic illness who is part of the affected PAP household
Formal tenants / informal users of permanently affected public land parcels which are	<ul style="list-style-type: none"> ■ Proof of use e.g. formal rental agreement or verbal agreements in place with the state ■ Details of the land and income loss (i.e. 20% or more of their productive land is affected, etc) ■ Whether the formal tenants/informal users are categorised as poor (yes or no) ■ Gender (female/male)

⁸⁵ Proof of age required to establish eligibility for LRAPs available for PAPs over 65 years of age.

PAP Group	Information Required
currently used for agriculture	<ul style="list-style-type: none"> Age Whether the formal tenants/informal users have any disability (physical and/or mental) and/or have a family member with a chronic illness who is part of the affected PAP household
Owners / shareholders of permanently affected non-agricultural private land parcels	<ul style="list-style-type: none"> Proof of residency Ownership/use status Proof of entitlement, such as title deeds Details of the land and income loss (i.e. if 20% or more of their land is affected, etc) Whether the owner/shareholder is categorised as poor (yes or no) Gender (female/male) Age Whether the owners/shareholder have any disability (physical and/or mental) and/or have a family member with a chronic illness who is part of the affected PAP household
Formal tenants / informal users of permanently affected non-agricultural private land parcels	<ul style="list-style-type: none"> Proof of use e.g. formal rental agreement or verbal agreements in place with owner Details of the land and income loss (i.e. if 20% or more of their land is affected, etc) Whether the formal tenants/informal users are categorised as poor (yes or no) Gender (female/male) Age Whether the formal tenants/informal users have any disability (physical and/or mental) and/or have a family member with a chronic illness who is part of the affected PAP household
Owners of residential houses	<ul style="list-style-type: none"> Proof of residency Ownership/use status of the house, including any rental agreements Proof of entitlement, such as title deeds Whether the owners are categorised as poor (yes or no) Gender (female/male) Age Whether the owners have any disability (physical and/or mental) and/or have a family member with a chronic illness who is part of the affected PAP household
Formal tenants of residential houses	<ul style="list-style-type: none"> Proof of residency Use status of the house, including rental agreements Whether the formal tenants are categorised as poor (yes or no) Gender (female/male) Age Whether the formal tenants have any disability (physical and/or mental) and/or have a family member with a chronic illness who is part of the affected PAP household

PAP Group	Information Required
Owners / formal users of non-residential buildings and secondary structures	<ul style="list-style-type: none"> Ownership/use status of the structure, including any rental agreements Proof of entitlement, such as title deeds (if owned) Whether the owners / formal users are categorised as poor (yes or no) Gender (female/male) Age Whether the owners / formal users have any disability (physical and/or mental) and/or have a family member with a chronic illness who is part of the affected PAP household
Business owners / employees permanently affected by loss of working land and/or income due to interrupted business activities	<ul style="list-style-type: none"> Business owner or employee status Proof of business ownership or employment contract (formal or verbal) Details of the land used by business and income loss to business owner and/or employee Business owner or employee categorised as poor (yes or no) Gender (female/male) Age Having any disability (yes or no) Qualifications and previous experience (CV and references, if available) Other business-owned assets
Vulnerable PAPs	<ul style="list-style-type: none"> Proof of ownership or use of: land, residential buildings, non-residential buildings, secondary structures or crops/trees affected by the Project Vulnerable PAPs categorised as poor (yes or no) Poor households below the minimum standard of living⁸⁶ (yes or no) Gender (female/male) Age and dependence on: affected lands, residential buildings, non-residential buildings, and secondary structures Whether the vulnerable PAPs have any disability (physical and/or mental) and/or have a family member with a chronic illness who is part of the affected PAP household Evidence of severe health conditions and long-term complication arising from the COVID-19 virus (e.g. doctor's letter) Literate (yes or no) Cumulatively affected (yes or no)⁸⁷ Previously subject to expropriation (yes or no) Women-headed household (yes or no) Evidence to demonstrate historic water supply issues (e.g. communications with Mukhtar and local utility companies) Evidence of welfare support provided by the State

⁸⁶ The term "poor" does not have an official definition in Turkey. Poor is defined as less than a 1/3 of the minimum wage (minimum wage in Turkey is 2,825.90 TL as of 2021).

⁸⁷ Those who are cumulatively impacted by this Project and the under construction Çerkezköy to Kapikule high speed railway.

PAP Group	Information Required
Business owners / employees temporarily affected by loss of working land and/or income due to interrupted business activities	<ul style="list-style-type: none"> Business owner or employee status Proof of business ownership or employment contract (formal or verbal) Details of the land used by business and income loss to business owner and/or employee Business owner or employee categorised as poor (yes or no) Gender (female/male) Age Having any disability (yes or no) Qualifications and previous experience (CV and references, if available) Other business-owned assets
Owners / formal tenants / informal users temporarily affected by loss of access to / or loss of land (private or public) during the construction phase.	<ul style="list-style-type: none"> Proof of residency Ownership/use status Proof of entitlement, such as title deeds Details of the land and income loss (i.e. if 20% or more of land parcel is affected, etc) Type of affected parcel Owners/formal tenants/informal users categorised as poor (yes or no) Gender (female/male) Age Whether the owners/formal tenants/informal users have any disability (physical and/or mental) and/or have a family member with a chronic illness who is part of the affected PAP household

9.1.9. Eligibility of PAPs will be assessed and confirmed by AYGM during LRAPs consultations and the preparation of the LRP.

9.2 NATIONWIDE ONGOING DEVELOPMENT INITIATIVES AND KEY INSTITUTIONS

9.2.1. In developing this LRP, ongoing initiatives and organisations near the Project were taken into consideration. The following relevant initiatives and organisations were identified, and will be integrated in the LRAPs:

- Agriculture: The Provincial Administrations Agricultural Support Programme (run by the Ministry of Agriculture and Forestry);
- Beekeeping: S.S. Istanbul Bee and Bee Products Production and Marketing Cooperative; and Tekirdag Bee Producer's Union;
- Chamber of Industry and Commerce;
- Social Support Programmes, including: Social Assistance Directorate General (SADG) under the Ministry of Family, Labour and Social Services; and
- General Directorate of Land Registry and Cadastre.

9.2.2. If relevant and required by the PAP, AYGM will contact local institutions and cooperatives to provide livelihood restoration support to the PAP, with the costs of working with these institutions to be covered by AYGM. An overview of these local institutions is provided in **Table 9-2** below.

Table 9-2 - Cooperatives and Unions Used by Producers in Affected Communities

Turkish	English
Ömerli Mahallesi	Omerli Quarter
2543 Sayılı Hadımköy Tarım Kredi Kooperatifi	Hadimkoy Agricultural Credit Cooperative No.2543
774 Sayılı Çatalca Yağlı Tohumlar Tarım Satış Kooperatifi	Catalca Oil Seeds Agricultural Sales Cooperative No 774
Gazi Mustafa Kema Paşa Mahallesi	GMK Quarter
700 Sayılı Çerkezköy Tarım Kredi Kooperatifi	Cerkezkoy Agricultural Credit Cooperative Number 700
Ferhatpaşa Mahallesi	Ferhatpasa Quarter
897 Sayılı Çatalca Tarım Kredi Kooperatifi	Catalca Agricultural Credit Cooperative No 897
774 Sayılı Çatalca Yağlı Tohumlar Tarım Satış Kooperatifi	No 774 Catalca Oil Seeds Agricultural Sales Cooperative
İstanbul Arı ve Arı Ürünleri Üretim ve Pazarlama Kooperatifi (Çatalca)	Istanbul Bee and Bee Products Production and Marketing Cooperative (Catalca)
İstanbul Damızlık Sığır Yetiştiricileri Birliği	Istanbul Cattle Breeders Association
İnceğiz Mahallesi	Incegiz Quarter
897 Sayılı Çatalca Tarım Kredi Kooperatifi	Catalca Agricultural Credit Cooperative No 897
774 Sayılı Çatalca Yağlı Tohumlar Tarım Satış Kooperatifi	Catalca Oil Seeds Agricultural Sales Cooperative No 774
İstanbul Arı ve Arı Ürünleri Üretim ve Pazarlama Kooperatifi (Çatalca)	Istanbul Bee and Bee Products Production and Marketing Cooperative (Catalca)
İstanbul Damızlık Sığır Yetiştiricileri Birliği	Istanbul Cattle Breeders Association

Turkish	English
Kabakça Mahallesi	Kabakca Quarter
Kabakça 900 Sayılı Tarım Kredi Kooperatifi	Kabakca Agricultural Credit Cooperative Number 900
774 Sayılı Çatalca Yağlı Tohumlar Tarım Satış Kooperatifi	Catalca Oil Seeds Agricultural Sales Cooperative No 774
Büyüksinekli Mahallesi	Buyuksinekli Quarter
853 Sayılı Silivri Tarım Kredi Kooperatifi	Silivri Agricultural Credit Cooperative No.853
Yeşilbayır Mahallesi	Yesilbayir Quarter
774 Sayılı Çatalca Yağlı Tohumlar Tarım Satış Kooperatifi	Catalca Oil Seeds Agricultural Sales Cooperative No 774
2543 Sayılı Hadımköy Tarım Kredi Kooperatifi	Hadımkoş Agricultural Credit Cooperative No.2543
Akören Mahallesi	Akoren Quarter
774 Sayılı Çatalca Yağlı Tohumlar Tarım Satış Kooperatifi	Catalca Oil Seeds Agricultural Sales Cooperative No 774
897 Sayılı Çatalca Tarım Kredi Kooperatifi	Catalca Agricultural Credit Cooperative No 897
Kabakça 900 Sayılı Tarım Kredi Kooperatifi	Kabakca Agricultural Credit Cooperative Number 900

9.3 LIVELIHOOD RESTORATION MEASURES

Table 9-3 provides a list of the livelihood restoration measures that will be the basis on which AYGM will develop the LRAPs. Vulnerable PAPs, including women who meet the vulnerability criteria, will be eligible for the same livelihood restoration measures as all other PAPs. As presented in **Chapter 6: Organisation Arrangements and Land Acquisition Approach**, men and women of affected households will be consulted together with when choosing entitlements, including the most suitable LRAPs. This is to ensure that women's preferences will be accounted for in the choice of livelihood restoration options. The measures listed in **Table 9-3** will be provided in addition to the entitlements included in the Entitlements Matrix in **Chapter 8: Eligibility and Entitlements**.

Table 9-3 – Livelihood Restoration Measures

Category	Livelihood Restoration Measure	Description
Agricultural Land	Support for agricultural equipment and agricultural production inputs	<p>AYGM will cover the costs of PAPs in transporting equipment (e.g. tractor, ploughs, seed spreader, etc.) to new land parcels. Additional agricultural equipment and inputs may also be required by the PAPs to support with cultivating the replacement land parcel effectively (particularly if different crops are to be produced). AYGM will assist the PAP to establish contact with relevant institutes to review what can be produced on the replacement land and cover the costs of purchasing appropriate equipment and agricultural inputs to support that production, such as:</p> <ul style="list-style-type: none"> ■ Connection with agricultural co-operatives to access markets and advice; ■ Seeds for high-yielding varieties of agricultural crop, and/or short-cycle crop varieties; ■ Replacement seeds, seedlings or saplings for lost crops and trees; ■ One-off organic fertiliser, herbicides and pesticides, with training on how to use appropriately; ■ Water wells or irrigation systems; ■ Improvements and advice related to drying, storage and transportation of crops/goods; and ■ Advice related to crop production, rotation, etc, including as needed for animal husbandry (where landowners grow crops to feed their animals).
	Support for animal husbandry	<p>AYGM will cover the costs of PAPs in safely transporting animals and equipment (e.g. tractor, ploughs, seed spread, etc.) to new land parcels. If any animals sustain any injuries or fatalities during transportation, AYGM will cover the costs of medical treatment and provide cash compensation for any animals that die during transportation.</p> <p>AYGM will also offer financial support in improving the animal husbandry practices of those being relocated by assisting the PAP to establish contact with relevant institutes to engage specialists who will be able to assess the current practices and provide recommendations in animal husbandry improvements. This could include:</p> <ul style="list-style-type: none"> ■ Construction of animal housing (e.g. barns, sheds, coops) to meet minimum animal shelter standards as set out by the EU⁸⁸ and International Finance Corporation (IFC)⁸⁹; ■ One-off visit by veterinary professional to provide check-ups for all animals, and medication, if required; ■ Animal health improvements (e.g. access to supply of improved feed, including one-off payment for first purchase, supply chain advice and general awareness training); ■ Introduction of local species, or potential artificial insemination of local stock with imported semen, to improve livestock breeds; and ■ Analysis of local markets and identification of additional buyers of animal products.
	Support for beekeepers	<p>AYGM will cover the costs of PAPs in transporting the beehives and equipment (e.g. frames and foundations, smokers and hive tools etc.) to new land parcels. AYGM will assist the PAP to establish contact with relevant institutes to work with beekeeping cooperatives/unions to develop a general approach to relocating beehives on affected land parcels to ensure sufficient distance and safe transportation.</p> <p>As part of this approach, the following assistance will be provided by AYGM:</p> <ul style="list-style-type: none"> ■ Costs and assistance in moving hives. AYGM will assist the PAP to establish contact with relevant institutes to work with the beekeeper and supporting institutions/unions to ensure the hives are transported safely. This will involve the following factors: <ul style="list-style-type: none"> • Relocation season – Assessment of the most suitable time to relocate bees in consultation with the S.S. Istanbul Bee and Bee Products Production and Marketing Cooperative and the Tekirdag Bee Producer's Union. • Safe transportation – Safe bee transportation methods will be discussed with the beekeeping PAPs and cooperatives/unions to ensure that bees are not harmed during their transportation.

⁸⁸ Council Directive 98/58/EC of 20 July 1998 concerning the protection of animals kept for farming purposes.

⁸⁹ Please refer to the IFC Good Practice Note on Improving Animal Welfare in Livestock Operations for further guidance: www.ifc.org/GPN-AnimalWelfare.

Category	Livelihood Restoration Measure	Description
		<ul style="list-style-type: none"> Administrative and financial support in ensuring all the hives are licensed by the Ministry of Agriculture, and Forestry and the beekeeper is a member of a beekeeping cooperative and/or union⁹⁰ if required by the PAP. If any hives are damaged, or colonies collapse during transportation, AYGM will cover the costs of purchasing replacement hives and bees. Advice relating to beekeeping best practice, including information on diseases and treatment, etc.
	Access to alternative public land for grazing	<p>AYGM will cover the costs of PAPs in safely transporting animals and equipment, and ensure that each replacement land parcel for grazing is:</p> <ul style="list-style-type: none"> Allocated as pasture for grazing; Of sufficient quality to satisfy the grazing needs of the PAPs' animals; Does not contain species that may be harmful to livestock; and Has suitable grazing capacity. <p>Advice on seasonal grazing and animal husbandry as described under 'Support for animal husbandry' section above will also be provided.</p>
	Vegetable garden and greenhouse relocation	<p>Many of the residential land parcels that will be expropriated, have a vegetable garden which is relied upon by the household. These tend to be maintained by women in the household. AYGM will financially support the re-establishment of vegetable gardens for physically displaced households, and provide assistance in relocating greenhouses, if required.</p> <p>AYGM will assist these affected households with coordination with relevant institutions to help PAPs to find alternative land parcels for housing, which include gardens (or have nearby available space for creating a garden). The following will be considered when identifying suitable replacement land parcels:</p> <ul style="list-style-type: none"> Suitability of soil (for produce), land capability and required improvements/soil preparation; Required cultivation techniques (e.g. fertilisation, and transplanting, weeding etc.); Accessibility to main house; Security – animal intrusion and theft; Fencing requirements; Availability of land; Water availability and requirement of supporting secondary structures (e.g. drilled or hand-dug wells, pumping); Acceptability of maintenance costs; and Options for integrating with animal husbandry to provide organic fertilisation. <p>AYGM will cover all costs associated with the above to ensure that a suitable replacement vegetable garden, and any greenhouses are either relocated or a new greenhouse as a replacement will be provided.</p>
Non-Agricultural Land	Business support for business owners	<p>Non-agricultural businesses (formal and informal) will be affected by the Project (both business owners and employees), as detailed in Chapter 4: Affected People and Assets. AYGM will provide the following assistance to affected businesses (support for employees is detailed in the next row):</p> <ul style="list-style-type: none"> Support in accessing new markets for products/services and in advertising new business location to customers; Access to technical experts/consultants in their sector to analyse business activities who will recommend improvements; and Effectively and sensitively relocating business activities, if required.

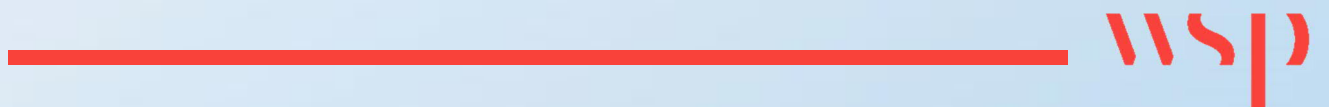
⁹⁰ Every beekeeper in Turkey who has 30 colonies, or more, is required to register to their city's Beekeepers Association, and 98% of beekeepers are registered to the Turkish Beekeepers Association. All the beekeepers associations in the 81 Turkish provinces are managed by the Central Beekeeping Association in Ankara.

Category	Livelihood Restoration Measure	Description
	Support for employees	<p>AYGM will support and financially assist the PAP to engage with suitable institutions that provide suitable training to the PAPs who are economically displaced and require either temporary employment while businesses are being relocated, or alternative employment if employment is no longer provided after the expropriation of a business.</p> <p>The following livelihoods have been identified as being potentially available for suitably qualified PAPs, on a temporary, or permanent basis:</p> <ul style="list-style-type: none"> Temporary employment during construction – AYGM will ensure that the Contractor provides a Local Procurement Plan to provide opportunities for local businesses and workers (e.g. subcontractors, catering and accommodation). The Contractor will establish a Local Employment Champion to work with AYGM to facilitate PAPs employment in construction. The recruitment process will be clearly defined by AYGM and the Contractor through this Plan, providing details on: how PAPs can apply, screening tests and eligibility criteria for available employment. Permanent employment during operation – TCDD will liaise with PAPs working temporarily during construction to provide employment opportunities during the operation of the Project. This could include railway maintenance, security, catering or cleaning roles. AYGM will prioritise PAPs when recruiting for post-employment opportunities that become available during construction and operation. Agricultural employment – AYGM will liaise with local farms and cooperatives to establish where permanent and temporary roles may be available. Employment in key industry – There are several large employment areas located along the route of the Project – including: Hadımköy Deliklikaya Organized Industrial Zone in Deliklikaya and Ömerli; İstanbul Hezarfen Airfield in Bahşayış; Çatalca Organized Industrial Site in Ferhatpaşa; and industrial areas in İstasyon (Çerkezköy). AYGM will liaise with businesses within these areas to proactively identify job opportunities for PAPs. <p>AYGM will provide the following financial and administrative assistance if employment is no longer provided after the expropriation of a business:</p> <ul style="list-style-type: none"> Support in registering those who are seeking employment; Facilitate job placement; Provide opportunities for vocational skills development in local educational institutions; Business management training; Literacy, numeracy and language training; and Classroom and on the job training. <p>AYGM will work with supporting organisations to provide this assistance in establishing alternative livelihoods upon commencement of the implementation of the RAP and during the construction phase. This support will also be provided by TCDD Transport for up to 2 years into the operation phase of the Project. Refer to SEP for further details.</p>
	Alternative livelihoods – new business development and support	<p>Some PAPs will prefer to begin new businesses themselves, rather than seek employment. For this category of PAPs, AYGM will therefore provide training, administrative assistance and financial support . The following ideas for new businesses have been identified, relevant to the local area and context:</p> <ul style="list-style-type: none"> Catering for construction workers and wider industrial areas; Food processing, packaging and marketing; Breeding of small animals; and Beekeeping. <p>As part of this assistance, AYGM will provide connections and costs for guidance and training on business establishment (legal forms and documentation, registration, business planning, equipment, recruitment etc.) until the business is established. They will also find potential access to credit, if required, will monitor business activity for any issues and provide regular refresher training.</p>
	Business formalisation	<p>There are existing businesses that will be affected by the Project that are informal and are not registered as a company. AYGM will assist these informal businesses with their formal registrations. AYGM will provide administrative support and cover registration fees with the Companies Registrar, completed in the local office of the Chamber of Commerce.</p>
Special Assistance for Vulnerable Groups	One-off cash support for poor and elderly and PAPs with disabilities who are not actively engaged with land activities	<p>AYGM will provide a one-off cash payment for poor, elderly or disabled PAPs who have lost their land and do not have the capacity to engage in economic activity due to their vulnerability.</p> <p>This measure will target vulnerable PAPs that do not have capacity to engage in any agricultural production or livestock related activities and who do not have the capacity to engage in other livelihood assistance packages provided for livelihood restoration.</p>

Category	Livelihood Restoration Measure	Description
	Transitional allowance for those who are significantly affected	<p>This measure will target vulnerable PAPs who are significantly affected by loss of land and/or household income due to the Project, and are not working in a job that provides a regular income.</p> <p>As well as the compensation provided for lost income and land under the Entitlement Matrix, these significantly-affected persons will also be provided with a one-off cash payment, equivalent to 6 months of the basic salary under Turkish Law.</p>
	Specific support for physically relocated vulnerable PAPs with chronic illness and disabilities (including the elderly with mobility issues)	<p>Vulnerable people losing residential housing will have some specific support measures, particularly those who need access to medical facilities, those with disabilities and children with special needs (e.g. specific schooling required, etc). All of these circumstances may limit the choice of suitable alternative living locations and will need to be considered, if in-kind compensation is requested.</p> <p>For example, AYGM will ensure that in-kind compensation includes: disability access provision (e.g. ramps, mobility aids, etc), access to suitable schooling and healthcare facilities/staff, if required.</p>
	Support to access to and register with national social support programmes	<p>AYGM will assist in collaboration with social services to ensure PAPs retain means tested benefits which might be lost due to income from compensation. In addition, assistance will be provided to assist in the registration of benefits to new places of residence (particularly for vulnerable people).</p> <p>Social programmes from the government are available to vulnerable groups. AYGM will provide support and administrative assistance to eligible PAPs in accessing these programmes (if not already accessed).</p>
	PAP households containing elderly persons	Households containing elderly people will be given priority (first choice) in accessing alternative land close to their current location (including replacement housing and land).
	Community resources and facility improvement	<p>AYGM will make available a livelihood restoration package to replace or amend affected community resources. This could include measures for noise cancellation and relocation if community health is affected (temporary relocation during construction and permanent relocation during operation, if required).</p> <p>Communities, represented by their Mukhtars will make applications for this assistance to AYGM, and AYGM will assess each application based on current and predicted noise, dust and vibration levels.</p>

10

MONITORING AND REPORTING



10 MONITORING AND REPORTING

10.1 INTRODUCTION

- 10.1.1. The PIU is required to establish a procedure to monitor and evaluate the implementation of the RAP and take corrective actions, as necessary, to achieve compliance with national legislation and PR5. This chapter sets out the monitoring and reporting arrangements that will ensure that the land acquisition and resettlement process is fully implemented in accordance with this RAP.
- 10.1.2. This RAP sets out measures to mitigate the potential negative impacts of physical and economic displacement that could be caused by the Project. The AYGM Senior Management Team will approve and oversee the implementation of the RAP to ensure it is carried out in accordance with PR5.
- 10.1.3. The AYGM Senior Management Team will be responsible for appointing the PIU Social and Resettlement Specialist to implement the RAP and conduct internal monitoring, with support from the Section Manager and Livelihood Restoration Specialist. The PIU Social and Resettlement Specialist will be responsible for appointing an External Independent Monitoring Consultant who will undertake external monitoring, every 6 months, during implementation of the RAP alongside a completion audit and a long-term review upon completion of the RAP, and yearly for 3 years after completion.
- 10.1.4. The objective of the monitoring and reporting is to provide feedback to the AYGM Senior Management Team and the Lender's on the effective implementation of this RAP. It will also ensure that any unforeseen impacts, issues, and successes related to physical and economic displacement are identified as early as practicable. Appropriate measures will be identified to address such impacts and issues and maximise successes in livelihood restoration and improvement in a timely manner and will allow for adjustment to the RAP implementation process, where appropriate. RAP monitoring also facilitates grievance management aiming to reduce the number and scale of grievances raised by PAPs.

10.2 MONITORING FRAMEWORK

- 10.2.1. The Monitoring and Evaluation Framework designed for this RAP includes the following three components:
 - Performance monitoring (internal monitoring) by PIU Social and Resettlement Specialist, on behalf of AYGM and reviewed by the External Independent Monitoring Consultant;
 - Impact monitoring (external monitoring) by the External Independent Monitoring Consultant every 6 months during the implementation process; and
 - A completion audit and long-term review upon completion of this RAP, and yearly for 3 years after completion, by the External Independent Monitoring Consultant.
- 10.2.2. The External Independent Monitoring Consultant above will be supported by the CLOs to ensure that all grievances and community views are included in the RAP monitoring reports.
- 10.2.3. The RAP monitoring will be undertaken using the Monitoring and Evaluation Framework presented in **Table 10-1**. The monitoring undertaken through this framework will use the 4 monitoring

indicators (consisting of input⁹¹, output⁹², process⁹³ and outcome/impact⁹⁴ indicators) listed in **Table 10-2**.

⁹¹ **Input indicators** include the resources in terms of people, equipment and materials that go into the RAP. Examples, of input indicators in the RAP include:

- A) The sources and amounts of funding for various RAP activities.
- B) The establishment of the land acquisition team.

⁹² **Output indicators** include activities and services produced with inputs. Examples of output indicators in a RAP can be a database of land acquisition, and the completion of payments made for the loss of assets.

⁹³ **Process indicators** present the changes that occur during and after the RAP implementation and the extent of activities and services that are provided. An example would be the ongoing implementation of grievance mechanism, public consultation and continued awareness raising for the Project.

⁹⁴ **Outcome/impact indicators** cover the delivery of mitigation activities and the measures taken to compensate physical and economic displacement triggered by the Project, such as livelihood restoration and compensation of agricultural production and overall income levels, the changes in PAPs and community attitudes towards the Project, and the use of compensation payments for income generating activities. These indicators will also define the change in long-term measurable results, e.g. in behaviour and attitudes, living standards, and conditions. These outcome/impact indicators may be subject to change by the Independent External Monitoring Consultant. The External Independent Monitoring Consultant carrying out the completion audit will use these outcome/impact indicators, to assess whether restoration activities of the RAP are effective in maintaining and improving the social and economic condition of PAPs.

Table 10-1 - Monitoring Framework

Monitoring and Evaluation Activity	Type of Information/Data Collection Methods	Source of Information/Data Collection Methods	Responsibility for Data Collection Analysis and Reporting	Frequency and Reporting
Performance Monitoring (Internal Monitoring)	Measurement of monitoring indicators against the proposed timeframes (as detailed in Chapter 12: Implementation Schedule) and budget, including ongoing procurement of in-kind compensation and other allowances (as detailed in Chapter 11: Implementation Costs and Budget).	Bimonthly (every 2 months) summary reports on progress against monitoring indicators in Table 10-2.	AYGM Social and Resettlement Specialist with review from External Independent Monitoring Consultant	Bimonthly reports will be submitted to Lenders.
Impact Monitoring (External Monitoring)	Tracking effectiveness of process and outcomes using the monitoring indicators in Table 10-2. Feedback on PAP satisfaction with the RAP.	6 monthly quantitative and qualitative surveys. Review of internal monitoring records. Community meetings focus groups and workshops and other consultation with PAPs (as detailed in the SEP). In addition to, reviews of grievance mechanism and stakeholder consultations (as detailed in the SEP).	External Independent Monitoring Consultant CLOs	6 monthly reporting to Lenders.
Completion Audit and Long-Term Review	Measurement of all monitoring indicators with an emphasis on the monitoring indicators In Table 10-2.	External independent assessment/sign-off report on completion (forecasted 06/2026 based on performance and impact monitoring reports, independent surveys and consultation with affected persons.	External Independent Monitoring Consultant	On completion of RAP timetable (forecasted 06/2026) as agreed between PIU and Lenders, and yearly for 3 years post-completion.

10.3 MONITORING INDICATORS

- 10.3.1. **Table 10-2** below presents the 5 monitoring indicators to be reported against by the PIU Social and Resettlement Specialist and the External Independent Monitoring Consultant. AYGGM will provide the External Independent Monitoring Consultant with the baseline data from the household surveys in order to measure these indicators against the baseline for internal monitoring purposes on behalf of AYGGM.
- 10.3.2. Please note that gender disaggregated data will be gathered for each indicator, where possible, in order to evaluate the specific impact of the RAP on women.

Table 10-2 - Monitoring Indicators

Indicator	Measure	Frequency of Monitoring / Reporting
1) Input Indicators		
Overall spending on land acquisition and resettlement (including a breakdown of costs).	Cash compensation.	Bimonthly
	Costs of providing assistance, by type of assistance.	
	Consultation and engagement costs.	
	Costs of evaluators and surveyors.	
	Costs of legal fees.	
	Costs of taxes and registration fees.	
	Costs of External Independent Monitoring Consultant.	
	Costs of vehicles, computers, etc.	
	Other costs (and type).	
Total number of PAPs, who will need to be compensated, including owners and total number of formal and informal users of Project affected land parcels.	<p>The PAPs data has been received through the surveys and asset inventory update (detailed in Chapter 8: Eligibility and Entitlements).</p> <p>Updates will be made continually as the Social and Resettlement Specialist progresses the identification and compensation of all owners/users of all affected land parcels.</p>	Bimonthly
Number of households that must be physically displaced.	<p>Data on this category of PAPs has been received through the surveys and asset inventory update (detailed in Chapter 8: Eligibility and Entitlements).</p> <p>Updates will be made continually as the Section Manager and PIU team progresses the identification and compensation of households.</p>	Bimonthly
Number of formal and informal businesses that must be relocated.	<p>Data on affected businesses has been received through the surveys and asset inventory update (detailed in Chapter 8: Eligibility and Entitlements).</p> <p>Updates will be made continually as the Social and Resettlement Specialist and Section Manager progress the identification and compensation of all formal/informal businesses that have been relocated by the Project.</p>	Bimonthly
2) Output Indicators		
Number (and percentage) of PAPs who signed compensation agreements.	The percentage should be calculated from the total number of PAPs who signed compensation agreements.	Bimonthly
Number (and percentage) of land parcels, residential houses, non-residential buildings and secondary structures for which compensation agreements were signed.	The percentage should be calculated from the total number of negotiated land parcels, residential houses, non-residential buildings and secondary structures, as identified by the surveys and asset inventory update (detailed in Chapter 8: Eligibility and Entitlements).	Bimonthly
Number (and percentage) of PAPs who refused to sign compensation agreements/are still deciding.	The percentage should be calculated from the total number of PAPs provided with compensation agreements. If possible, a breakdown of reasons why compensation agreements have been refused (or still have not been accepted) should be provided, with separate data on those that have not been negotiated and those that have been unattended.	Bimonthly

Indicator	Measure	Frequency of Monitoring / Reporting
Number (and percentage) of compensation agreements executed (compensation paid in full).	The percentage should be calculated from the total number of PAPs provided with compensation agreements. With separate reporting of compensation in accordance with national legislation and compensation in accordance with PR5.	Bimonthly
Number (and percentage) of households that have been physically displaced (moved to another location).	The percentage should be calculated from the number of households which were identified as having to be physically displaced; with separate reporting of compensation in accordance with national legislation and compensation in accordance with PR5.	Bimonthly
Number (and percentage) of businesses that have been relocated.	The percentage should be calculated from the number of businesses which were identified as having to be relocated.	Bimonthly
Number of PAPs that have been provided with Settlement Deeds	Number of Settlement Deeds that have been requested and delivered to those owning assets above the tunnels.	Bimonthly
Number of PAPs assisted by the PIU by type of assistance and by category (owners/users).	Assistance to prepare ownership documents (monetary assistance, provision of information, legal aid etc.).	Bimonthly
	Assistance to identify replacement land/residential houses for purchase.	
	Assistance to construct/identify new non-residential buildings and secondary structures.	
	Assistance to move or payment of moving costs.	
	Assistance provided through the livelihood restoration programme ⁹⁵ (as detailed in Chapter 9: Livelihood Restoration Plan).	
3) Process Indicators ⁹⁶		
Number of PIU external consultants dedicated to the implementation of this RAP.	Members of the PIU (Section Manager, Social and Resettlement Specialist, Livelihood Restoration Specialist, CLOs).	Bimonthly
	Members of other AYGM departments.	
	Skill trainers and other supporting specialists included in the livelihood restoration plan.	
	External Independent Monitoring Consultant	
Number of newly received, open and closed grievances; any trends in grievances received; and average time for grievance processing.	Measure the time interval between grievance registration and closure as summarised below. <div>■ Immediate grievance registration;</div>	Bimonthly

⁹⁵ A livelihood restoration programme will be developed by AYGM using **Chapter 9: Livelihood Restoration Plan**. When this programme has been developed specific monitoring indicators for each assistance package will be included as part of this proposed monitoring indicator list.

Indicator	Measure	Frequency of Monitoring / Reporting
	<ul style="list-style-type: none">CLOs contact complainant within 2 working days following complainant registration to explain the Project response process to the grievance;10 working days for CLO to investigate and respond to complainant; and10 working days to solve complaint, with more complex investigations resolution can take up to 30 working days maximum. <p>Grievances should be reviewed in accordance with the process detailed in the SEP.</p>	
	Number of PAPs using the Grievance Mechanism.	
	Number of cases resolved at Project-level.	
	Number of cases referred to court and subjects of court cases.	
Engagement activities.	Number of community meetings undertaken.	Bimonthly
	Percentage of women participating in community meetings.	
	Number of focus groups and workshops targeting vulnerable groups including women.	
Budget and timeframes.	Capacity building and training activities completed on schedule (in accordance with Chapter 12: Implementation Schedule).	Bimonthly
	Achieved activities against the agreed RAP implementation schedule.	
	Funds disbursement according to the Chapter 12: Implementation Schedule .	
	Number of land entry protocols signed.	
4) Outcome/Impact Indicators		
Average time for payment of compensation.	Average time between acceptance of the offer/signing of the compensation agreements and the execution of compensation. This should also be regularly internally monitored by the External Independent Monitoring Consultant to determine if there are delays which could put PAPs in a difficult position.	Every 6 months (external monitoring)
How was the received cash compensation used/invested?	Survey to determine what affected people used compensation for, such as: replacement land, replacement residential housing, non-residential buildings and secondary structures (business and facilities), other assets or investments, and not invested for anything.	Every 6 months (external monitoring)
Has compensation been paid at full replacement cost?	Investigate whether recipients of cash compensation who bought replacement land, replacement residential houses, non-residential buildings and secondary structures (business and facilities) were able to purchase a similar (or better) property.	Every 6 months (external monitoring)
Satisfaction with replacement residential housing.	Conduct household and Mukhtar surveys to determine whether displaced households are satisfied with new living arrangements (and why). In relation to the household survey, the survey structure will cover the overall household level (completed by the head of household) and separate sections/questions for their partner.	Every 6 months (external monitoring)
	Assess whether the standard of living seems to have improved or deteriorated (for example, is the household reporting that they bought new furniture, cars, equipment etc.).	
	Assess whether the displaced households have an improved water supply.	

Indicator	Measure	Frequency of Monitoring / Reporting
Re-establishment of incomes/livelihoods.	Assess whether those who were using land as a source of livelihood/income managed to re-establish this source and the same level of livelihood/income.	Every 6 months (external monitoring)
	Assess whether informal users of land have re-established their previous level of income.	
	Calculate the number of PAPs that benefited from the livelihood restoration programme.	
	Number and type of vocational training courses delivered and number of PAPs who attended to evaluate the progress in implementing the livelihood restoration programme.	
	Percentage of displaced persons who improved their income and standard of living using indicators such as income, employment opportunities, costs of goods and services, poverty, life expectancy, inflation rate and the number of paid holidays people receive each year.	
	Assess gender and vulnerability segregated data on livelihood re-establishment.	
Re-establishment of businesses.	Assess whether relocated businesses have been successfully re-established. Survey of net income and comparison to baseline data as presented in Chapter 4: Affected People and Assets .	Every 6 months (external monitoring)
	Assess whether business employees are still working after re-location. (If not, establish reasons why).	
	Survey of employees and their earnings and comparison with baseline data.	
Agricultural productivity.	Assess land productivity against previous productivity levels.	Every 6 months (external monitoring)
	Assess suitability of animal pasture against previous productivity and accessibility levels.	
	Assess whether PAPs not yet achieving pre-Project productivity are still receiving transitional assistance.	
Social stability.	Record the number of arguments or issues between host communities and displaced families, provided through Mukhtar and/or resettled PAPs.	Every 6 months (external monitoring)
	Identify whether the Project has caused significant access issues for PAPs.	
	Identify whether rural communities, with significant percentage of population affected, maintained a sense of community.	
	Percentage of physically resettled households that have the same or increased level of trust in their surrounding community members.	
	Percentage of physically resettled households that have the same or increased sense of security within their new community.	
	Identify whether the elderly populations of affected communities have been provided with suitable social support.	
Health	Identify whether the Project caused health problems (physical and/or mental health issues) in nearby communities. This can be measured with submission of grievances and complaints made to the Mukhtar .	Every 6 months (external monitoring)

Indicator	Measure	Frequency of Monitoring / Reporting
	Identify whether the resettlement process aggravated health concerns of PAPs.	
Rehabilitation of infrastructure, public facilities and access.	Identify whether common resources lost have been replaced.	Every 6 months (external monitoring)
	Identify whether displaced individuals still have access to similar public facilities near replacement residential housing.	
	Identify whether those living close to the Project are able to efficiently cross the alignment to access natural common resources, pastureland, agricultural land and access to community services (such as schools, hospitals, etc).	
	Identify whether there are drop off rates in primary and secondary schools for children in affected households during RAP implementation and 1 year post resettlement.	
Level of satisfaction of PAPs.	Identify how satisfied displaced households (formal and informal) have been with the resettlement.	Every 6 months (external monitoring)
	Identify how satisfied displaced businesses (formal and informal) have been with the resettlement.	
	Identify how satisfied landowners have been with the resettlement.	
	Identify how satisfied land users (formal and informal users) have been with the resettlement.	
	Identify how satisfied nearby communities have been with the Project's environmental, health, safety and social measures.	

10.4 MONITORING

10.4.1. The internal monitoring process will be carried out through:

- **Database Monitoring** – All socio-economic information on each household and the list of their affected assets will be stored in a database that will be the responsibility of the PIU Social and Resettlement Specialist, with support from the Section Manager to maintain. In addition, the database will also include the information on the boundaries of each affected land parcel available in the Geographic Information System (GIS) format.
- **Follow-up Activities** – The follow up on the implementation of this RAP will ensure that the activities are implemented within the dates specified in **Chapter 12: Implementation Schedule**. This process will also help to modify and re-schedule activities where appropriate, to ensure that the RAP implementation is completed on time and as planned.

MONITORING TASKS

10.4.2. Following an evaluation, it has been decided by AYGM that the most effective approach to monitoring the robust implementation of the RAP internally, would be through the Social and Resettlement Specialist, with review from the External Independent Monitoring Specialist. The External Independent Monitoring Specialist will also complete their existing external monitoring role as part of the Project.

Internal Monitoring

Objectives

- To monitor and report on the land acquisition process which will affect other Project activities;
- To measure and report progress against the RAP schedule;
- To verify that agreed entitlements are delivered in full to affected people;
- To identify any problems, issues or cases of hardship resulting from physical displacement, and to develop appropriate corrective actions, or where problems are systemic refer them to the AYGM Senior Management Team;
- To monitor the effectiveness of the grievance mechanism (detailed in the **SEP**); and
- To periodically measure the satisfaction of PAPs.

Activities

- Liaison with the PIU, Contractor and PAPs to review and report progress against this RAP;
- Verification that compensation entitlements are being delivered in accordance with the RAP;
- Verification that agreed measures to restore or enhance living standards are being implemented;
- Verification that agreed measures to restore or enhance livelihood are being implemented;
- Assessment of PAPs satisfaction with resettlement outcomes through household and Mukhtar surveys;
- Monitoring of the Grievance Mechanism in accordance with the **SEP**; and
- Preparation of quarterly summary reports on progress for each of the monitoring indicators and compensation disbursement updates/reports for AYGM Senior Management and Lenders.

Implementation

10.4.3. It is intended that most of these activities will be carried out every 2months (bimonthly) by the PIU Social and Resettlement Specialist, with the External Independent Monitoring Consultant reviewing the reports, however some local consultants/NGOs may be required for support. The CLOs will lead

regular consultation with local communities through virtual outreach and meetings. Where internet access is limited, the CLOs will liaise with the Mukhtars to be able to reach the affected businesses and will undertake small focus groups with 2m social distancing measures in place (in line with COVID-19 restrictions).

10.4.4. Additional PIU Social and Resettlement Specialist tasks for internal monitoring:

- Liaise with other designated officials as necessary within the wider AYGM to collate up-to-date information on land acquisition progress such as agreement signing, compensation disbursement, disbursement milestones, land areas under construction, land areas reinstated and the like;
- Liaison with the CLOs to gather information about progress, issues/incidents, grievances and issues; and
- Conducting semi-structured interviews and/or hardcopy/online surveys with a cross-section of PAPs to verify receipt of entitlements, review effectiveness of measures, assess satisfaction with outcomes (in accordance with the monitoring indicators shown in **Table 10-2**).

External Monitoring

Objectives

- To assess the effectiveness of the land acquisition process as well as compliance with this RAP;
- To verify that measures to restore or enhance PAPs quality of life and livelihood to pre-Project levels are being implemented satisfactorily and effectively; and
- To assess the extent to which the quality of life and livelihoods of affected communities have been restored using information provided by AYGM as well as PAPs and Mukhtars.

Activities

- Review grievance records (as detailed in the **SEP**) for evidence of non-compliance or recurrent poor performance in RAP implementation;
- Discussions with the CLOs to review progress and identify issues;
- Validate the surveys completed by PIU of affected households and businesses on a sample basis to gauge the extent to which PAPs standards of living and livelihood have been restored or enhanced as a result of the project;
- Assess overall compliance with the RAP requirements and PR5; and
- Prepare a summary compliance report for AYGM Senior Management and Lenders on the RAP implementation progress, any issues arising and any necessary corrective actions.

Implementation

10.4.5. Every six months:

- The External Independent Monitoring Consultant would initially convene by teleconference, online/hardcopy surveys, or in person (in accordance with COVID-19 related restrictions) and discuss the review agenda;
- Travel to the Project site (subject to COVID-19 related restrictions);
- Spend 3-4 days in the AYGM office reviewing quarterly internal monitoring summary reports (including supporting documentation), interviewing the Social and Resettlement Specialist, Section Manager and support teams (where relevant) and CLOs as necessary to assess functioning of monitoring and grievance systems, assess progress against this RAP and identify issues arising;

- Spend 7-10 days on site to conduct interviews with a sample of PAPs, the Social and Resettlement Specialist, and supporting CLOs; and
- Develop key conclusions and recommendations based upon the relevant monitoring indicators detailed in **Table 10-2** and prepare an external monitoring report.

10.5 COMPLETION AUDIT AND LONG-TERM REVIEW

- 10.5.1. A key objective of the RAP is that resettlement actions and mitigatory measures should lead to sustainable restoration or enhancement of PAPs pre-Project living standards and income levels. At such time as PAPs quality of life and livelihood can be demonstrated to have been sustainably restored to pre-Project levels, the resettlement process can be deemed “complete”.
- 10.5.2. Resettlement planning for the Project assumes that livelihood restoration of affected landowners will be completely restored through replacement land or other measures, community and social investment programs are well established and all those physically displaced are living in residential housing to the same of higher quality.
- 10.5.3. It is proposed that the resettlement completion audit and long-term review will be conducted by the External Independent Monitoring Consultant upon completion of RAP anticipated 06/2026 and, yearly for 3 years after completion, ending in 06/2029. The External Independent Monitoring Consultant will determine if affected peoples’ living standards and income levels have been fully restored.

10.6 REPORTING REQUIREMENTS

- 10.6.1. The RAP reporting requirements are summarised in **Table 10-3** below:

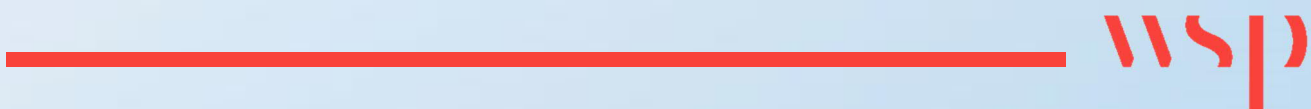
Table 10-3 - RAP Reporting Requirements

Report Type	Frequency	Prepared By	Reviewed By (and issued to)	Comments
Internal RAP Monitoring Report	Bimonthly	PIU Social and Resettlement Specialist	AYGM Senior Management and External Independent Monitoring Consultant (Issued to Lenders)	10-15 page report (plus supporting documentation) summarising progress against the RAP; outline of any issues and agreed related actions; summary schedule of grievance status; minutes of any stakeholder or affected people consultations or meetings.
External RAP Monitoring Report	Every 6 months	External Independent Monitoring Consultant	AYGM Senior Management and Lenders Findings to be made available publicly after presentation to	25-35 page report (plus supporting documentation) summarising assessment of PAP satisfaction with RAP implementation and Grievance Mechanism process, progress towards living standard restoration, livelihood restoration; PR5

Report Type	Frequency	Prepared By	Reviewed By (and issued to)	Comments
			the AYGM Board. (Issued to Lenders)	compliance; discussions of any RAP issues of concern; identification of any areas of non-compliance and agreed corrective actions; and summary of resettlement status.
RAP Completion Audit Report and Reviews	Upon completion of construction and every year after that for a period of 3 years (4 reports in total)	External Independent Monitoring Consultant	AYGM Senior Management and Lenders. Findings to be made available publicly after presentation to the AYGM Board.	RAP Completion Audit and Reviews to verify PIU has complied with undertakings defined by the RAP and that land acquisition and compensation has been completed in accordance with the PR5.

11

IMPLEMENTATION COSTS AND BUDGET



11 IMPLEMENTATION COSTS AND BUDGET

11.1 FUNDING ARRANGEMENTS

- 11.1.1. This Chapter presents the costs for implementing this RAP. It includes:
- All compensation costs;
 - Costs of livelihood measures (inclusive of the livelihood restoration programme described in **Chapter 9: Livelihood Restoration Plan**); and
 - Additional assistance allowances (such as legal fees and transportation costs).
- 11.1.2. It also includes the personnel costs for delivering this RAP, such as fees for the and the External Independent Monitoring Consultant.
- 11.1.3. The RAP implementation costs included in this Chapter will be financed through two separate funding sources:
- Funds allocated from the Ministry of Finance for implementation of the Expropriation Law (national legislation): This source will provide compensation to PAPs in line with Turkish legislation (see **Chapter 3: Legislative Framework, Policy and Guidance**). Compensation provided through national legislation will be disbursed by the AYGM.
 - RAP Fund: A separate RAP Fund, financed by an agreed loan from AIIB, will be established to ensure cash and in-kind compensation meets full replacement values in accordance with PR5 requirements. Compensation provided through this RAP Fund will be disbursed by AYGM.
- 11.1.4. The compensation (including livelihood restoration measures) to be provided to each PAP from both funding sources will be clearly presented in the contracts signed by AYGM and each PAP. Compensation amounts paid under national law and the RAP Fund will be under separate contracts.
- 11.1.5. Payment of the compensation through national legislation to owners and users will be paid within 45 days of title deed transaction. Due to the timing of the loan, the additional compensation provided through the RAP Fund may be disbursed to PAPs after the funds from the Ministry of Treasury and Finance.
- 11.1.6. The full amounts of both allocated compensation amounts will be provided to a PAP before land is either permanently acquired and / or Land Entry Protocols are signed to access land temporarily. Only after delivery of this cash or in-kind compensation to the PAP, will the land be transferred to and accessible by, the Contractor. However, please note that some compensation may continue to be provided after the PAP vacates the expropriated land (e.g. through implementation of the specific livelihood restoration packages).

11.2 BUDGET METHODOLOGY

- 11.2.1. The compensation amounts described in this Chapter are based on the valuation methodologies presented in **Chapter 7: Valuation Methodology**. The total amounts are then calculated using the PAP data obtained during the asset inventory update and the household surveys.
- 11.2.2. The costs have been separated into the following categories:
- Compensation for land where in-kind replacement land is not feasible;
 - Compensation for residential houses, non-residential buildings, and secondary structures;
 - Compensation for income losses (business);

- Compensation for income losses (employees);
- Compensation for crops;
- Compensation for trees;
- Livelihood restoration programme costs; and
- Additional assistance allowances.

11.2.3. The compensation amounts presented for each of these categories represents totals that can be used for both cash compensation and in-kind compensation, as described in **Chapter 8: Eligibility and Entitlements**. Exact figures cannot be provided for a number of categories (such as the livelihood restoration programme) as they will be mutually agreed between the PAPs and AYGM through negotiations and specific choice of livelihood restoration activities – see **Chapter 6: Organisational Arrangements and Land Acquisition Approach**. In these cases, estimations and methodologies for these amounts have been provided, alongside a contingency included in the RAP Fund.

11.3 ESTIMATED COMPENSATION COSTS

11.3.1. The anticipated compensation costs for each cost category, including the funding source, are presented as follows:

- Table 11-1 - Compensation Costs for Land (where in-kind replacement is not feasible);
- Table 11-2 - Compensation for Residential Houses, Non-Residential Buildings and Secondary Structures;
- Table 11-3 - Compensation for Income Losses (Business);
- Table 11-4 - Compensation for Income Losses (Employees);
- Table 11-5 - Compensation for Crops;
- Table 11-6 - Compensation for Trees;
- Table 11-7 - Compensation for Assets Devalued by Tunnels;
- Table 11-8 – Livelihood Restoration Programme;
- Table 11-9 - Additional Assistance Allowances.

Table 11-1 - Compensation Costs for Land (where in-kind replacement is not feasible)

Land Type	Land Category	Number of Land Parcels	Total Area (m ²)	Compensation Budget (TRY)		
				National Legislation	RAP Fund	Total
Agricultural Land ⁹⁷	Agricultural	812	4.347.771	388.184.540	2.082.000	390.266.540
Non-agricultural Land ⁹⁸	Residential	330	380.422	142.303.461	0	142.303.461
	Industrial	81	21.583	9.152.487	0	9.152.487
Unviable Land	Economically unusable land	163	400.000	15.000.000	0	15.000.000
Additional budget for purchasing replacement land to the same or improved quality and quantity		-	-	1.386.601	0	1.386.601
Additional budget for rental allowance		-	-	0	659.181	659.181
Total		1.386	5.149.776	556.027.089	2.741.181	558.768.270

Table 11-2 - Compensation for Residential Houses, Non-Residential Buildings and Secondary Structures

Structure Type	Description	Number of Structures	Total Area (m ²)	Unit Cost (TRY/m ²)	Compensation Cost (TRY)		
					National Legislation	RAP Fund	Total Cost
Residential Houses	Structures used for residential housing by PAPs.	59	-	-	5.548.505	1.399.464	6.947.969
Non-Residential Buildings and Secondary Structures	Other structures used by PAPs (e.g. barns, outhouses, fences, walls, sheds, water tanks, wells etc.).	-	-	-	2.247.695	1.337.554	3.585.249
Total		59	-	-	7.796.200	2.737.018	10.533.218

⁹⁷ Values of individual agricultural land parcels are determined on a case by case basis. The figure provided is the total compensation for all types of affected private agricultural land, such as irrigated, non-irrigated, currently used, currently unused, pastoral and arable.

⁹⁸ Values of individual non-agricultural land parcels are determined on a case by case basis. The figure provided is the total compensation for all types of affected private residential housing land (including those with and without housing), affected private industrial land (including those currently in use and not in use).

Table 11-3 - Compensation for Income Losses (Business)

Compensation for Income Losses - Business ⁹⁹	Number of Businesses	Average Monthly Income Rate Loss Due to Expropriated Land (TRY)	Approximate Period of Income Loss	Compensation Cost (TRY)		
				National Legislation	RAP Fund	Total Cost
Permanent Loss of Income for Business at Existing Location	10	-	1 year's net income	-	2.300.000	2.300.000
Temporary Loss of Income for Business	60	-	For period of disruption	-	13.800.000	13.800.000
Total	70	-	-	-	16.100.000	16.100.000

Table 11-4 - Compensation for Income Losses (Employees)

Compensation for Income Losses - Employees ¹⁰⁰	Number of Employees	Average Monthly Income Rate Loss Due to Expropriated Land (TRY)	Approximate Period of Income Loss	Compensation Cost (TRY)		
				National Legislation	RAP Fund	Total Cost
Permanent Loss of Income for Employees	To be confirmed	To be confirmed	Permanent	-	200.000-	200.000-
Temporary Loss of Income for Employees	216	2.826	3 months	-	1.828.004	1.828.004
Total	216	2.826	-	-	2.028.004	2.028.004

⁹⁹ The gross income obtained by enterprises from their activities is 736 billion TL in SMEs. Therefore, the annual average per SME is 230.000 TL. It is 19.200 TL per month. It is 57.500 TL for three months. Our assumption is that there are 60 enterprises and one-year net income support is 13.800.000 TL. Source: <https://mobil.tobb.org.tr/MansetResimler/26166-3.pdf>

¹⁰⁰ There are 3.2 million SMEs in Turkey. These SMEs provide a total of 11.500.000 employment positions. $11.500.000 / 3.200.000 = 3,59375$ is the average number of employees in an SME. If there are 60 businesses potentially affected by this Project: $3,59375$ (average number of employees) multiplied by 60 (number of businesses) is 215,625 potential employees; this is the estimated total number of employees that could be affected in the businesses affected by this Project. Source: <https://mobil.tobb.org.tr/MansetResimler/26166-3.pdf>

Table 11-5 - Compensation for Crops

Crop	No. of Land Parcels	Unit Cost (TRY/m ²)	Area (m ²)	Compensation Cost (TRY)		
				National Compensation	RAP Fund	Total Cost
Total Crops Produced on Agricultural Land	812	2,52625	4.347.771	10.983.555	-	10.983.555
Total	812	2,52625	4.347.771	10.983.555	-	10.983.555

Table 11-6 - Compensation for Trees

Type	No. of Trees	Compensation Cost (TRY)		
		National Compensation	RAP Fund	Total Cost
Wild Pear	1	0	22	22
Raspberry	2	40	4	44
Morning	1	20	2	22
Acacia	356	6.871	961	7.832
Maple	7	139	15	154
Hawthorn	1	20	2	22
Pear	306	155.452	20.738	176.190
Vine Leaf	289	15.813	5.543	21.356
Horse Chestnut	14	79	229	308
Quince	109	35.004	7.023	42.027
Almond	36	15.925	1.746	17.671
Pine	2.614	47.062	11.613	58.675
Walnut	685	367.224	181.356	548.580
Plane	6	119	13	132
Wild Medlar	8	0	176	176
Bay	1	0	22	22
Mulberry	128	30.972	17.570	48.542
Apple	274	105.756	20.169	125.925
Plum	455	17.352	9.333	26.685

Type	No. of Trees	Compensation Cost (TRY)		
		National Compensation	RAP Fund	Total Cost
Hazelnut	27	2.130	502	2.632
Rose	2	40	4	44
Hornbeam	1	0	22	22
Jujube	27	14.865	1.652	16.517
Silverberry	1	114	13	127
Linden	16	939	1,137	2.076
Fig	172	36.769	7.253	44.022
Oak	42	0	924	924
Elm	595	1.980	11.110	13.090
Black Mulberry	1	573	64	637
Poplar	252	4.970	574	5.544
Kavlan	667	1.346	13.328	14.674
Apricot	119	46.167	10.297	56.464
Carob	37	713	101	814
Chestnut	18	1.112	124	1.236
Cherry	70	30.432	10.410	40.842
Kiwi	3	232	26	258
Alder	195	3.861	429	4.290
Cranberry	85	1.544	326	1.870
Lemon	5	810	90	900

Type	No. of Trees	Compensation Cost (TRY)		
		National Compensation	RAP Fund	Total Cost
Mandarin	2	365	19	384
Past	7	139	15	154
Oak	864	8.494	10.881	19.375
Medlar	13	5.535	2.514	8.049
Pomegranate	192	28.773	3.175	31.948
Bonito	13	257	29	286
Palm	2	0	44	44
Orange	3	518	58	576
Peach	66	13.654	2.215	15.869
Cypress	37	733	81	814
Willow	110	2.114	389	2.503
Sumac	40	792	88	880
Persimmon	26	12.615	2.686	15.301
Grape	5	17	2	19
Sour Cherry	100	27.008	9.228	36.236
Eriobotrya	12	3.344	798	4.142
Green Plum	41	713	189	902
Olive	13	3.937	413	4.350
Total	9.174	1.055.452	367.749	1.423.201

Table 11-7 - Compensation for Assets Devalued by Tunnels

Type of Assistance/ Allowance	Compensation Cost (TRY)		
	National Legislation	RAP Fund	Total Cost
Assets Devalued by Tunnels	16.000.000		16.000.000
Total	16.000.000		16.000.000

Table 11-8 - Livelihood Restoration Programme

Type of Assistance/ Allowance	Compensation Cost (TRY)		
	National Legislation	RAP Fund	Total Cost
Livelihood Restoration Activities	-	8.743.375	8.743.375
Total	-	8.743.375	8.743.375

Table 11-9 - Additional Assistance Allowances

Type of Assistance/ Allowance ¹⁰¹	Compensation Cost (TRY)		
	National Legislation	RAP Fund	Total Cost
Additional Assistance Allowances <ul style="list-style-type: none"> ■ Title deed update and registration fees ■ Transportation costs (max 30km) 	-	663.600	663.600
Total	-	663.600	663.600

¹⁰¹ Note that AYGM will cover the costs of all legal fees of PAPs, however this cost is not presented in this Chapter.

11.4 SUMMARY OF COSTS

- 11.4.1. The total cost estimated for the implementation of this RAP is shown in **Table 11-10**. All compensation costs are due to be dispersed prior to the commencement of construction works¹⁰². A 10% contingency has also been added to the total cost calculated for compensation to ensure that sufficient funding is available, if required, such as for further PAPs that might be identified, or if significant increases to compensation is required.

Table 11-10 – Summary of Costs

Item	Compensation Cost (TRY)			Total Cost (EUR) ¹⁰³
	National Legislation	RAP Fund	Total Cost	
Compensation				
Compensation for Land (where in-kind replacement is not feasible)	556.027.089	2.741.181	558.768.270	64.181.241
Compensation for Residential Houses, Non-Residential Buildings and Secondary Structures	7.796.200	2.737.018	10.533.218	1.209.866
Compensation for Income Losses (Business)	-	16.100.000	16.100.000	1.849.278
Compensation for Income Losses (Employees)	-	2.028.004	2.028.004	232.941
Compensation of Crops	10.983.555	-	10.983.555	1.261.593
Compensation of Trees	1.055.452	367.749	1.423.201	163.472

¹⁰² This is based on the assumption that there are no lengthy delays during contract negotiations. It may be the case that some individual parcels may be delayed due to court proceedings.

¹⁰³ Average exchange rate over past 12 months from date of writing used – TRY 1 to EUR 0.114862.

Item	Compensation Cost (TRY)			Total Cost (EUR) ¹⁰³
	National Legislation	RAP Fund	Total Cost	
Compensation for Assets Devalued by Tunnels	16.000.000	-	16.000.000	1.837.792
Livelihood Restoration Programme Costs	-	8.743.375	8.743.375	1.004.282
Other Assistance Allowances	-	663.600	663.600	76.222
10% Contingency	59.186.230	3.338.093	62.524.323	7.181.669
Total	651.048.526	36.719.020	687.767.546	78.998.356

11.5 UPDATING IMPLEMENTATION COSTS

- 11.5.1. The costs presented above will change during the implementation of this RAP, as a result of negotiations, any court proceedings, and where PAPs select specific replacement land, structures, livelihood restoration programme activities, and assistance allowances.
- 11.5.2. Therefore, the costs will be reviewed every quarter and updated where necessary in-line with the reality of the costs being incurred. AYGM will monitor the costs throughout the implementation of this RAP.

11.6 RAP MANAGEMENT AND ADMINISTRATIVE COSTS

- 11.6.1. AYGM will appoint an External Independent Monitoring Consultant to provide independent analysis of the progress of the RAP implementation against the defined monitoring indicators in Chapter 10: Monitoring and Reporting. An overview of the costs for these services is provided in **Table 11-11**.

Table 11-11 – RAP Management and Administrative Costs

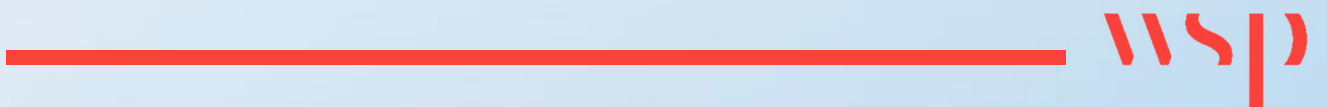
Item	Total Cost (TRY)	Total Cost (EUR) ¹⁰⁴
RAP Miscellaneous Implementation Costs (Consultation, communication, logistics, travel expenses, etc)		
External Independent Monitoring Consultant		
External close-out audit		
Total		

AYGM has allocated a budget for these activities but since these works will be subject to a procurement process, this information has been withheld.

¹⁰⁴ Costs originally provided in EUR and converted to TRY using average exchange rate over past 12 months from date of writing – EUR 1 to 8,765543 TRY.

12

IMPLEMENTATION SCHEDULE



12 IMPLEMENTATION SCHEDULE

- 12.1.1. This RAP is a live public document and will continue to be revised following Project approval to inform the resettlement programme through the various stages of Project development (construction and operation). It will be the responsibility of the PIU Social and Resettlement Specialist to revise the RAP during construction and the TCDD Environmental and Social Expert to revise the RAP during operation, if required. This RAP provides a timeline of actions (primarily consisting of RAP implementation and monitoring) between the latter part of 2020 and 2026, when the Project will become fully operational.
- 12.1.2. The stakeholder engagement activities referred to in this RAP correlate with the actions detailed in the **SEP**.
- 12.1.3. **Table 12-1** below provides the key dates for the implementation of this RAP, covering all activities from RAP disclosure through to its implementation, monitoring, evaluation and completion. End dates are indicative as certain land parcels may be acquired later in the Project RAP implementation process, for example due to extended negotiations and court proceedings.

Table 12-1 – RAP Implementation Timeframes

Item	Responsible Entity	Indicative Start Date	Indicative End Date
RAP Disclosure			
Disclosure of the RAP (as detailed in the SEP).	AYGM	04/2021	04/2021
RAP Implementation (including land acquisition)			
Asset inventory update.	AYGM	12/2020	12/2020
Identification of PAPs.	AYGM	08/2020	01/2021
Announcing RAP eligibility and entitlements to PAPs.	AYGM	05/2021	05/2021
Evaluation of individual PAP eligibility and entitlements.	AYGM	05/2021	08/2021
Preparation of draft contracts, including budget allocation for compensation amounts delivered through national legislation and the RAP Fund.	AYGM	05/2021	09/2022
Negotiations with PAPs (in person or virtually) and draft contracts issued to PAPs.	AYGM	06/2021	09/2021

Item	Responsible Entity	Indicative Start Date	Indicative End Date
Court proceedings (in the case of no agreement on the issued contracts).	AYGM	06/2021	11/2021
Contract signing ¹⁰⁵ .	AYGM	06/2021	09/2021
Mobilisation of Construction Contractor	AYGM, Contractor	11/2021	04/2022
Disbursement of compensation to PAPs under national legislation and landowners/users from RAP Fund ¹⁰⁶ .	AYGM	10/2021	2025
Signing land entry protocols for land that will be temporarily transferred to the Construction Contractor ¹⁰⁷ .	AYGM, Construction Contractor	09/2021	2025
Deadline for handing over of the Project affected land and other assets (such as crops, trees and structures) to the Contractor (excluding ongoing court cases).	AYGM	01/2022	01/2022
Commencement of construction works.	Construction Contractor	03/2022	2025
Continuation of RAP implementation.	AYGM	01/2022	05/2026
Signing land exit protocols for land that will be transferred back to the landowner on completion of construction ¹⁰⁸ .	AYGM	01/2022	2026

¹⁰⁵ The Entitlements Matrix allows the owners of residential structures 3 months to vacate their house, allowing time for finding, negotiating, agreeing and relocating to alternative housing. This being the case, negotiations with owners of residential structures will be prioritised in line with this RAP.

¹⁰⁶ PAPs will be compensated in accordance with national legislation and/or from the RAP Fund where appropriate. Refer to **Chapter 8: Eligibility and Entitlements** for further details.

¹⁰⁷ A Land Entry Protocol for each affected land parcel that will be transferred to the Contractor needs to be signed at least 3 days prior to physically entering the land parcel. The Land Entry Protocol shall be signed between the landowner/land user of the land parcel and the representative of the Contractor, being witnessed by the local Mukhtar. The Contractor will not enter any land parcels that have not been delivered to the Contractor through a Land Entry Protocol or for which they have established rights through a rental agreement with the relevant landowner.

¹⁰⁸ A Land Exit Protocol needs to be completed for land that is temporarily acquired and will be handed back to the original owner by the Contractor. The land will be fully reinstated to its prior condition or better by the Contractor before handover.

Item	Responsible Entity	Indicative Start Date	Indicative End Date
Monitoring and Evaluation			
Internal RAP performance monitoring by the PIU Social and Resettlement Specialist, with reviews from the External Independent Monitoring Consultant.	AYGM Internal Monitoring Team	06/2021	10/2026
External RAP impact monitoring by the External Independent Monitoring Consultant (every 6 months).	External Independent Monitoring Consultant	10/2021	10/2026
Stakeholder Engagement			
Establish and implement the grievance mechanism (as detailed in the SEP).	AYGM	05/2021	06/2026
Consultation meetings with PAPs (monthly during RAP implementation), including presence of local Mukhtars.	AYGM	05/2021	05/2026
Negotiations with landowners and users (formal and informal) to agree entitlements and compensation amounts.	AYGM	05/2021	05/2026
Ongoing engagement with PAPs, including vulnerable people, as part of the delivery of the Livelihood Restoration Plan (Chapter 9) and the SEP .	AYGM	05/2021	05/2026
Post RAP Completion			
Continued operation of grievance mechanism during construction (as detailed in the SEP).	AYGM to end of construction ¹⁰⁹	06/2023	06/2026
Continued operation of grievance mechanism during operation (as detailed in the SEP).	TCDD / TCDD Transport	06/2026	Ongoing

The Land Exit Protocol shall be signed between the landowner/land user of the land parcel and the representative of the Contractor, again being witnessed by the Independent RAP Implementation Consultant and the local Mukhtar.

¹⁰⁹ Grievance mechanism will be continued by TCDD Transport post-construction as per **SEP**.

Item	Responsible Entity	Indicative Start Date	Indicative End Date
Completion audit and long-term review (upon completion of RAP anticipated 06/2026), and yearly for 3 years after completion, ending in 06/2029, as detailed in Chapter 10: Monitoring and Reporting).	External Independent Monitoring Consultant	06/2026	06/2029

Appendix A

CROP RATES



Catalca - 2020-2019_2018_2017 verim tabloları.pdf

ÇATALCA İLÇESİ 2019 (2018/2017) YILI BİTKİSEL ÜRETİM VERİM TABLOSU

İlçemizde ekonomik olarak yetiştiriciliği yapılan bitkisel ürünlerin verimli, hasat esnasında Müdürlüğümüz elemanlarınca yapılan biçerdöver ve tarla kontrolleri, çiftçi sohbetleri, alıcı kurum ve tüccarlarla yapılan görüşmeler değerlendirilerek aşağıdaki gibi tespit edilmiştir.

ÇATALCA DISTRICT 2019 (2018/2017) HERBAL PRODUCTION YIELD TABLE

The productive crops grown economically in our district have been determined as follows by evaluating the harvester and field controls performed by the staff of our Directorate during the harvest, the talks with the farmers, the interviews with the buyer institutions and traders.

2020

Ürün Adı Crop		Verim (kg/da) Yield (kg/da)	
		Minimum	Maximum
Buğday	Wheat	450	800
Arpa	Barley	400	700
Tritikale – dane	Triticale - grain	400	550
Yulaf – dane	Oats - grain	200	400
Yulaf – ot	Oats - herbs	520	1000
Çeltik	Paddy	600	950
Çayır otu	Meadow grass	300	650
ayçiçek yağılık	sunflower – seed oil	200	400
Aspir	Aspir	200	325
mısır – dane	corn - grain	600	850
mısır – silaj	corn - silage	2500	4500
Kanola	Canola	180	300
fiğ – kuru ot	vetch - dry grass	450	750
Nohut	chickpea	90	160
fasulye – kuru	beans - dry	90	150
soğan – kuru	onion - dry	1000	2200
lahana – beyaz	cabbage - white	2750	3300
lahana – kırmızı	cabbage - red	1400	2600
marul – kıvrıkcık	lettuce - curly	1200	2000
marul – göbekli	Head lettuce	1300	1750
Ispanak	spinach	700	1500

Pırasa	leek	2500	3200
Semizotu	purslane	1100	2000
Enginar	artichoke	1100	2000
Maydanoz	parsley	500	800
Roka	Garden rocket	700	1500
Nane	mint	300	550
kabak – sakız	Cabbage	2000	2700
kabak – bal	pumpkin	2000	3500
hıyar – sofralık	cucumber - table	2200	2800
Patlıcan	eggplant	1200	2000
domates – sofralık	tomato - table	2000	4000
biber – sivri çarliston	pepper - pointed charliston	650	1200
biber – dolmalık	pepper - bellflower	950	2200
Karpuz	watermelon	2500	6000
Kavun	melon	1800	5000
fasulye – taze	beans - fresh	700	1200
soğan – taze	onion - fresh	1200	2300
bezelye – taze	peas - fresh	650	1200
bakla – taze	broad beans - fresh	900	1350
barbunya – taze	kidney beans - fresh	700	1300
sarımsak – taze	garlic - fresh	900	1700
turp – bayır	radish - wild	1000	2000
turp – kırmızı	radish – red	900	1600

2019

Ürün Adı Crop		Verim (kg/da) Yield (kg/da)	
		Minimum	Maximum
Buğday	Wheat	450	800
Arpa	Barley	400	700
Tritikale – dane	Triticale - grain	400	550
Yulaf – dane	Oats - grain	200	400
Yulaf – ot	Oats - herbs	520	1000
Çeltik	Paddy	600	950
Çayır otu	Meadow grass	300	650
ayçiçek yağlık	sunflower – seed oil	200	400

Aspir	aspir	200	325
mısır – dane	corn - grain	600	850
mısır – silaj	corn - silage	2500	4000
Kanola	canola	180	300
fiğ – kuru ot	vetch - dry grass	450	750
Nohut	chickpea	90	160
fasulye – kuru	beans - dry	90	150
soğan – kuru	onion - dry	1000	2200
lahana – beyaz	cabbage - white	2750	3300
lahana – kırmızı	cabbage - red	1400	2600
marul – kıvrık	lettuce - curly	1200	2000
marul – göbekli	Head lettuce	1300	1750
Ispanak	spinach	700	1500
Pırasa	leek	2500	3200
Semizotu	purslane	1100	2000
Enginar	artichoke	1100	2000
Maydanoz	parsley	500	800
Roka	Garden rocket	700	1500
Nane	mint	300	550
kabak – sakız	Cabbage	2000	2700
kabak – bal	pumpkin	2000	3500
hıyar – sofralık	cucumber - table	2200	2800
Patlıcan	eggplant	1200	2000
domates – sofralık	tomato - table	2000	4000
biber – sivri çarliston	pepper - pointed charliston	650	1200
biber – dolmalık	pepper - bellflower	950	2200
Karpuz	watermelon	2500	6000
Kavun	melon	1800	5000
fasulye – taze	beans - fresh	700	1200
soğan – taze	onion - fresh	1200	2300
bezelye – taze	peas - fresh	650	1200
bakla – taze	broad beans - fresh	900	1350
barbunya – taze	kidney beans - fresh	700	1300
sarımsak – taze	garlic - fresh	900	1700
turp – bayır	radish - wild	1000	2000
turp – kırmızı	radish – red	900	1600

Prepared By
Rustem Yurteri
Engineer

Mehmet Sencan
Engineer

Approved By
Kadir Güngör
District Manager
08/10/2019
08/10/2018
02/10/2017

2018

Ürün Adı Crop		Verim (kg/da) Yield (kg/da)	
		Minimum	Maximum
Buğday	Wheat	400	700
Arpa	Barley	350	600
Tritikale – dane	Triticale - grain	400	550
Yulaf – dane	Oats - grain	200	400
Yulaf – ot	Oats - herbs	520	1000
Çeltik	Paddy	600	950
Çayır otu	Meadow grass	300	650
ayçiçek yağılık	sunflower – seed oil	150	350
Aspir	aspir	200	325
mısır – dane	corn - grain	600	850
mısır – silaj	corn - silage	2500	4000
Kanola	canola	180	300
fiğ – kuru ot	vetch - dry grass	450	750
Nohut	chickpea	90	160
fasulye – kuru	beans - dry	90	150
soğan – kuru	onion - dry	1000	2200
lahana – beyaz	cabbage - white	2750	3300
lahana – kırmızı	cabbage - red	1400	2600
marul – kıvrıcık	lettuce - curly	1200	2000
marul – göbekli	Head lettuce	1300	1750
Ispanak	spinach	700	1500
Pırasa	Leek	2800	3200

Semizotu	purslane	1100	2000
Enginar	artichoke	1100	2000
Maydanoz	parsley	500	800
Roka	Garden rocket	700	1500
Nane	mint	300	550
kabak – sakız	Cabbage	2000	2700
kabak – bal	pumpkin	2000	3000
hıyar – sofralık	cucumber - table	2200	2800
Patlıcan	eggplant	1200	2000
domates – sofralık	tomato - table	2000	4000
biber – sivri çarliston	pepper - pointed charliston	650	1200
biber – dolmalık	pepper - bellflower	950	2200
Karpuz	watermelon	2500	6000
Kavun	melon	1800	5000
fasulye – taze	beans - fresh	700	1200
soğan – taze	onion - fresh	1200	2300
bezelye – taze	peas - fresh	650	1200
bakla – taze	broad beans - fresh	900	1350
barbunya – taze	kidney beans - fresh	700	1300
sarımsak – taze	garlic - fresh	900	1700
turp – bayır	radish - wild	1000	2000
turp – kırmızı	radish – red	900	1600

2017

Ürün Adı Crop		Verim (kg/da) Yield (kg/da)	
		Minimum	Maximum
Buğday	Wheat	400	750
Arpa	Barley	350	600
Tritikale – dane	Triticale - grain	400	550
Yulaf – dane	Oats - grain	200	450
Yulaf – ot	Oats - herbs	520	1000
Çeltik	Paddy	600	950
Çayır otu	Meadow grass	300	650
ayçiçek yağlık	sunflower – seed oil	150	350

Aspir	aspir	200	325
mısır – dane	corn - grain	600	850
mısır – silaj	corn - silage	2500	4000
Kanola	canola	180	300
fiğ – kuru ot	vetch - dry grass	450	750
Nohut	chickpea	85	160
fasulye – kuru	beans - dry	90	150
soğan – kuru	onion - dry	1000	2200
lahana – beyaz	cabbage - white	2750	3300
lahana – kırmızı	cabbage - red	1400	2600
marul – kıvrıkcık	lettuce - curly	1200	2000
marul – göbekli	Head lettuce	1300	1750
Ispanak	spinach	700	1500
Pırasa	Leek	2800	3200
Semizotu	purslane	1100	2000
Enginar	artichoke	1100	2000
Maydanoz	parsley	500	800
Roka	Garden rocket	700	1500
Nane	mint	300	550
kabak – sakız	Cabbage	2000	2700
kabak – bal	pumpkin	2000	3000
hıyar – sofralık	cucumber - table	2200	2800
Patlıcan	eggplant	1200	2000
domates – sofralık	tomato - table	2000	4000
biber – sivri çarliston	pepper - pointed charliston	650	1200
biber – dolmalık	pepper - bellflower	950	2200
Karpuz	watermelon	2500	6000
Kavun	melon	1800	50000
fasulye – taze	beans - fresh	700	1200
soğan – taze	onion - fresh	1200	2300
bezelye – taze	peas - fresh	650	1200
bakla – taze	broad beans - fresh	900	1350
barbunya – taze	kidney beans - fresh	700	1300
sarımsak – taze	garlic - fresh	900	1700
turp – bayır	radish - wild	1000	2000
turp – kırmızı	radish – red	900	1600

T.C. BÜYÜKÇEKMECE KAYMAKAMLIĞI
T.R. BUYUKCEKMECE DISTRICT OFFICE

İlçe Tarım ve Orman Müdürlüğü
Provincial Directorate of Agriculture and Forestry

Sayı / Number : E-24891484-230.99-2934223, 19.10.2020

Konu: Halkalı-Çerkezköy Demiryolu Projesi

Subject: Halkalı-Çerkezköy Railway Project

ULAŞTIRMA VE ALTYAPI BAKANLIĞINA (Altyapı Yatırımları Genel Müdürlüğü)
TO THE MINISTRY OF TRANSPORT AND INFRASTRUCTURE (General Directorate of Infrastructure Investments)

İlgi: 08.10.2020 tarihli ve E-58891979-752.99-56551 sayılı yazınız.

Ref: 08.10.2020 dated and E-58891979-752.99-56551 numbered your correspondence.

İlgi tarih sayılı yazı ile istenen; İstanbul ilinde yetiştiriciliği yapılan 2018 yılı ağaç bedelleri ve İlçemizde münavebe yapılarak yetiştirilmekte olan tarla ürünlerine ait 2019 yılı verim, üretim gideri ve satış fiyatları yazımız ekinde tablolar halinde sunulmuştur.

Gereğini arz ederim.

As requested with your reference dated correspondence; cost of trees in 2018 which are grown in Istanbul Province, and the yield, production costs and sales prices of the rotational crops in our district is provided as attached.

Kindly submitted for necessary action.

2019

BUĞDAY-ARPA-AYÇİÇEĞİ-KANOLA (KURU)

WHEAT – BARLEY – SUNFLOWER – CANOLA (DRY)

ÜRÜN ADI	ASGARİ VERİM (Kg/Da)	AZAMİ VERİM (Kg/Da)	ÜRETİM GİDERLERİ TOPLAMI (TL/Da)	ORTALAMA SATIŞ FİYATI (TL/Kg)
CROP	MINIMUM YIELD (Kg / Da)	MAXIMUM YIELD (Kg / Da)	TOTAL PRODUCTION EXPENSES (TL / Da)	AVERAGE SALES PRICE (TL / Kg)
BUĞDAY WHEAT	550	700	586,81	1,25
ARPA BARLEY	500	650	547,06	1,15
AYÇİÇEĞİ SUNFLOWER	250	450	527,03	2,50
KANOLA	300	400	605,81	2,45

CANOLA				
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SEBZELER (SULU)

VEGETABLES (IRRIGATED)

ÜRÜN CROP	ASGARİ VERİM (Kg/Da) MINIMUM YIELD (Kg/Da)	AZAMİ VERİM (Kg/Da) MAXIMUM YIELD (Kg/Da)
DOMATES TOMATOES	4000	5000
ISPANAK SPINACH	800	1800
KARPUZ WATERMELON	3500	4500
KAVUN MELON	2500	3500

*2019 yılında Ayçiçeği'ne 40 Krş/Kg, Kanola'ya 50 Krş/Kg, Buğday'a 10 Krş/Kg ve Arpa' ya 10 Krş/Kg Fark Ödemesi Desteği yapılmaktadır.

* In 2019, additional “difference payments” support is made; 40 Krş / Kg for Sunflower, 50 Kr / Kg for Canola, 10 Kr / Kg for Wheat and 10 Kr / Kg for Barley.

Ek: Münferit Ağaç Bedelleri (1 sayfa)

Annex: Individual Tree Prices (1 page)

2020

BUĞDAY-ARPA-AYÇİÇEĞİ (KURU)

WHEAT – BARLEY – SUNFLOWER (DRY)

ÜRÜN ADI CROP	ASGARİ VERİM (Kg/Da) MINIMUM YIELD (Kg / Da)	AZAMİ VERİM (Kg/Da) MAXIMUM YIELD (Kg / Da)	ÜRETİM GİDERLERİ TOPLAMI (TL/Da) TOTAL PRODUCTION EXPENSES (TL / Da)	ORTALAMA SATIŞ FİYATI (TL/Kg) AVERAGE SALES PRICE (TL / Kg)
BUĞDAY WHEAT	550	700	662,86	1,65
ARPA BARLEY	500	650	624,86	1,40

AYÇİÇEĞİ SUNFLOWER	250	450	587,54	3,10
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SEBZELER (SULU)

VEGETABLES (IRRIGATED)

ÜRÜN CROP	ASGARİ VERİM (Kg/Da) MINIMUM YIELD (Kg/Da)	AZAMİ VERİM (Kg/Da) MAXIMUM YIELD (Kg/Da)
DOMATES TOMATOES	3000	5000
ISPANAK SPINACH	800	1800
KARPUZ WATERMELON	3500	4500
KAVUN MELON	2500	3500

*2020 yılında Ayçiçeği'ne 40 Krş/Kg, Buğday'a 10 Krş/Kg ve Arpa' ya 10 Krş/Kg Fark Ödemesi Desteği yapılmaktadır.

* In 2019, additional “difference payments” support is made; 40 Krş / Kg for Sunflower, 10 Kr / Kg for Wheat and 10 Kr / Kg for Barley.

ÇERKEZKÖY İLÇESİ 2019 YILI AĞIRLIKLIL OLARAK YETİŞTİRİLEN ÜRÜNLERE AİT VERİM VE MALİYET TABLOSU

YIELD AND COST TABLE FOR MOST COMMONLY GROWN CROPS IN ÇERKEZKÖY DISTRICT FOR YEAR 2019

	VERİM YIELD	ÜRÜN FİYATI (TL/kg) UNIT COST	ÜRETİM MALİYETİ PRODUCTION COST (TL/kg)
BUĞDAY WHEAT	380	1,24	0,74
ARPA BARLEY	414	1,09	0,70
AYÇİÇEĞİ SUNFLOWER	250	2,36	1,47

BAŞAKŞEHİR 2020 AVERAGE YIELD OF AGRICULTURAL PRODUCTS ON DRY AND IRRIGATED CONDITIONS

2020

AYÇİÇEĞİ, ARPA, BUĞDAY, YULAF, KANOLA
SUNFLOWER, BARLEY, WHEAT, OATS, CANOLA

ÜRÜN CROP	ASGARİ VERİM (Kg/Da)	AZAMİ VERİM (Kg/Da)	ORTALAMA BİRİM FİYAT
	MINIMUM YIELD (Kg/Da)	MAXIMIM YIELD (Kg/Da)	AVERAGE UNIT COST (TL/kg)
AYÇİÇEĞİ SUNFLOWER	200	300	2,5
ARPA BARLEY	300	450	1,15
BUĞDAY WHEAT	400	600	1,3
YULAF OATS	400	600	0,7
KANOLA CANOLA	200	300	2,5

SEBZELER (SULU)

VEGETABLES (IRRIGATED)

MAYDANOZ, MARUL (KIVIRCIK), MARUL (GÖBEKLİ), SİVRİBİBER

PARSLEY, LETTUCE (CURLEY), LETTUCE (HEAD), POINTED PEPPER

ÜRÜN CROP	ASGARİ VERİM (Kg/Da)	AZAMİ VERİM (Kg/Da)	ORTALAMA BİRİM FİYAT
	MINIMUM YIELD (Kg/Da)	MAXIMIM YIELD (Kg/Da)	AVERAGE UNIT COST (TL/kg)
MAYDANOZ PARSLEY	700	1100	4
MARUL (KIVIRCIK) LETTUCE (CURLEY)	950	3000	4
MARUL (GÖBEKLİ) LETTUCE (HEAD)	1000	3000	3,5
SİVRİBİBER POINTED PEPPER	600	1800	3,5

SİLİVRİ 2020 AGRICULTURAL CROP DATA

Ürün	Crop	Verim Yield (kg/da)				Ortalama bedel Average unit value (TL/kg)
		Irrigated sulu		Dry kuru		
		minimum	maximum	minimum	maximum	
fiğ – kuru ot	vetch - dry grass			650	1200	0,85
soğan – kuru	onion - dry			1000	3000	1,75
sarımsak	garlic			500	1000	15
mısır – silaj, 1. Hasat	corn – silage 1 st harvest			1000	5000	0,5
mısır – silaj, 1. Hasat	corn – silage 2 nd harvest	2000	6000			0,5
yonca	clover	600	1250			1,75
Buğday	Wheat	350	950	350	900	1,6
Arpa	Barley	350	900	350	800	1,31
fasulye – kuru	beans - dry	120	300			12
Nohut	chickpea			100	250	10
Tritikale – dane	Triticale - grain			200	700	1,5
Kanola	canola			150	450	3,15
ayçiçek yağlık	sunflower – seed oil			100	350	3,5
marul – kıvrıcık (örtü altı)	curley lettuce (undercover)	1500	2800			3,5
hıyar – sofralık (örtü altı)	cucumber – table (undercover)	10000	14000			2,75
biber – sivri (örtü altı)	pepper - pointed (undercover)	3000	4000			3,2
biber – dolmalık (örtü altı)	pepper – bellflower (undercover)	3000	4000			3,1
domates – sofralık (örtü altı)	tomato – table (undercover)	5000	10000			4
lahana – beyaz	cabbage - white	2000	4500			1,75
lahana – kırmızı	cabbage - red	1500	2600			1,5
marul – kıvrıcık	lettuce - curly	1400	3000			3,5
Ispanak	spinach	800	1800			2
Pırasa	leek	1500	4500			2,5
fasulye – taze	beans - fresh	1000	1750			4,5
barbunya – taze	kidney beans - fresh	1000	1750			4,5
domates – sofralık	tomato - table	3000	7000			3
Biber-dolmalık	Pepper-bellflower	500	2000			4
Biber-sivri	Pepper-pointed	600	2500			5

Bamya	okra	500	1000			12
Balkabağı	pumpkin	1000	3000			3
Karpuz (kuru)	Watermelon (dry)	1000	4500			1,5
Karpuz (sulu)	Watermelon (irr.)	2500	8000			1,5
Kavun (kuru)	Melon (dry)	1000	3500			2,75
kabak – sakız	Cabbage	1500	3000			2
Patlıcan	eggplant	1300	3500			3
Sarımsak - taze	Garlic - green	1300	2700			10
soğan – taze	onion - green	1300	2700			3
bezelye – taze	peas - green	200	600			6
bakla – taze	broad beans - green	1000	1500			3,5

İSTANBUL 2020 PROVINCIAL DIRECTORATE UNIT PRICES FOR CROPS

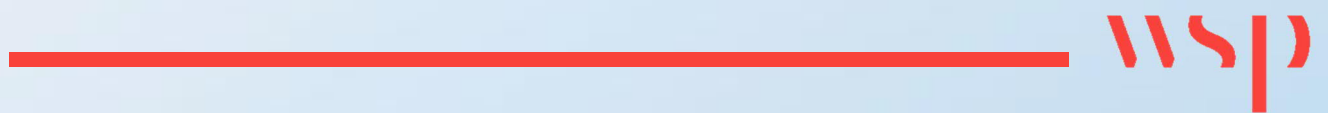
Ürün Adı	Maliyeti
Biber (Dolmalık)	1,99
Kiraz	4,48
Fiğ (Yeşil Ot)	0,51
Yonca (Yeşil Ot)	0,58
Fiğ (Dane)	3,66
Domates (sofralık)	1,38
Biber (sivri)	2,41
Böğürtlen	4,87
Nane	2,36
Hıyar (sofralık)	1,31
Marul (Kıvırcık)	2,16
Elma (Diğer)	1,75
Mısır (Dane)	0,71
Marul (Göbekli)	1,38
Turp (Kırmızı)	1,48
Kavun	0,85
Balkabağı	0,66
Pazı	0,83
Arpa (Diğer)	1,05
Buğday (Diğer)	1,09
Elma (Golden)	12,03
Ceviz	5,75
Patates (Diğer)	0,47
Fındık	6,54
Kabak (Sakız)	1,33
Lahana (KArayaprak)	2,01
Ispanak	1,72
Şeftali (Diğer)	1,52
Fasulye (Taze)	2,16
Bakla (Taze)	1,37
Kivi	3,21
Vişne	3,23
Nohut	9,97
Soğan (Kuru)	1,59

Lahana (Kırmızı)	0,83
Arpa (Biralık)	1,14
Yulaf (Dane)	1,20
Elma (Starking)	6,86
Üzüm (Sofralık) (Çekirdeksiz)	3,94
Yulaf (Kuru Ot)	0,95
Ayçiçeği (Yağlık)	2,18
Erik	2,37
Kayısı	2,91
Lahana (Beyaz)	0,67
Çeltik	1,47
Yulaf (Yeşil Ot)	0,69
Pırasa	0,72
Karpuz	0,46
Maydanoz	2,50
Kereviz (Kök)	1,87
Badem	3,28
Barbunya Fasulye (Taze)	1,65
Semizotu	1,14
Bezelye (Taze)	1,64
Fiğ (Adi) (Kuru Ot)	0,82
Sarımsak (Taze)	2,58
Kanola (Kolza)	2,30
Üzüm (Sofralık) (Çekirdekli)	3,80
Tritikale (Kuru Ot)	0,97
Fiğ (Adi) (Yeşil Ot)	0,52
Patlıcan	1,68
Dereotu	1,86
Mısır (Silajlık)	0,25
Üzüm (Şaraplık)	3,34
Tere	2,21
Bupday (Durum)	0,62
Mavi Yemiş (Likapa)	10,30
Domates (Salçalık)	0,52
Roka	2,19
Bezelye (Yemlik) (Kuru Ot)	0,67
Fasulye (Kuru)	7,94

Soğan (Taze)	3,13
Brokoli	5,27
Ahududu	9,27
Armut	2,70
Bamya	3,28
Sarımsak (Kuru)	7,86
Ayva	3,35
Tritikale (Dane)	1,28
Turp (Bayır)	1,81
Nar	1,61

Appendix B

APPROXIMATE UNIT COSTS FOR
STRUCTURES IN 2020



Çevre ve Şehircilik Bakanlığından:

MİMARLIK VE MÜHENDİSLİK HİZMET BEDELLERİNİN HESABINDA KULLANILACAK 2020 YILI YAPI YAKLAŞIK BİRİM MALİYETLERİ HAKKINDA TEBLİĞ

From the Ministry of Environment and Urbanisation:

NOTIFICATION ON APPROXIMATE UNIT COSTS FOR STRUCTURES FOR YEAR 2020 TO BE UTILIZED FOR CALCULATION OF ARCHITECTURE AND ENGINEERING SERVICE FEES

**Yapı yaklaşık birim maliyetleri
Approximate unit costs of Structures**

MADDE 1 – (1) 16/7/1985 tarihli ve 85/9707 sayılı Bakanlar Kurulu Kararı ile yürürlüğe konulan Mimarlık ve Mühendislik Hizmetleri Şartnamesinin 3.2 maddesi gereğince, mimarlık ve mühendislik hizmet bedellerinin hesabında kullanılacak 2020 yılı Yapı Yaklaşık Birim Maliyetleri, yapının mimarlık hizmetlerine esas olan sınıfı dikkate alınarak; KDV hariç, genel giderler (%15) ile yüklenici kârı (%10) dâhil edilerek aşağıda gösterilmiştir.

ARTICLE 1 - (1) In accordance with Article 3.2 of the Architectural and Engineering Services Specification, which was put into effect with the Cabinet Decree dated 16/7/1985 and numbered 85/9707, the approximate Building Unit Costs for 2020 to be used in the calculation of the architectural and engineering service costs are the basis for the architectural services of the building, considering the class; Excluding VAT, general expenses (15%) and contractor profit (10%) are included and shown below.

Yapının mimarlık hizmetlerine esas olan sınıfı	Class of the building as basis for architectural services	Yapının birim maliyeti Unit cost of Structure
1. Sınıf Yapılar	Class 1 Buildings	TL/m2
A Grubu Yapılar	Group A Buildings	210
Kargir ve betonarme ihata duvarı (3,00m yüksekliğe kadar)	Stone and reinforced concrete door (up to 3.00m height)	
Basit Kümes ve basit tarım yapıları	Simple Poultry and simple farming structures	
Plastik örtülü seralar	Plastic covered greenhouses	

Mevcut yapılar arası bağlantı + geçiş yapıları	Link between existing structures + passway structures	
Geçici kullanımı olan küçük yapılar	Small structures with temporary use	
Kalıcı kullanımı olan yardımcı yapılar	Secondary structures with permanent use	
Gölgelikler, çardaklar	Shades, pergolas	
Üstü kapalı, yanları açık dinlenme, oyun ve gösteri alanları	Indoor, open-sided recreation, play and show areas	
Depo amaçlı kayadan oyma yapılar	Rock carving sites for warehouse purposes	
Bu gruptakilere benzer yapılar	Structures similar to those in this group	
B Grubu Yapılar	Group B Buildings	310
Cam örtülü seralar	Glass-covered greenhouses	
Basit padok, büyükbaş ve küçükbaş hayvan ağılları	Simple paddock, cattle and sheep barns	
Kagir ve betonarme su depoları	Stone and reinforced concrete water tanks	
İşyeri depoları	Workplace warehouses	
Bu gruptakilere benzer yapılar	Structures similar to those in this group	
2. Sınıf Yapılar	Class 2 Buildings	TL/m2
A Grubu Yapılar	Group A Buildings	510
Kuleler, ayaklı su depoları	Towers, standing water tanks	
Palplanj ve ankrajlı perde ve istinad duvarı	Sheet pile and anchored curtain and retaining wall	
Kayıkhanesi	Boathouse	
Bu gruptakilere benzer yapılar	Structures similar to those in this group	
B Grubu Yapılar	Group B Buildings	750
Şişirme (Pnömatik) yapılar	Blowing (Pneumatic) structures	
Tek katlı ofisler, dükkan ve basit atölyeler	Single storey offices, shops and simple workshops	

Semt sahaları, küçük semt parkları, çocuk oyun alanları ve eklentileri	Fields in local settlements, small neighborhood parks, children's playgrounds and add-ons	
Tarımsal endüstri yapıları (tek katlı prefabrik beton, betonarme veya çelik depo ve atölyeler, tesisat ağırlıklı ağıllar, fidan yetiştirme ve bekletme tesisleri)	Agricultural industrial buildings (single-storey prefabricated concrete, reinforced concrete or steel warehouse and workshop, installation-weighted pens, sapling growing and holding facilities)	
Yat bakım ve onarım atölyeleri	Yacht maintenance and repair shops	
Jeoloji, botanik ve tema parkları	Geology, botany and theme parks	
Mezbahalar	Slaughterhouses	
Bu gruptakilere benzer yapılar	Structures similar to those in this group	
C Grubu Yapılar	Group C Buildings	820
Hangar Yapıları (küçük uçaklar, helikopterler, tarım uçakları ve bakım onarım yeri)	Hangar Structures (small planes, helicopters, agricultural planes and repair&maintenance place)	
Sanayi yapıları (tek katlı, bodrum ve asma katı da olabilir)	Industrial buildings (can be single storey, basement and mezzanine)	
Bu gruptakilere benzer yapılar	Structures similar to those in this group	
3. Sınıf Yapılar	Class 3 Buildings	TL/m2
A Grubu Yapılar	Group A Buildings	1.100
Okul ve mahalle spor tesisleri (temel eğitim okullarının veya işletme ve tesislerin spor alanları, jimnastik salonları, semt salonları)	School and neighborhood sports facilities (sports grounds of basic education schools or businesses and facilities, gymnasiums, neighborhood halls)	
Katlı garajlar	Storey garages	
Ticari amaçlı binalar (üç kata kadar, üç kat dahil – asansörsüz – 3/7/2017 tarihli ve 30113 sayılı resmi gazetede yayımlanan Planlı Alanlar İmar Yönetmeliği'nin 34. Maddesinin 1. Fıkrasına göre asansör yeri bakılacak)	Commercial buildings (up to three floors, including three floors - without elevators - elevator location will be checked according to the 1st paragraph of the 34th Article of the Planned Areas Zoning Regulation published in the official newspaper dated 3/7/2017 and numbered 30113)	

Alışveriş merkezleri (semt pazarları, küçük ve büyük hal binaları, marketler, vb.)	Shopping centers (neighborhood markets, small and large market buildings, markets, etc.)	
Basımevleri, matbaalar	Printing houses	
Soğuk hava depoları	Cold storages	
Konutlar (üç kata kadar, üç kat dahil – asansörsüz – 3/7/2017 tarihli ve 30113 sayılı resmi gazetede yayımlanan Planlı Alanlar İmar Yönetmeliği'nin 34. Maddesinin 1. Fıkrasına göre asansör yeri bakılacak)	Residences (up to three floors, including three floors - without elevator - according to the 1st paragraph of the 34th Article of the Planned Areas Zoning Regulation published in the official newspaper dated 3/7/2017 and numbered 30113)	
Akaryakıt ve gaz istasyonları	Fuel and gas stations	
Kampinger	Campings	
Küçük sanayi tesisleri (donanımlı atölyeler, imalathane, dökümhane)	Small industrial facilities (equipped workshops, workshop, foundry)	
Semt postaneleri	Neighborhood post offices	
Kreş ve gündüz bakımevleri, hobi ve oyun salonları	Nursery and day care centers, hobby and game halls	
Bu gruptakilere benzer yapılar	Structures similar to those in this group	
B Grubu Yapılar	Group B Buildings	1.450
Entegre tarımsal endüstri yapıları, büyük çiftlik yapıları	Integrated agricultural industry structures, large farm structures	
Gençlik merkezleri, halk evleri	Youth centers, public houses	
Lokanta, kafeterya ve yemekhaneler	Restaurants, cafeterias and dining halls	
Temel eğitim okulları	Basic/Fundamental education schools	
Küçük kitaplık ve benzeri kültür tesisleri	Small library and similar cultural facilities	
Jandarma ve emniyet karakol binaları	Gendarmerie and police station buildings	
Sağlık ocakları, kamu sağlık dispenseri	Health centers, public health dispensary	
Ticari amaçlı binalar (yapı yüksekliği 21,50 metreye kadar)	Commercial buildings (building height up to 21.50 meters)	

150 kişiye kadar cezaevleri	Prisons for up to 150 persons	
Fuar alanları	Fairgrounds	
Sergi salonları	Exhibition halls	
Konutlar (yapı yüksekliği 21,50 metreye kadar)	Residences (building height up to 21.50 meters)	
Marinalar	Marinas	
Gece klübü, diskotekler	Night club, discotheques	
Misafirhaneler, pansiyonlar	Guesthouses, hostels	
Bu gruptakilere benzer yapılar	Structures similar to those in this group	
4. Sınıf Yapılar	Class 3 Buildings	TL/m2
A Grubu Yapılar	Group A Buildings	1.550
Özelliği olan büyük okul yapıları (spor salonu, konferans salonu ve ek tesisleri olan eğitim yapıları)	Large school buildings with special features (gymnasium, conference hall and educational buildings with additional facilities)	
Poliklinikler	Polyclinics	
Liman binaları	Harbor buildings	
İdari binalar (ilçe tipi hükümet konakları, vergi daireleri gibi)	Administrative buildings (district-type government mansions, tax offices, etc.)	
İlçe belediyeleri binaları	District municipal buildings	
150 kişiyi geçen cezaevleri	Prisons exceeding 150 people	
Kaplıcalar, şifa evleri gibi termal tesisler	Thermal facilities such as hot springs, healing houses	
İbadethaneler (1500 kişiye kadar)	Places of worship (up to 1500 persons)	
Entegre sanayi tesisleri	Integrated industrial facilities	
Aquaparklar	Aquaparks	
Müstakil spor köyleri (yüzme havuzları, spor salonları ve stadları bulunan)	Independent sports villages (with swimming pools, gyms and stadiums)	
Yaşlılar huzurevi, kimsesiz çocuk yuvaları, yetiştirme yurtları	Nursing homes for the elderly, orphaned kindergartens, orphanages	

Büyük alışveriş merkezleri	Large shopping malls	
Yüksek okullar ve eğitim enstitüleri	High schools and educational institutes	
Apartman tipi konutlar (yapı yüksekliği 30,50m'den az yapılar)	Apartment type residences (building height less than 30.50m)	
Oteller (1 ve 2 yıldızlı)	Hotels (1 and 2 star)	
Bu gruptakilere benzer yapılar	Structures similar to those in this group	
B Grubu Yapılar	Group B Buildings	1.850
Araştırma binaları, laboratuvar ve sağlık merkezleri	Research buildings, laboratories and health centers	
İl tipi belediyeler	Provincial municipalities	
İl tipi idari kamu binaları	Provincial administrative public buildings	
Metro istasyonları	Metro stations	
Stadyum, spor salonları ve yüzme havuzları	Stadium, sports halls and swimming pools	
Büyük postaneler (merkez postaneler)	Large post offices (central post offices)	
Otobüs terminalleri	Bus terminals	
Eğlence amaçlı yapılar (çok amaçlı toplantı, eğlence ve düğün salonları)	Entertainment purpose buildings (multi-purpose meeting, entertainment and wedding halls)	
Banka binaları	Bank buildings	
Normal radyo ve televizyon binaları	Normal radio and television buildings	
Özelliği olan genel sığınaklar	General shelters with special features	
Müstakil veya ikiz konutlar (bağımsız bölüm brüt alanı 151m2-600m2 villalar, teras evleri, dağ evleri, kaymakam evi gibi)	Detached or twin residences (independent part gross area 151m2-600m2 villas, terrace houses, chalets, district governors' houses)	
Bu gruptakilere benzer yapılar	Structures similar to those in this group	
C Grubu Yapılar	Group C Buildings	2.000
Büyük kütüphaneler ve kültür yapıları	Large libraries and cultural buildings	
Bakanlık binaları	Ministry buildings	

Yüksek öğrenim yurtları	Higher education dormitories	
Arşiv binaları	Archive buildings	
Radyoaktif korumalı depolar	Radioactive proof warehouses	
Büyük adliye sarayları	Large courthouses	
Oteller (3 yıldızlı) ve moteller	Hotels (3-star) and motels	
Rehabilitasyon ve tedavi merkezleri	Rehabilitation and treatment centers	
İl tipi hükümet konakları ve büyükşehir belediye binaları	Provincial government mansions and metropolitan municipal buildings	
İş merkezleri (yapı yüksekliği 21,50m-30,50m; 30,50m dahil)	Business centers (building height 21.50m-30.50m; including 30.50m)	
Konutlar (yapı yüksekliği 30,50m-51,50m; 51,50m dahil)	Residences (building height 30.50m-51.50m; including 51.50m)	
Bu gruptakilere benzer yapılar	Structures similar to those in this group	
5. Sınıf Yapılar	Class 5 Buildings	TL/m2
A Grubu Yapılar	Group A Buildings	2.400
Televizyon, radyo istasyonları binaları	Television, radio stations buildings	
Orduevleri	Army Houses	
Büyükelçilik yapıları, vali konakları ve brüt alanı 600m2 üzerindeki özel konutlar	Embassy buildings, governor mansions and private residences with a gross area of over 600m2	
Borsa binaları	Stock Exchange buildings	
Üniversite kampüsleri	University campuses	
İş merkezleri (yapı yüksekliği 30,50m aşan yapılar)	Business centers (buildings with a building height exceeding 30.50m)	
Yapı yüksekliği 51,50m'yi aşan yapılar	Structures with a building height exceeding 51.50m	
Alışveriş kompleksleri (içerisinde sinema, tiyatro, sergi salonu, kafe, restoran, market gibi bulunan)	Shopping complexes (with facilities such as cinema, theater, exhibition hall, cafe, restaurant, market)	
Bu gruptakilere benzer yapılar	Structures similar to those in this group	
B Grubu Yapılar	Group B Buildings	2.900

Kongre merkezleri	Convention centers	
Olimpik spor tesisleri, AR-GE binaları	Olympic sports facilities, R&D buildings	
Hastaneler	Hospitals	
Havalimanları	Airports	
İbadethaneler (1500 kişi üzerinde)	Places of worship (over 1500 people)	
Oteller (4 yıldızlı)	Hotels (4 star)	
Uçak bakım onarım ve yenileme merkezleri	Aircraft maintenance, repair and renewal centers	
Bu gruptakilere benzer yapılar	Structures similar to those in this group	
C Grubu Yapılar	Group C Buildings	3.250
Oteller ve tatil köyleri	Hotels and resorts	
Müze ve kütüphane kompleksleri	Museum and library complexes	
Bu gruptakilere benzer yapılar	Structures similar to those in this group	
D Grubu Yapılar	Group D Structures	3.800
Opera, tiyatro ve bale yapıları, konser salonları ve kompleksleri	Opera, theater and ballet structures, concert halls and complexes	
Tarihi eser niteliğinde olup restore edilerek veya yıkılarak aslına uygun olarak yapılan yapılar	Structures that are historical artifacts, restored or demolished and made in accordance with the original	
Bu gruptakilere benzer yapılar	Structures similar to those in this group	

Yapının mimarlık hizmetlerine esas olan sınıfının belirlenmesine ilişkin açıklamalar

Explanations regarding the determination of the class of the building as a basis for architectural services

MADDE 2 – (1) Benzer yapılar, ilgili gruptaki yapılara kıyasen uygulayıcı kurum ve kuruluşlarca Mimarlık ve Mühendislik Hizmetleri Şartnamesinin ilgili hükümlerinden yararlanılarak belirlenecektir.

(2) Tebliğin revizyonu çalışmalarında sınıfı veya grubu değiştirilen veya tebliğden çıkarılan yapılar için, 2020 yılından önceki tebliğlere göre yapı sınıfı ve grubu belirlenmiş mimarlık ve mühendislik hizmetlerinde; belirlendiği yılın tebliğindeki yapı sınıfı ve grubu değiştirilmeksizin 2020 yılı tebliğinde karşılığı olan tutar esas alınmak suretiyle hesap yapılacaktır.

(3) Tebliğdeki sınıf ve gruplar yapım aşamasında belirlenirken tereddüte düşülmesi halinde, o yapının yapı yaklaşık maliyeti; yapının projesine göre hazırlanacak metrajlara Çevre ve Şehircilik Bakanlığı Birim Fiyatlarının uygulanması suretiyle hesaplanacaktır.

ARTICLE 2 - (1) Similar structures will be determined by the implementing institutions and organizations by making use of the relevant provisions of the Architecture and Engineering Services Specification compared to the structures in the relevant group.

(2) For the buildings whose class or group was changed or removed from the notification in the revision works of the communiqué, in architectural and engineering services whose building class and group were determined according to the communiqués before 2020; The calculation will be made on the basis of the amount equivalent in the 2020 communiqué, without changing the building class and group in the communiqué of the year it was determined.

(3) In case of hesitation while determining the classes and groups in the notification during the construction phase, the approximate cost of the building of that building; It will be calculated by applying the Unit Prices of the Ministry of Environment and Urbanization to the quantities to be prepared according to the project of the building.

Yürürlük

MADDE 3 – (1) Bu Tebliğ 1/1/2020 tarihinden itibaren geçerli olmak üzere yayımı tarihinde yürürlüğe girer.

Force Effective Date

ARTICLE 3 - (1) This Communiqué enters into force on the date of its publication, effective from 1/1/2020.

Yürütme

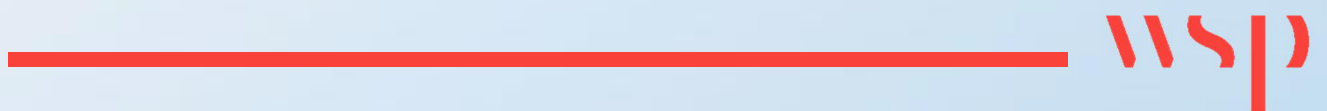
MADDE 4 – (1) Bu Tebliğ hükümlerini Çevre ve Şehircilik Bakanı yürütür.

Execution

ARTICLE 4 - (1) The provisions of this Communiqué are executed by the Minister of Environment and Urbanization.

Appendix C

HOUSEHOLD SURVEY



[illegible]

				sustain your household?	No															
2.4 Previous Employment																				
2.4.1 Was anyone in the household previously employed and is now not working/providing income, in the last year (12 months)?				Yes, they were permanently employed (fill in the table below)																
				Yes, they were temporarily employed (fill in the table below)																
				No																
	No.	Name	Primary source of Household income		Additional details on employment (e.g. employer, crop type, exact profession, permanent/ temporary etc.)	Period of Work	Reason for stopping work													
	1		Farmer (Arable)				Retired													
Farmer (Pastoral)				Unemployed / job seeking																
Employed (private)								Childcare												
Employed (public)									Health reasons											
Self-employed										Pandemic										
Pension											Death									
Remittances																				
Social welfare																				
Other (specify)																				
	2		Farmer (Arable)				Retired													
Farmer (Pastoral)				Unemployed / job seeking																
Employed (private)								Childcare												
Employed (public)									Health reasons											
Self-employed										Pandemic										
Pension											Death									
Remittances																				
Social welfare																				
Other (specify)																				
etc.																				
2.4.2 Is anyone in the household registered as unemployed with the National Employment Agency?				Yes																
				No																
2.4.3 Is anyone in your household actively looking for employment / other forms of livelihood?				Yes																
				No																
				If Yes																
				In what area/sector(s) does this individual(s) want to work?																
2.5 Health Status of Household																				
2.5.1 Do any members of the household have a disability or suffer from chronic illness, or have done in the past 5 years?				Yes																
Are any female members of the household pregnant?				No																
				If Yes, how many?																
				Fill in table below																
	No.	Name	Details of disability/chronic illness		Details of pregnancy (current term, due date etc.)	Is the person receiving any social or other welfare benefits?		If yes, please specify												
	1		Physical Disability			Yes														
Mental Disability				No																
Chronic Illness									Yes											
Aged Person in Need of Care										No										
Other (specify)											Yes									
		No																		
			Yes																	
				No																
					Yes															
						No														
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				Yes																
					No															
						Yes														

Frequency of hunting		Use		What animal is hunted (specify)	Is a licence required to hunt here (Y?N)?														
Daily		Self-subsistence																	
Weekly		Exchange/ barter																	
Monthly		Sale																	
Seasonal																			
2.7.8 Does your household collect wood locally?		Yes (complete table below)																	
		No																	
Frequency of wood collection		Use																	
Daily		Self-subsistence																	
Weekly		Exchange/ barter																	
Monthly		Sale																	
Seasonal																			
2.7.9 Approximately, how much do you spend monthly on rent (if renting home)?																			
2.7.10 For the main dwelling of the household, what is the main building material used?																			
Roof		Walls		Floor															
Corrugated Iron Sheets		Concrete/ Cement		Wood / planks															
Concrete/ Cement				Ceramic tiles															
Tiles		Bricks/ Stone		Earth/sand/dirt/ straw															
Asbestos																			
Thatch																			
Plastic canvas		Wood		Smoothed mud															
Wood																			
Other (specify)		Other (specify)		Carpet															
				Other (specify)															
Section 3: Local Community and Project Perception																			
This section is intended to gain an understanding of the respondent's views on the Project, as well as to ask some additional questions regarding the local community.																			
3.1 Community Background																			
3.1.1 Overall, do you think that the economy in your community has improved or deteriorated in the past five years?																			
Significantly Improved																			
Improved																			
No Change																			
Deteriorated																			
Significantly Deteriorated																			
Don't Know																			
3.1.2 What do you think are the most important problems in the community/settlement																			
Issue	Please Tick																		
Crime																			
Drug abuse																			
Alcohol abuse																			
Violence																			
Domestic violence																			
Other (specify)																			
3.2 Previous Projects and Construction																			
3.2.1 Is there any ongoing construction in the settlement?																			
Yes		Please list these Projects																	
Will any of these households be affected by the proposed railway?		Yes (list these people and their addresses)																	

3.3.4	What benefits can you see for yourself and/or the local community with regard to the Project? Can tick multiple.																	
	Job creation / employment																	
	Rising house prices																	
	Improved livelihoods																	
	Easier/quicker commuting																	
	Urbanisation and improved services																	
	Improved economy																	
	No Benefits																	
	Other (specify)																	
3.3.5	What are your concerns with regard to the Project? Can tick multiple.																	
	General nuisance																	
	Train Noise																	
	Construction - noise																	
	Disruption to roads and access																	
	Dust																	
	Construction - traffic																	
	Community safety around the rail																	
	Disruption to sense of community																	
	Falling house prices due to proximity of rail																	
	Increased urbanisation and loss of rural character																	
	Pollution from trains																	
	Land expropriation																	
	Loss of livelihoods																	
	Construction - worker influx																	
	Construction - pressure on resources																	
	Construction - pressure on infrastructure																	
	No Concerns																	
	Other (specify)																	
3.3.6	Are you aware of any informal settlers or seasonal workers that may be affected by the Project (e.g. migrant agricultural workers, fruit pickers,		Yes (specify location and contact details, if possible)															
			No															
3.3.7	Should we be aware of any other plans in the settlement that we have not discussed today? This could include construction projects, proposed infrastructure improvements, changes in agriculture etc.		Yes (specify)															
			No															
3.3.8	How do you define your settlement? (E.g. rural, urban, commuter etc.)																	
3.3.9	What is the best quality of the settlement?																	
	Quality	Please Tick																
	Rural character																	
	Close to family / friends																	
	Community life																	
	Proximity to Istanbul																	
	Other (specify)																	
3.3.10	Do you have a relationship to the expropriated area of this Project (e.g. significant emotional or cultural attachments)?		Yes (specify how many and GPS WP for each)															
			No															
3.3.11	Would any traditional knowledge, customs, institutions or practices ongoing in the community be affected by the Project? (E.g. charcoal making, traditional decision making structures, key events)		Yes (specify)															
			No															
3.2.12	Do you have any specific questions about the Project you would like to be answered?		Yes (specify)															
			No															
3.4	Gender and Equality																	
EBRD and the Project developer, AYGM, want to ensure that this Project benefits all members of society. We are therefore ask a few questions now on the important role of women in the community.																		
3.4.1	Do you have any expectations and/or concerns on the impact of the Project on women?		Yes (please explain)															
			No															
3.4.2	Do women feel safe walking around the area and taking public transport in the area?		Yes															
			No (please explain)															
3.4.3	Has there been any violence issues in the area?		Yes (please explain)															
			No															
Section 4: Overview of Affected Assets																		
This section may be completed by the surveyor on the date of survey, or by the respondent after the survey has concluded. Please record all land parcels that are owned and/or used by the household in the last 12 months (including land and structures owned, rented or leased, as well as use of common/community land).																		
4.1	Ownership / Use of Land Parcels																	
4.1.1	How many pieces of land did you use in the last 12 months (owned, rented, sharecropped, formally and/or informally)?																	
	Parcel No.	Ownership / Use Rights	Ownership of the Use Rights	Land owner, if rented (formally or informally) or illegally	Use (tick many, if required)	Area (decare)	GPS Reference (if possible)	Land Plot No. (if known)	Tick if the title deeds of this parcel need to be updated	Will this land be expropriated	If yes, what area (in decare) will be expropriated?	Approximately what percentage of the whole land parcel will be expropriated?	Will the remaining (unexpropriated) land in this parcel be still of use (Y/N)?					
		Fully owned (on title deed)	Head of Household		Crop growing													
		Leasehold	Wife		House/store													

1	Customary law		Son/Daughter			Rented to others - agri								
	Sharecropper		Father of HoH			Rented to others - housing								
	Rented (formal agreement)		Mother of HoH			Pasture								
	Rented (informal agreement)		Other relative (male)			Planted trees								
	Borrowed		Other relative (female)			Natural (wild)								
	Illegal use		Other (specify)			Fallow								
	Other form of tenure (specify)					Unused								
						Unusable (specify)								
						Other business activity								
						Other (specify)								
2	Fully owned (on title deed)		Head of Household			Crop growing								
	Leasehold		Wife			House/store								
	Customary law		Son/Daughter			Rented to others - agri								
	Sharecropper		Father of HoH			Rented to others - housing								
	Rented (formal agreement)		Mother of HoH			Pasture								
	Rented (informal agreement)		Other relative (male)			Planted trees								
	Borrowed		Other relative (female)			Natural (wild)								
	Illegal use		Other (specify)			Fallow								
	Other form of tenure (specify)					Unused								
						Unusable (specify)								
					Other business activity									
					Other (specify)									
etc.														
TOTAL														
4.1.2 Provide the names, contacts and details of the individuals who rent (informally or formally) the land that you own/manage, or your landlord separately.														
4.1.3 Do you engage a workforce to work on the affected land plot?														
Members of the household (specify how many)														
Hired help (specify how many)														
No														
Provide the names, contacts and details of the individuals who are part of the workforce on the land parcel you own/manage separately.														
4.1.4 What percentage of the owner/user's total land will be affected by this Project?														
4.2 Ownership / Use of Agricultural Land														
4.2.1 For expropriated land that is owned/rented for agricultural purposes:														
Parcel No. (corresponding with table above)	Annual crops				Permanent crops (e.g. trees)			What source of water is used on the affected land plot?		Animal Husbandry / Grazing				
	Type	Total area used (m2)	Total area used to be acquired (m2)	Type	Number of trees to be acquired	Degree of Maturity (insert number)	Type			Number of animals/hives				
1	Wheat			Pine tree		Small		Public irrigation system		Chickens				
	Barley					Medium		Irrigation from another source		Goats				
	Sugar beets					Large		Well		Cattle				
	Maize			Acacia		Small		None		Sheep				
	Sunflower seeds					Medium		Other (specify)		Beehive				
				Sour Cherry		Large				Cattle				
						Small				Sheep				
						Medium				Other (specify)				
				Cherry		Large								
						Small								
						Medium								
				Plum		Large								
						Small								
						Medium								
				Hazelnut		Large								
						Small								
						Medium								
				Fig		Large								
						Small								
						Medium								
				Grapevine		Large								
						Small								
						Medium								
				Loquat		Large								
						Small								
						Medium								
				Quince		Large								
						Small								
						Medium								
				Pear		Large								
			Small											
			Medium											
			Apple		Large									
					Small									
					Medium									
			Walnut		Large									
					Small									
					Medium									
					Large									
					Small									

1		External Kitchen		Bought		Provide the names and contacts details of landlord/tenants separately.	Corrugated Iron Sheets		Concrete/ Cement		Wood / planks		No fence
		External Bathroom		Rented			Concrete/ Cement						
		External latrine		Borrowed			Bricks/ Stone		Ceramic tiles		Bush/ plants		
		Barn		Inherited					Earth/sand/dirt/ straw		Fence / Wooden Wall		
		Hennerly		Given					Thatch				
		Corral for goats		Built			Wood		Smoothed mud				
		Cattle corral		Don't know					Carpet				
		Shed											
				Other (specify)			Other (specify)		Other (specify)				
2		External Kitchen		Bought		Provide the names and contacts details of landlord/tenants separately.	Corrugated Iron Sheets		Concrete/ Cement		Wood / planks		No fence
		External Bathroom		Rented			Concrete/ Cement						
		External latrine		Borrowed			Bricks/ Stone		Ceramic tiles		Bush/ plants		
		Barn		Inherited					Earth/sand/dirt/ straw		poles Wall		
		Hennerly		Given					Thatch				
		Corral for goats		Built			Wood		Smoothed mud				
		Cattle corral		Don't know					Carpet				
		Shed											
				Other (specify)			Other (specify)		Other (specify)				
etc.													
4.4 Other Disruption to Business Activities / Livelihoods													
<i>To be completed by house and business owners/enters</i>													
4.4.1	Do you require any specific improvements/enhancements to land/structures in order to carry out an activity currently undertaken in the expropriated land?		Yes (<i>specify</i>)										
4.4.2	What are the key aspects when resettling the household, with regard to business activities?		No										
			Access										
			Housing layout										
			Additional structures										
			Other (<i>specify</i>)										
4.4.3	Do you need to access a specific location regularly to undertake business activities?		Yes (<i>specify</i>)										
			No										
4.5 Use of Common Resources													
4.5.1	Are there any common natural resources used by the household? (Including nearby public and community land)		Yes (<i>complete section</i>)										
			No										
4.5.2	If Yes, are they partly or entirely located in the expropriation corridor?		Yes										
			No (<i>skip next</i>)										
			Don't know										
4.5.3	Specify the main use of the natural resource and the season of major activity:		Fishing	Season:									
			Feeding livestock	Season:									
			Hunting	Season:									
			Collecting spices	Season:									
			Collecting herbs	Season:									
			Collecting mushrooms	Season:									
			Logging	Season:									
			Other (<i>specify</i>)	Season:									
4.6 Preferences and Plans for the Future													
4.6.1	If your owned/used land/structure(s) will be expropriated, where would you like to be resettled?		As close to their current location as possible										
			A specific place in the local area (<i>specify</i>)										
			To my home town/city of origin (<i>specify</i>)										
			To another town/city (<i>specify</i>)										
			Not being resettled										
4.6.2	If being resettled, what type of assistance do you/your household require?		Construction material										
			Accommodation										

Appendix D

MUKHTAR SURVEY



Mukhtar Survey

Section 1: Background Information

Before beginning our questions regarding the social and economic status of the local community, as well as your views on the Project, we would first like to gather some introductory information.

[illegible]

Section 2: Socio-Economic Information

We will now like to ask you some general information regarding the composition and income sources of the community you oversee. This will allow us to understand the current situation, providing us with a baseline to understand the impacts of the Project after construction. Please answer as accurately as possible.

[illegible][illegible]

[illegible]

[illegible]

[illegible]

2.6.7	How many days in the year are roads closed in the settlement (e.g. due to weather)																	
2.6.8	What are the primary infrastructure problems experienced by the settlement?																	
	Poor roads																	
	Poor / lack of housing																	
	Poor electricity connection																	
	Poor internet/telephone connection																	
	Poor water supply																	
	Poor sewerage																	
	Other (<i>specify</i>)																	
	None																	
2.6.9	What are the three key things which would improve the quality of life for people in the settlement?																	
	1																	
	2																	
	3																	
2.7 Use of Natural Resources in the Settlement																		
2.7.1	Is there a publically owned forest, stream, river, lake or other natural/common resource that is used by the settlement (e.g. forestry or municipal land)?				Yes (<i>proceed to the table below</i>)													
					No													
2.7.2	Specify the main use of the natural resource and the season of major activity:				Fishing	Season:												
					Feeding livestock	Season:												
					Hunting	Season:												
					Collecting spices	Season:												
					Collecting herbs	Season:												
					Collecting mushrooms	Season:												
					Logging / wood supply	Season:												
					Other (<i>specify</i>)	Season:												
2.8 Places of Worship and Cultural Significance																		
2.8.1	How many places of worship are located in the settlement?				Yes (<i>complete table below</i>)													
					No													
	No.	Name	Location	Located close to/in expropriation corridor (Y/N)?	Contact details													
	1																	
	etc.																	
2.8.2	How many cemeteries are located in the settlement?				Yes (<i>complete table below</i>)													
					No													
	No.	Name	Location	Located close to/in expropriation corridor (Y/N)?	Contact details													
	1																	
	etc.																	
2.8.3	Are there any other places of cultural significance located in the settlement?				Yes (<i>complete table below</i>)													
					No													
	No.	Name	Location	Located close to/in expropriation corridor (Y/N)?	Contact details													
	1																	
	etc.																	
3.3.10	Do you or the community have a relationship to the expropriated area of this Project (e.g. significant emotional or cultural attachments)?				Yes (<i>specify how many and GPS WP for each</i>)													
					No													
3.3.11	Would any traditional knowledge, customs, institutions or practices ongoing in the community be affected by the Project? (E.g. charcoal making, traditional decision making structures, key events)				Yes (<i>specify</i>)													
					No													
2.9 Gender and Equality																		
EBRD and the Project developer, AYGM, want to ensure that this Project benefits all members of society. We are therefore ask a few questions now on the important role of women in the community.																		
2.9.1	Do you have any expectations and/or concerns on the impact of the Project on women?				Yes (<i>please explain</i>)													
					No													

[illegible]

	Increased urbanisation and loss of rural character														
	Pollution from trains														
	Land expropriation														
	Loss of livelihoods														
	Construction - worker influx														
	Construction - pressure on resources														
	Construction - pressure on infrastructure														
	No Concerns														
	Other (specify)														
3.6	Have any individuals/groups in the settlement already voiced their concerns to you about the Project?				Yes (list their concerns and your replies)										
					No										
3.7	Through what mechanism do members of the community voice their concerns/issues to you?														
	Mechanism	Please Tick (multiple)													
	Personal Call														
	Community Meeting														
	Letters														
	Association / cooperative communication														
	Direct Meeting														
	Other (specify)														
3.8	Do you have any specific questions about the Project you would like to be answered?				Yes (specify)										
					No										

Section 4: Recommendations for Household Survey															
Please provide a list of approximately 20 individuals from your jurisdiction, either residing or with assets (owned or common) in the settlement, to be made available for surveying. You are encouraged to nominate individuals from an array of different backgrounds, income bands, age, occupations, ethnicity, gender and status within the local community.															
No.	Proposed Individual	Age	Gender (M/F)	Nationality	Occupation	Income Band		Address and Contact Details	Inform of Nomination						
1						High									
						Middle									
						Low									
2						High									
						Middle									
						Low									
3						High									
						Middle									
						Low									
4						High									
						Middle									
						Low									
5						High									
						Middle									
						Low									
6						High									
						Middle									
						Low									
7						High									
						Middle									
						Low									
8						High									
						Middle									
						Low									
9						High									
						Middle									
						Low									

10						High									
						Middle									
						Low									
11						High									
						Middle									
						Low									
12						High									
						Middle									
						Low									
13						High									
						Middle									
						Low									
14						High									
						Middle									
						Low									
15						High									
						Middle									
						Low									
16						High									
						Middle									
						Low									
17						High									
						Middle									
						Low									
18						High									
						Middle									
						Low									
19						High									
						Middle									
						Low									
20						High									
						Middle									
						Low									



2 London Square
Cross Lanes
Guildford, Surrey
GU1 1UN

wsp.com

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