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	TANAP TRANS ANATOLIAN NATURAL GAS PIPELINE PROJECT	
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REPORT



AZERBAIJAN SOUTH CAUCASUS PIPELINE LTD - TRANS ANATOLIAN NATURAL GAS PIPELINE PROJECT (TANAP)

Resettlement Action Plan (RAP) for TANAP Project

Submitted to:

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ABBREVIATIONS

ABPRS	Address Based Population Registration System
ADB	Asian Development Bank
AGI	Above Ground Installation
ASME	American Society of Mechanical Engineers
bcma	Billion cubic meters per annum
BOTAŞ	Petroleum Pipeline Corporation
BTC	Baku Tbilisi Ceyhan
BVS	Block Valve Stations
CS	Compressor Stations
DSA	Designated State Authority
EBRD	European Bank for Reconstruction and Development
EC	Engineering Contractor
EPC	Engineering Procurement and Construction
EP	Equator Principles
ESIA	Environmental and Social Impact Assessment
FEED	Front-end Engineering Design
GLAC	Guide to Land Acquisition and Compensation
GTA	Gas Transport Agreement
HGA	Host Government Agreement
IEA	International Energy Agency
IFC	International Finance Corporation
IGA	Intergovernmental Agreement
ITE	Iran Turkey Europe
KHGM	General Directorate of Rural Affairs
km	Kilometer
LAC	Land Acquisition
LASC	Authority Liaison, Mapping, Land Acquisition and Ground Investigation Services Contractor
LRE	Land Rights Entity
MENR	Ministry of Energy and Natural Resources
MoEU	Ministry of Environment and Urbanization
MS	Metering Stations
PAC	Project Affected Communities
PAP	Project Affected Person
PIGM	General Directorate of Petroleum Affairs
PPM	Public Participation Meetings
PS5	Performance Standard 5
QA/QC	Quality Assurance / Quality Control
RAP	Resettlement Action Plan



RoW	Right of Way
SCADA	Supervisory Control and Data Acquisition
SCP	South Caucasus Pipeline
SCPC	South Caucasus Pipeline Company
SEP	Stakeholder Engagement Plan
sqm	square meter
TANAP	Trans Anatolian Natural Gas Pipeline
TMT	TANAP Management Team
TUIK	Turkish Statistical Institute
UN	United Nations
WB	World Bank



GLOSSARY

Affected person/people or affected community: any community or person who can no longer use, own or benefit from a built structure, from land (residential, agricultural, or pasture), from annual or perennial crops and trees, or from any other fixed or moveable asset because of a project's implementation. This loss may be in full, or in part, and may be temporary or permanent.

Compensation: payments made by those causing specified and agreed loss to those who suffer the impairment of access to land, waters and other critical natural resources or livelihoods, or damage to, or destruction of, community members' individual or collective assets of any kind, whether accidental or planned.

Cut-off date: This is the date when the census and the inventory of assets of the people affected by the project are completed. People occupying the project area after the definition and disclosure of cut-off date are not eligible for compensation and/or resettlement assistance. In the same way, fixed assets (like built structures, crops, fruit trees and woodlots) that appear after this date, or an alternative mutually agreed on date, will not be compensated.

Economic displacement (Loss of income in relation to land acquisition): Economic displacement occurs when people's means of earning an income is lost because of the construction or operation of a project. This includes situations where people lose their access to resources (land, water, forest or markets) that they depend upon for their livelihood.

Land expropriation: This process dispossesses a person, household or community of their land It is usually done by a public authority in return for compensation. The property is taken either for government use or by delegation to third parties who will devote it to public or civic use or, in some cases, economic development. Compulsory purchase, resumption/compulsory acquisition, or expropriation all refer to the same process.

Involuntary resettlement: When land is acquired through the application of state powers, such as eminent domain, the resettlement is involuntary. A resettlement is always involuntary when there is no power of choice on the part of the people affected by the project. If land acquisition is undertaken in an open market on a willing-seller/willing-buyer basis it is not considered involuntary resettlement.

Land acquisition: A state authority or a company can acquire land by purchasing the land or by gaining the right to access that piece of property (eg: through easements or rights of way).

Livelihood: The occupational activities associated with the maintenance of material life. The livelihoods are typically associated with formal employment and cash remuneration; arable farming, animal husbandry, commerce and hybrid livelihoods relying on a mixture of occupational elements, including the cash economy.



Physical displacement: This occurs when people have to move to another location because a project acquired the land where they lived. It entails the loss of shelter and associated assets.

Replacement cost: In the absence of in-kind¹ recompense, when calculating the compensation amount, lost assets must be calculated at full replacement cost. This is the deemed market value of the assets plus transaction costs and does not consider depreciation.

- With regard to land and structures, IFC defines “replacement costs” as follows:
 - **agricultural land**—the market value of land of equal productive use or potential located in the vicinity of the affected land, plus the cost of preparation to levels similar to or better than those of the affected land, plus the cost of any registration and transfer taxes;
 - **land in urban areas**—the market value of land of equal size and use, with similar or improved public infrastructure facilities and services preferably located in the vicinity of the affected land, plus the cost of any registration and transfer taxes;
 - **household and public structures**—the cost of purchasing or building a new structure, with an area and quality similar to or better than those of the affected structure, or of repairing a partially affected structure, including labor and contractors’ fees and any registration and transfer taxes.
- In determining the replacement cost, depreciation of the asset and the value of salvage materials are not taken into account, nor is the value of benefits to be derived from the project deducted from the valuation of an affected asset.

Resettlement Action Plan (RAP): The document in which a private company or a public institution specifies the procedures that it will follow and the actions that it will take to ensure that the people affected by the project are duly compensated for their losses. The project may not have an impact on living quarters and thus the impacts may be limited to economic displacements.

Resettlement assistance: Support provided to people who are physically displaced by a project. Assistance may include transportation, food, shelter and social services that are provided to affected people during their relocation. Assistance and/or money that are paid to cover transition expenses (eg: moving costs and lost work days) is also considered part of this.

Vulnerable groups: These are people who are potentially more negatively impacted by resettlement than others because of their gender, ethnicity, age, physical or mental disability, or historical, economic or social status. These people have the same rights to resettlement assistance as other persons, but may need additional help to access the assistance.

EXECUTIVE SUMMARY

¹ In kind compensation is not possible when land is not compensated with land, or house is not compensated with house. In such cases the cash compensation value is calculated to replace lost assets.



INTRODUCTION

This Executive Summary is based on the Resettlement Action Plan (RAP) which serves as a framework for all current and future resettlement needs for the TANAP project. It summarizes the main data and information regarding the extent and nature of resettlement impacts related to TANAP's pipeline project and provides details on the various compensation measures to be applied to redress the unavoidable adverse effects of the project activities on the people affected by the project (PAPs).

This summary also presents details about the project itself, the policy and legislative framework within it falls into, the roles and responsibilities for land acquisition and livelihood restoration, the resettlement principles that will be followed during the project, the eligibility criteria for compensation and assistance, the public consultations and disclosure arrangements, the grievance mechanism and the monitoring and evaluation system that will be put in place to make sure, amongst other things, that the PAPs' livelihoods are restored or even improved, whenever possible.

PROJECT DESCRIPTION

TANAP'S Pipeline Project is part of the Southern Gas Corridor, which aims to transport the Azeri natural gas from Shah Deniz 2 Gas Field and other fields in the south Caspian Sea extending to Turkey and Europe. TANAP's natural gas pipeline route commences in the North-Eastern corner of Turkey at the Georgia Border and it will pass through 20 provinces from Ardahan in the East to Edirne in the West. The pipeline will join the Turkey/Greece border in Ipsala/Edirne. From this location it will feed into the TAP Natural Gas Pipeline. There will be an off-take station at Eskişehir, Turkey, and another one at Thrace, Turkey that will connect to the Turkish natural gas distribution network.

The total length of TANAP's natural gas pipeline within the borders of Turkey will be 1,805 km from Turkgözü to Ipsala, where 1,787 km will be onshore and 18 km will cross through the Marmara Sea. The average width of the construction corridor (Right-of-Way or "RoW") is planned to be 36 meters in accordance with the standard international pipeline construction criteria to enable the deposit of the topsoil and subsoil separately within the scope of the construction phase of the project and also to maintain the construction works.

The TANAP system will be fully automated with main and back-up control centers to meet the requirements of gas transmissions and associated environmental and safety considerations. The main pipeline facilities include the required number of compression facilities, block valve stations, distribution and custody transfer metering facilities. Other above ground installations (AGIs) are also planned as well as access roads and temporary facilities such as camps and pipe stock yards. The construction of the Project is expected to last four years and a phased approach will be pursued where the target for completion of the construction and the start of operation is mid- 2018. An Intergovernmental Agreement (IGA) between the Government of the Republic of Turkey and the Government of the Republic of Azerbaijan and a Host Government Agreement (HGA) between the Government of the Republic of Turkey and The Trans Anatolian Gas Pipeline Company B.V were signed on June 26th 2012 in Istanbul, Turkey. The IGA and the HGA were approved by Law



no. 6375 dated January 2nd 2013. Following signature of IGA (Appendix 3.1) and HGA (Appendix 3.2), TANAP Doğalgaz İletim A.Ş. was established and TANAP B.V transferred its rights and obligations to TANAP Doğalgaz İletim A.Ş under the HGA. The companies assigned by the two countries to form a project-specific joint consortium are; the State Oil Company of the Republic of Azerbaijan (SOCAR) and the Petroleum Pipeline Corporation (BOTAŞ). Within the framework of the Memorandum of Understanding between the Government of the Republic of Turkey and the Government of the Republic of Azerbaijan that was signed on December 24th 2011, TANAP Doğalgaz İletim A.Ş. (TANAP) was established and authorized by SOCAR as the owner and operator of the TANAP project.

RESETTLEMENT ACTION PLAN (RAP)

The Resettlement Action Plan (RAP) aims to outline the measures TANAP is committed to adopt in order to ensure that the people affected by the project (PAP), whether they are economically or physically affected, are compensated for their temporary or permanent losses of land, immovable assets and means of livelihood within the project's footprint (Pipeline, AGIs, access roads, temporary facilities, etc.). The RAP has been developed for the Project within the framework of relevant national laws, applicable World Bank policies (OP 4.12), applicable IFC performance standards (PS 5) and the Equator Principles. The project's impacts will mainly be **income losses in as a result of land acquisition** since it is expected that the pipeline will be designed to avoid the settlement areas and not have an impact on residential areas. However, since the pipeline's final RoW, and the exact location of the AGIs, access roads and temporary facilities, was not available during the preparation of the RAP, measures regarding the impacts on the settlements were still provided in case this situation occurs. The ongoing technical design studies will however avoid the settlement areas and the impacts on dwellings.

The RAP presents the policy and legal framework, the socioeconomic characteristics of the PAPs, information on land acquisition and its process, details on compensation measures for other types of immovable assets (dwellings, trees, crops, irrigation canals, barns, stables, etc.), details on valuation issues, information on the affected community and stated-owned lands (forest and pasture lands), the eligibility criteria, the entitlement matrix, details about public consultation, information about the grievance mechanism and the redress process, descriptions of measures to be taken in order to minimize resettlement impacts during the construction phase, monitoring and evaluation measures as well as a budget and project implementation schedule.

RESETTLEMENT ACTION PLAN BACKGROUND

Since the technical design of the pipeline was underway and not finalized before the submittal of the RAP, the RAP report is based on Revision F of the pipeline's right-of-way (RoW) as it was sent to Golder on July 1st 2013.

Moreover, since the engineering studies pertaining to AGIs, access roads and temporary facilities were also not completed before the finalization of the RAP, the report cannot specifically identify the resettlement impacts of these facilities. However, the compensation measures presented in the RAP cover all types of impacts and can be implemented with ease once these elements have been defined.



At the time of the preparation of the RAP, the inventory of affected land and immovable assets carried out by LASC (Authority Liaison, Mapping, Land Acquisition and Ground Investigation Services Contractor) was completed for one forth (481 km) of the pipeline route and it was observed that the negative impacts of the Project are limited since the route is designed to be away from settlement areas.

Hence, the works carried out and studies realized for the elaboration of the RAP were based on current and available data such as the results of the recent socioeconomic field survey carried out by Golder, the parcel data that was transmitted by TANAP and Revision F of the 48 meter RoW. The average width of the final construction corridor (RoW) is planned to be 36 meters but since the route's detailed engineering was not finalised, the RAP has considered a study corridor of 48 meters.

POLICY AND LEGISLATIVE FRAMEWORK

Many National laws, regulations and regulatory statutes address pipeline and resettlement issues. These are the Turkish Constitution (Articles 44, 45 and 46), the Law on the Transit Transport of Petroleum through Pipelines (No. 4586), the Expropriation Law (No. 2942) and other supplementary laws that pertain to land acquisition such as the Forest Law (No. 6831), the Pasture Law (No. 4342), the Cadastral Law (No. 3402), the Agricultural Reform Law on Land Arrangement in Irrigated Areas (No. 3083), the Law on Soil Protection and Land Use (No. 5403), the Resettlement Law (No. 5543), the Law of Population Services (No. 5490), the Notification Law (No. 7201) and the Land Registry Code.

Primary agreements also govern the way the project is implemented. These are the Intergovernmental Agreement (IGA), between the Governments of the Republic of Turkey and the Azerbaijan Republic, and the Host Government Agreement (HGA), between the Government of the Republic of Turkey and Trans Anatolian Natural Gas Pipeline Company B.V.

The IGA establishes the basis for the transport of natural gas from the Caspian Sea, across the territories of Azerbaijan and Turkey, through the realization of an export pipeline, and it confers the twin status of international law and the prevailing domestic law in each country on the legal and commercial terms of the Project. The HGA further establishes the legal basis within Turkey for the implementation; operation and decommissioning of the Turkish section of the Trans Anatolian Natural Gas Pipeline and is an integral part of the IGA.

The comparison between the local legal framework, the IGA and HGA, and the international policies identified some differences, but TANAP is committed to follow the highest standards amongst them.

RESETTLEMENT IMPACTS OF THE PROJECT

The TANAP pipeline will acquire permanently or temporarily 8 041 ha of public and private lands and other immovable assets over a total distance of 1,805 km of the 48 meter study corridor. Approximately 60 % of the affected land is privately owned (5,031 ha) and 12% Treasury owned (1,015 ha). Forest and pasture land represent respectively 9% (769 ha) and 11% (931 ha) of total affected land. Other types of land account for 8 % (655 ha) of the total affected land.



Within the pipeline’s RoW, the land acquired at each point is small and the estimated livelihood impacts are minor. The land requirements of auxiliary facilities are also modest. The total land area that will be acquired for the above ground installations (AGIs), the access roads and other facilities (camps, stock yards, etc.) is unknown though estimated to be relatively low.. The studies regarding their location and footprint were not finalized before the submittal of the RAP.

The pipeline will mainly cross farming, forest and pasture lands and will not traverse any settlements. A total of 22,080 parcels and 60,041 private owners are affected within the 48 meter study corridor which passes through 20 of the 81 provinces of Turkey. Out of these parcels, 82 % (18,013) of them are privately owned and 18% (4 067) are mainly treasury owned or pasture and forest lands. The private owned lands represent approximately 60 % of the total affected area (5,031 ha out of 8,401 ha).

The main resettlement impacts of the project consist of loss of farming land (agriculture and horticulture), loss of privately owned land used for grazing, loss of man-made immovable structures (wells, barns, pergola, stables, etc.), loss or reduced access to common resources such as pastures and forests, loss of standing crops, loss of trees, orchards and vineyards and loss of feedstock on pasturelands. Other losses typically observed in similar linear investments, but that will be avoided or be very limited in the final pipeline route of TANAP project, include: loss of dwellings, loss of buildings and facilities used for business, loss of community assets (cemeteries, mosques, etc.) and loss of infrastructure such as irrigation canals.

Out of the final 36 meter RoW, 16 meters will be acquired permanently. The remaining 20 meters will be returned to their original owners within the first 3 years of the start of construction. The land within the 16 meters will be reinstated and returned to the owners with use restrictions.

ROLES AND RESPONSIBILITIES FOR LAND ACQUISITION AND LIVELIHOOD RESTORATION

Roles and responsibilities assigned to various entities with regard to land acquisition and livelihood restoration in TANAP Project are shown in the Table below.

Institutional Responsibilities for Land Acquisition

Entity	Roles and Responsibilities
TANAP Management Team (TMT)	The entity performs overall project management tasks, reviews and approves reports and documents. Defines and determines the roles and responsibilities of all relevant parties involved in land acquisition activities. Closely monitors land acquisition activities and ensures that land acquisition activities are executed in line with relevant national legislation, project agreements and international policies.
Engineering Contractor (EC)	Provides support during the process of final corridor route and identifies the centerline and final RoW boundaries; determines the location of Above Ground Installations (AGI). It also provides inputs to Change Management Procedures.



Entity	Roles and Responsibilities
Engineering Procurement and Construction (EPC)	Executes pipeline construction in accordance with the international best practice/standards and ensures that construction activities take place within the expropriation boundaries. EPC uses best endeavor to minimize complaints/grievances throughout the construction process. EPC is also responsible for damages that occur outside the expropriation boundaries.
Land Rights Entity (LRE)	Manages and executes all land acquisition activities in conformity with the relevant national legislation, project agreements and international policies.
RAP Fund Management (FUND)	A special fund will be created in order to cover the assets not considered in the RAP’s land acquisition budget. This Fund will be managed by TANAP through a specialized Social Research Team.
Authority Liaison, Mapping, Land Acquisition and Ground Investigation Services Contractor (LASC)	Prepares documentation for all affected parcels required for land acquisition, including identification of resident and absentee owners and their addresses and ensures that data submitted to Lands Right Entity accords with the Project schedule. Ensures that the documentation prepared complies with national legislation, international policies and lender requirements.
Lenders	Monitors the land acquisition process’s conformity with international policies and commitments incorporated in the Resettlement Action Plan (RAP).
Ministry of Energy and National Resources (MENR)	Provides support to the project as the Designated State Authority (DSA) as defined in Article 5 of the Host Government Agreement. It has identified BOTAS as the “direct point of contact for the TANAP Project Entity” (as per Article 5.2).

RESETTLEMENT PRINCIPLES

The project will follow the resettlement principles mentioned below. These principles emanate from the HGA, the Turkish laws or from the IFC, whichever one is most stringent:

- Involuntary resettlement will be avoided or minimized;
- Not only title deed holders, but also customary owners, tenants, public land users and squatters are entitled to compensation;
- All people who were settled in the project’s RoW before the designated cut-off date are eligible for compensation and/or assistance;
- The loss of assets or access to assets that results in loss of income or other means of livelihood will be restored for all PAPs;



- Physically and economically displaced persons will be assisted in their efforts to improve their former living standards, income earning capacity and production levels, or at least to restore them;
- Project related losses of the persons affected by the project (PAP) will be compensated in full prior to the actual acquisition of immovable assets;
- All eligible PAPs that lose homes are entitled to resettlement;
- If any physical relocation is required in the course of the project, TANAP will carry out the resettlement activities in consultation with the PAPs. TANAP will handle physical displacement cases individually to ensure that new homes are of equivalent size to those lost without additional costs borne by the people;
- Replacement cost at market prices, that will include transaction costs and exclude amortization, will be paid for land and other immovable assets within the project's RoW;
- TANAP will compensate the users of forest and pasture lands for the crops and other immovable assets that they might have planted or built on these lands. Compensation will be complemented with Community Development Programs in areas where livelihoods are affected as a result of reduced access to natural resources (forest and pasture) and where special vulnerabilities exist;
- Damage to land, structures, crops and other immovable assets during construction phase will be compensated. The RAP Fund will be used to cover these damages in the course of construction;
- TANAP and its contractors will ensure that the land used for the construction activities will be reinstated and given back to the owner;
- TANAP's RAP will incorporate monitoring of input, output, process, and impact indicators in its monitoring activities and plan for internal, external and participatory monitoring arrangements;
- TANAP will establish a grievance mechanism to receive and facilitate resolution of concerns regarding resettlement issues. This mechanism will allow women, vulnerable people, the elderly and the illiterate to reach TANAP easily;
- Special effort will be made to encourage female owners to attend negotiations;
- TANAP will ensure that compensation arrangements will be issued in the names of both spouses or heads of households;
- Current international standards of stakeholder engagement will be met by TANAP. A public consultation and disclosure plan will be established and implemented once RAP is completed. This consultation process will capture both men's and women's views, if necessary through separate forums or engagements.

ELIGIBILITY AND COMPENSATION MEASURES

The pipeline will impact both private and public land. The private land impacts are distributed along the entire length of the pipeline and those pertaining to the loss of forests and pasture are concentrated in certain segments.



Based on Article 16 of HGA and Article 8 of Transit Transportation of Petroleum through Pipelines, unrestricted and exclusive rights will be established by TANAP on the 16 meter corridor. Temporary easement will be established on the remaining 20 meters during construction for a period of three years. Once the pipes are buried in the entire 36 meter corridor, the construction area will be leveled and returned to the use of the owner/user with minimum restrictions.

People occupying the project area after the cut-off date are not eligible for compensation and/or resettlement assistance. In the same way, fixed assets (like built structures, dwellings, crops and fruit trees) that appear after this date, will not be compensated.

Generally, the cut-off date corresponds to the date at which the PAP and asset inventory is completed. In this case, since the Project is of linear nature, a single cut-off date is not recommended. For practical reasons, LRE will establish a cut-off date for each of the 20 provinces that will be crossed by the pipeline. This will facilitate the spatial understanding of the project since each cut-off-date will correspond to existing and known territorial limits. At the end of the asset and PAP inventory, the project will therefore have one cut-off-date for each of the 20 provinces.

Information regarding the cut-off dates will be well documented and disseminated throughout the Project area through use of LRE branch offices and written communications with headmen (or mayors) of affected communities.

According to IFC standards, the PAPs in the following two groups are entitled to compensation for loss of land and other assets that are within the project's RoW. These groups are:

- Those who have formal legal rights to land or other affected assets (including customary and traditional rights to the use of land or other assets); and
- Those who do not have formal legal rights to land or other assets at the time of the census, but who have claim to such legal rights by virtue of occupation or use of those assets.

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“In other words, the absence of legal title to land or other assets is not, in itself, a bar to compensation for lost assets or to other resettlement assistance”².

The compensation measures planned in the RAP for various categories of PAP are detailed as follows:

a) Private owners will:

- Be compensated for:
 - Permanent acquisition of land for AGIs,
 - 3 year easement for (temporary acquisition of land) 20 meters, and
 - unrestricted and exclusive long term easement on 16 meters of the RoW,
- Receive replacement value for the loss of structures/dwellings;
- Get fair compensation based on net income capitalization plus a payment for reduced marketability for each individual rural plot;
- Receive market value of urban land;
- Be paid for standing crops based on their market value;

² IFC Handbook for Preparing a Resettlement Action Plan, page 32.



- Be paid for other immovable assets such as trees, vineyards, barns, etc. at replacement cost;
 - Receive payments made into their bank accounts in their name within 45 days of mutual agreement;
 - Be assured that no land entry for construction will start before payments are deposited;
 - Be assured that all construction damage to standing crops and immovable assets (homes, trees, vineyards, barns, etc.) will be compensated;
 - Be awarded payments on the basis of the shares registered in their name if the land is jointly owned. If shares of joint owners are not registered, their mutual consent on ownership right and shares are encouraged;
 - Be invited to attend a willing buyer/seller negotiation.
- b) Land users, tenants and squatters on public and/or private land will:
- Not be entitled to receive compensation for the land they occupy;
 - Receive replacement value for the loss of structures/dwellings that they own or built on public (including forest and pasture) or private land;
 - Be paid at market value for standing crops that they grow on public (including forest and pasture) or private land;
 - Be paid at replacement cost for other immovable assets (such as trees, vineyardsetc.) that they have on public (including forest and pasture) or private land;
 - Receive payments made into their bank accounts in their name within 45 days of mutual agreement;
 - Be assured that no land entry for construction will start before payments are deposited;
 - Be assured that all construction damage to standing crops and immovable assets (homes, trees, vineyards, barns, etc.) will be compensated;
 - Be invited to attend a willing buyer/seller negotiation.
- c) The Ministry of Forestry and Water Affairs will:
- Receive appropriate payments for the acquisition of their lands prior to entry to the land.
 - Receive compensation for the loss of public assets prior to entry to the land, at a value determined/agreed with the Forest authority;
 - Receive compensation for the loss of public structures/buildings, at a value determined/agreed with the Forest authority;
 - Receive compensation for the loss of other public immovable assets such as crops, trees, vineyards, barns, etc., at a value determined/agreed with the Forest authority.
- d) Treasury and other State Authorities will:
- Receive appropriate payments for the acquisition of their lands (including pasture lands) prior to entry to the land.



- Receive compensation for the loss of public assets prior to entry to the land, at a value determined/agreed with the Treasury or State Authority;
- Receive compensation for the loss of public structures/buildings, at a value determined/agreed with the Treasury or State Authority;
- Receive compensation for the loss of other public immovable assets such as crops, trees, vineyards, barns, etc.) , at a value determined/agreed with the Treasury or State Authority.

PUBLIC CONSULTATION AND DISCLOSURE

The design and implementation of the TANAP Project, as well as its land acquisition activities, have been and will continue to be guided by stakeholder consultations including consultations with the affected PAPs and communities.

The consultations carried out so far aimed at providing the public, affected communities and PAPs, accurate and timely information about the Project, the procedures to be followed in land acquisition and the potential project impacts. These consultations also allowed the stakeholders to express their concerns about the project.

Many consultations were carried out during the Environmental and Social Impact Assessment (ESIA) and many were also lead during the elaboration of the resettlement action plan.

In addition to consultations lead by the LASC, a socioeconomic survey amongst 876 owner/user households affected by the project, 17 focus groups with women and 132 village head interviews were carried out by Golder between February 20 and March 5, 2014.

The main concerns and issues brought to light by the affected households are the following:

- When will we have information on the amount of payments to be made for our land?
- When will the land acquisition/expropriation activity start?
- Will I be able to cultivate my land again?
- How much of my property will be affected?
- When will the payments be made?
- Will the land acquisition process be based on willing buyer/seller negotiations or will there be immediate expropriation?
- Can I receive a compensation for the Treasury land I cultivate?
- How will the land be affected ?
- Would reinstatement works be carried out for our land?

During the socioeconomic survey it was observed that many of the correspondents had little information on the land acquisition process and the legal framework of the project. However, during the assets inventory works owners and/or users were informed on the land acquisition process. A Guide to Land Acquisition and Compensation (GLAC) was also produced for this purpose. The GLAC will provide specific information on the entitlements of all PAPs as well as providing information on the process of land.

In addition to collecting their concerns on the Project, all PAPs contacted were provided with information on the Project's grievance mechanism that will be established and provided with the



means that could be utilized for getting in contact with TANAP if they have concerns of grievances regarding the project activities.

To comply with the World Bank and IFC policies, TANAP will ensure that the RAP is made available to IFC for submission to the World Bank InfoShop for public access at least 60 days before IFC's formal consideration. TANAP will also make sure that the RAP is distributed among pertinent project stakeholders (i.e relevant ministries, provincial directorates of various state authorities, governorships and sub-governorships, etc.) in local language for review. The executive summary of the RAP will be made available in both languages (Turkish and English). Local language summary will be shared in multiple copies with community leaders in all 570 settlements.

GRIEVANCE MECHANISM

In line with international standards, TANAP's grievance mechanism will ensure that all affected PAPs will be able to place complaints, claims and/or requests without cost and under the guarantee that they are provided with a timely and satisfactory resolution for it.

All PAPs and project affected communities will be provided with the information on different means/tools available for lodging a complaint, claim or request. A toll free number is set up and a complaint register form is prepared for the complaints log. Each complaint registered will be recorded in TANAP's central complaints database.

Many projects rely solely on grievance mechanisms to track adverse impacts and responses to them. Yet, in a pipeline project such as TANAP that affects over 60,000 private owners along 1,805 km in 20 provinces, LRE's branch offices will be difficult to reach no matter how many there may be. Project Affected Persons (PAPs) might be reluctant to travel long distances to seek resolution to their problems. Therefore a proactive impact identification process will be established in order to complement the grievance mechanism. This process will monitor the relevant land acquisition activities that will be carried out without relying solely on the grievance mechanism for the identification of adverse impacts. This process will enable the identification of additional adverse impacts of the Project during its construction and implementation phases and will help formulate the required responses at a household and/or community levels. The proactive process will also identify women (as well as men) who may face hardship as a result of the Project's land acquisition and/or construction activities and will implement appropriate measures for their concerns.

Additionally, in compliance with IFC standards, TANAP is prepared to make special accommodations for women and members of vulnerable groups to ensure that they have equal access to the grievance mechanism. TANAP will also be prepared to communicate with certain groups that do not speak Turkish as a mother language or as 'second language' through their local leaders.

Moreover, the poor and the illiterate PAPs might not have the means for accessing the grievance mechanism through the Internet and will probably not be able to use the other written-based grievance tools such as claim forms. The Project will take these issues into consideration and give special attention to avoid such cases.



MONITORING AND EVALUATION

The objective of monitoring and evaluation is to provide feedback to TANAP on the Resettlement Action Plan's implementation and to identify problems and successes as early as possible to allow timely adjustment of implementation arrangements. Monitoring and evaluation is also critical to confirm the success of sustainable livelihood restoration of the affected people and to ensure that the land acquisition activities, with respect to all Project components that are not covered by this RAP especially those that emerge during Project implementation, are implemented in accordance with the principles outlined in the RAP.

The purpose of resettlement monitoring in TANAP Pipeline Project will be to verify that:

- Actions and commitments described in the RAP are implemented fully and on time by TANAP;
- Commitment to livelihood restoration/improvement is recognized, monitored and documented;
- Construction activities are closely followed and all new land acquisitions, crop compensations and construction damages are identified and addressed;
- Eligible affected people receive their full compensation within agreed time frames;
- RAP actions and compensation measures are effective in enhancing or restoring living standards and income levels;
- Community level impacts are recognized and mitigation measures are implemented;
- Complaints and grievances logged by project affected persons are followed up and appropriate corrective actions are implemented; and
- Changes in RAP procedures are made during implementation so that compensation measures are effective in restoring living standards and income levels of affected people.

TANAP's monitoring framework is composed of the following components:

- Internal monitoring of planned and budgeted inputs and outputs;
- Internal monitoring of input and outputs of land acquisition requirements that emerge in the process of construction and the monitoring of construction related compensation for crops and other immovable assets;
- Internal monitoring of grievances;
- Participatory monitoring whereby the affected people and the communities themselves as well as the labor force of the Project identify monitoring indicators that matter to them and assess relative success/failure of Project's land acquisition activities;
- External monitoring by independent experts of inputs, outputs, processes, and especially outcomes;
- External monitoring of RAP Fund activities and effectiveness of community based programs that fall within the Fund framework;
- External independent expert monitoring of impacts; and
- RAP Completion Audit by external Expert Panel based on internal monitoring data and reports.



The Project's monitoring will be carried out with input indicators, output indicators, process indicators, outcome indicators, and impact indicators. These various indicators will monitor such things as the progress in signing land purchase agreements, the progress of land acquisition for specific project facilities, the modes of parcel acquisition, the completion of various processes, the number and types of affected assets that were compensated, the types of grievances, the resolution of grievances, the work opportunities provided and the RAP Fund activities, etc.

CONCLUSION

The RAP presents all the measures required to carry out land acquisition and compensation of affected land and other immovable assets within the project's RoW. It is also based on the most stringent principles that emanate either from Turkish law, from the HGA or from the IFC. Although the final pipeline's RoW was not available at the moment of the elaboration of this RAP, it is anticipated that the project will cause little or no physical displacements. The ongoing technical design studies are focused on minimizing physical displacements.

The pipeline will mainly cross farming lands. The parcel analysis within the 48 meter study corridor indicates that only small portions of the affected farm plots will be impacted, as one should expect from a linear project such as this one. Moreover, the fact that the land within the 20 meters of the RoW will be returned to their original owners/users within the first three years of the start of the construction and that fact that the land within the 16 meters will be reinstated and returned to the owners with some use restrictions, reduces the extent of the overall impact. The impacts that may occur during the construction phase will also be minimal and fully compensated according to the RAP's compensation principles.



1.0 INTRODUCTION

1.1 Background

This Resettlement Action Plan (RAP) describes the policies and procedures that Trans Anatolian Natural Gas Pipeline (TANAP) Project will follow for the acquisition and compensation of land and other immovable assets within the project's right of way and which may be permanent and/or temporary.

As the technical design of the pipeline is underway and will not be finalized before the submittal of this RAP, the present report is based on Revision F of the Right of Way (RoW) produced on July 1st 2013 by TANAP.

Moreover, since the engineering studies pertaining to AGIs, access roads and temporary facilities were also not completed before the finalization of this RAP, the present report cannot specifically identify the resettlement impacts of these facilities. However, the compensation measures presented in this RAP cover all types of impacts and can be implemented with ease once these elements have been defined.

At the time of the preparation of this RAP, the inventory of affected assets was only completed for one forth (481 km) of the pipeline route where immovable assets were determined.

Hence, the works carried out and studies realized for the elaboration of this RAP were based on current and available data such as the results of the recent socio-economic field survey carried out by Golder, the parcel data that was transmitted by TANAP and Revision F of the 48 meter study corridor.

The present RAP was prepared on behalf and in consultation with TANAP and is in compliance with the World Bank's (OP 4.12) and IFC's (PS 5) standards and policies regarding involuntary resettlement issues.

According to Revision F of the RoW, the TANAP Project will not impact residential structures and thus should not cause physical displacement. But this RAP still plans compensation measures for this type of loss since the final RoW has still not been finalized. Throughout the pipeline corridor, easement will be established to obtain unrestricted and exclusive rights to land; the Project affected households will be able to use the affected land with some restrictions. There are potential, although minor adverse livelihood impacts. This RAP is prepared to address issues of economic displacement.



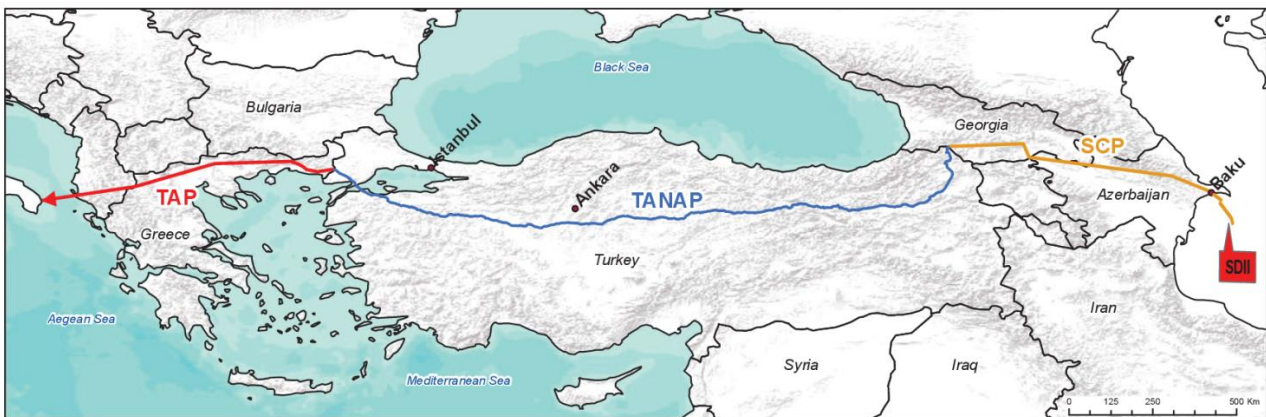
1.2 TANAP Project

1.2.1 Project Rationale³

TANAP Project is part of the Southern Gas Corridor, which aims to transport the Azeri natural gas from Shah Deniz 2 Gas Field and other fields in the south Caspian Sea extending to Turkey and Europe.

The Southern Gas Corridor comprises of the South Caucasus Pipeline (SCP), TANAP and the Trans-Adriatic-Pipeline (TAP) as shown in Figure 1.

Figure 1: Site Location for the Potential Southern Gas Corridor (SCP, TANAP and TAP routes)



The TANAP corridor will start from the Georgia/Turkey border at Türkgözü/Posof/Ardahan where it will connect to SCP and end at the Turkey/Greece border in Ipsala/Edirne. From this location it will feed into the TAP Natural Gas Pipeline. There will be an off-take station at Eskişehir, Turkey, and another one at Thrace, Turkey that will connect to the Turkish natural gas distribution network.

In this context, 'The Intergovernmental Agreement Between the Government of the Republic of Turkey and the Government of the Republic of Azerbaijan (IGA) Concerning The Sales of Natural Gas To The Republic of Turkey and the Transit Passage of Natural Gas Originating From The Republic of Azerbaijan Across The Territory of The Republic of Turkey and The Development of A Standalone Pipeline For The Transportation of Natural Gas Across The Territory of the Republic of Turkey' was signed in İzmir, Turkey on 25th of October 2011.

This Agreement was approved by Law no. 6349 dated 29th of June 2012 and was published in the Official Gazette on 07th of December 2012.

³Trans Anatolian Pipeline Project Environmental and Social Impact Assessment Report, 2014



A 'Memorandum of Understanding between the Government of the Republic of Turkey and the Government of the Republic of Azerbaijan Concerning the Development of a Standalone Pipeline for the Transportation of The Natural Gas Originating and Transiting from the Republic of Azerbaijan across the Territory of the Republic of Turkey' was signed on 24th of December 2011 in Ankara, Turkey.

This Agreement was approved by Law no 6342 dated June 29th 2012 which was published in the Official Gazette on June 12th 2012. Following the approval by the Council of Ministers, the Agreement was published in the Official Gazette on October 11th 2012 and entered into force.

TANAP BV was established within the framework of the Memorandum of Understanding between the Government of the Republic of Turkey and the Government of the Republic of Azerbaijan that was signed on 24th of December 2011.

'The Intergovernmental Agreement Between the Government of the Republic of Turkey and the Government of the Republic of Azerbaijan Concerning The Trans-Anatolian Natural Gas Pipeline System" and its attachment "The Host Government Agreement (HGA) between the Government of the Republic of Turkey and The Trans Anatolian Gas Pipeline Company B.V Concerning Trans-Anatolian Natural Gas Pipeline System" was signed on June 26th 2012 in Istanbul, Turkey.

The IGA and the HGA were approved by Law no. 6375 dated January 2nd 2013 which was published in the Official Gazette on January 17th 2013. Following the approval by the Council of Ministers, the Agreements were published in the Official Gazette on March 19th 2013 and entered into force.

These two primary agreements (IGA and HGA), facilitate the realization of the TANAP Project and govern the way in which the Project will be implemented. Both IGA and HGA establish the procedures and the principles applicable to the TANAP project and the transit passage of natural gas within the TANAP system.

Following signature of IGA and HGA on June 26th 2012, TANAP Doğalgaz İletim A.Ş. was established and TANAP B.V transferred its rights and obligations under the HGA to TANAP Doğalgaz İletim A.Ş. with the approval of the Ministry of Energy and Natural Resources (MENR) of Turkey. The companies assigned by two countries to form a project-specific joint consortium are; the State Oil Company of the Republic of Azerbaijan (SOCAR) and the Petroleum Pipeline Corporation (BOTAS).



1.2.2 TANAP Doğalgaz İletim A.Ş.⁴.

Within the framework of the Memorandum of Understanding between the Government of the Republic of Turkey and the Government of the Republic of Azerbaijan that was signed on December 24th 2011, TANAP Doğalgaz İletim A.Ş. (TANAP) was established and authorized by SOCAR as the owner and operator of the TANAP project.

The main objective of TANAP Doğalgaz İletim A.Ş. is to develop a secure and efficient pipeline system, allowing for the reception of natural gas at the entry point and the delivery at various exit points within the territory of the Republic of Turkey, to supply the European Republic of Turkey's gas market.

In accordance with the HGA, signed on December 26th 2012 between the Government of the Republic of Turkey and the Trans Anatolian Gas Pipeline Company, TANAP Project Entity shall have the right to:

- Implement and carry out the TANAP Project ;
- Conduct all Project Activities, while benefiting from all other rights provided to it by the State Authorities, under the Project Agreements and the terms of other agreements.

TANAP's policy has been set to deliver a gas pipeline system designed to best practice industry standards for the efficient transportation of Azerbaijani gas supplies to customers in Turkey and Europe.

While performing these activities, TANAP aims to achieve a series of sustainable development goals as follows:

- Avoid adverse impacts to the environment and society;
- Avoid or minimize involuntary resettlement;
- If avoidance is not possible; minimize adverse impacts and prepare a plan to mitigate them;
- Maximize positive impacts, including employment;
- Design and implement an effective Stakeholder Engagement System .

TANAP will operate in full compliance with:

- National laws and regulations;
- Applicable international standards (World Bank and IFC);
- Best practices in the natural gas industry.

⁴Trans Anatolian Pipeline Project Environmental and Social Impact Assessment Report, 2014



- Health, Safety and Environment rules defined for the project in line with national and international requirements.

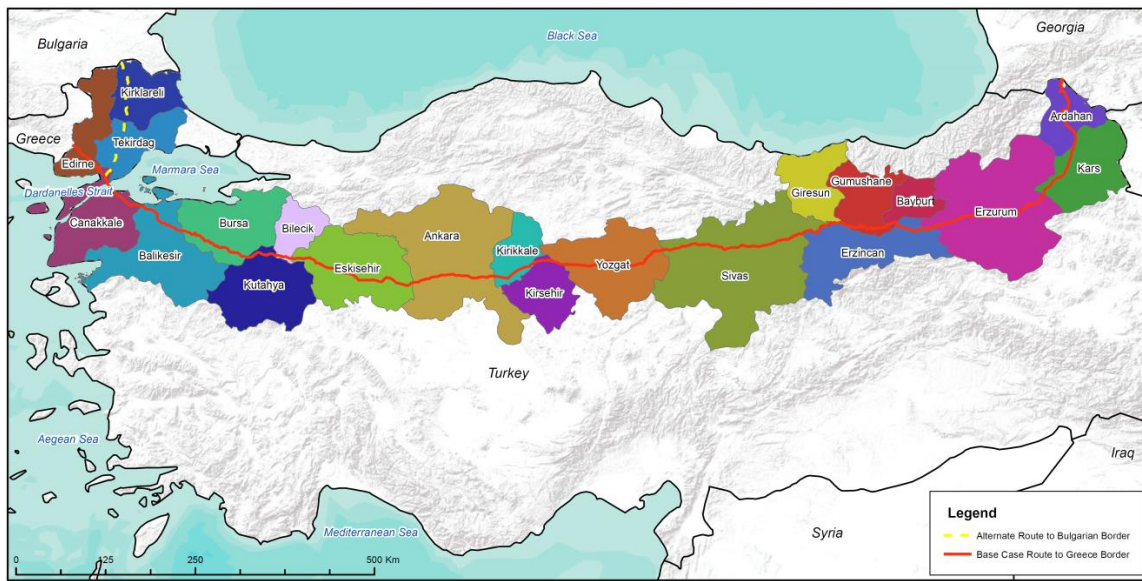
1.2.3 Project Specifications

The proposed TANAP project is a 56-inch and 48-inch pipeline system of 1,805 km., and will transport natural gas to the required specifications and quantity in stages; starting with 16 bcma (billion cubic meters per annum) defined as base case, leading up to a High Flow case 31 bcma. It is estimated that 6 bcma will be delivered to Turkish consumers within the Republic of Turkey via off-take stations in Eşkişehir and Thrace, based on the Gas Transport Agreement (GTA).

The construction of the Project is expected to last four years and a phased approach will be pursued where the target for completion of the construction and the start of operation is mid- 2018. The initial capacity of 16 bcma (First Stage) is expected to expand to 24 bcma by 2023 (Second Stage) and to 31 bcma by 2026 (Third Stage); the capacity enlargement will be achieved through additional compressor stations.

At the outset of the Environmental and Social Impact Assessment (ESIA) process, the pipeline was planned to be divided into two branches after crossing the Marmara Sea; one branch would end at the border of Greece and the second branch would pass through Tekirdağ and end at the border of Bulgaria. However, due to the change in the marketing strategy of Azerbaijan natural gas transport to Europe, the Bulgarian section was cancelled. The pipeline's routing, as per Revision F, is presented in Figure 2.

Figure 2: Map of TANAP Pipeline route crossing 20 provinces (Revision F)



The TANAP system will be fully automated with main and back-up control centers to meet the requirements of gas transmissions and associated environmental and safety considerations. The



main pipeline facilities include the required number of compression facilities, block valve stations, distribution and custody transfer metering facilities. The pipeline crosses terrain with challenging geotechnical features; including landslides and other geo-hazards, in addition to crossing regions with different levels of urbanization and economic activity.

1.2.4 Benefits of TANAP Project

Natural gas is a source of energy with an ever-increasing share among the energy sources of the world owing to its environmental advantages. For Turkey, with rapidly increasing energy demand, natural gas constitutes one of the important elements for a rapid and sustainable economic development.

Recent developments with respect to energy demand have highlighted the importance of natural gas. In the year 2010, the global energy consumption increased by 5.6 percent, which reflects the largest increase since the year 1973. Among alternative sources of energy, including petroleum, natural gas, nuclear energy, hydro-electric power and coal, the highest increase occurred in coal with a rate of 7.6 percent, while the lowest rate of increase was reflected in the demand for petroleum at 3.1 percent. Following the economic recession in the year 2009, the worldwide natural gas consumption in the year 2010 increased by 7.4 percent, which is the highest rate of increase for this source of energy since 1984.

The International Energy Agency (IEA) predicts a significant increase in demand for petroleum, natural gas, and coal for the period of 2009-2035. These three fossil fuels had a share of 81 percent within the total energy consumption as of the year 2009 and share is expected to decrease to 75 percent by the year 2035. Among the fossil fuels, the demand for the natural gas is estimated to increase due to its conveniences related with environment and use, and by the year 2035, it is estimated to exhibit a progress proportionately similar with coal, which holds the second rank after petroleum⁵.

Along with its objective of supplying natural gas to European markets, TANAP will contribute to meeting Turkey's rising needs for natural gas. The Project brings many political and economic benefits for Turkey.

Having hosted several natural gas and oil pipelines to date, Turkey has proved to be one of the most convenient countries to transfer natural gas and oil to Europe from Caspian basin, Caucasia and the Middle East. The routing of TANAP will solidify the role of Turkey for providing reliable energy between international markets. Thus, the routing of the pipeline will enhance Turkey's strategic position in the geopolitical context of the planned east-west energy corridor; In line with this role, there will be economic and social benefits to the country. These benefits will include;

⁵Energy Policies of IEA Countries, Turkey 2009 Review, International Energy Agency.



- opportunity to receive pipeline transit fees;
- provision of a long term secure supply of natural gas to Turkey;
- employment generation especially during construction;
- reduction of consumer prices for national gas through the utilization of a safer and cost effective route.

There are several other pipeline projects in Turkey, both of which are existing or previously planned that provide benefits similar to those promised by TANAP and as such complement each other. A summary of these pipeline projects is provided in Annex 1.1.

1.3 Project Affected Settlements and Population

1.3.1 Regional context

The economic characteristics of the Project affected settlements change from east to west along the pipeline. The economic activity in these rural settlements is majorly based on agriculture; changing from small scale, non-intensive, subsistence farming from the east to the more intensive and market oriented farming activities in the west. Social indicators of the pipeline affected provinces follow a similar pattern to the economic activities in such a manner that literacy rates, access to health care services, schooling rates increase from east to west.

With respect to the above explanation, the provinces affected by the pipeline have been divided into four homogenous regions for comparison (Table 1).

Table -1: Division of the Pipeline Affected Provinces

Region	Name	Provinces
Region 1	Eastern Anatolia	Ardahan, Kars, Erzurum, Erzincan, Bayburt, Gümüşhane, Giresun
Region 2	Central Anatolia	Sivas, Yozgat, Kırşehir, Kırıkkale, Ankara, Eskişehir
Region 3	Western Anatolia	Bilecik, Kütahya, Bursa, Balıkesir, Çanakkale
Region 4	Thrace	Edirne, Tekirdağ

Figure 3 shows the passage of the pipeline through the four regional divisions along its route.



Figure 3: Regional Division of the Pipeline (Revision F, excluding Bulgarian section)



The pipeline corridor, while be passing through 20 provinces and 66 districts. Within these districts, the highest number of impacted settlements are in Sivas (77), followed by Erzurum (67) and Eskişehir and Yozgat (52). Tekirdağ, Giresun (2), Bayburt (4) and Bilecik (7) have the least number of affected settlements and population (Table 2 of Annex 1.2.). The Project impacts a different number of districts and settlements in each province, thus creating either a province-wide or more local impact in each one.

The TANAP pipeline will cross the country land (terroir) of 570 settlements (Table 2). These settlements represent a total population of 246,966 persons. Note that no residence has been identified in the RoW (Revision F). This means that the population indicated in Table 3 is purely indicative of the people that live in the 570 communities crossed by the pipeline but that are not necessarily directly affected by the pipeline’s RoW. See Section 1.3.2 for details about the people directly affected by the pipeline project.

Table -2: Population of Settlements who's land is crossed by the pipeline

Region	Province	Number of Settlements Affected	Population of Settlements Affected	Percentage of the Total Affected Population (%)
East Anatolia	Ardahan	32	12,615	5.1
	Kars	26	15,208	6.2
	Erzurum	67	39,597	16.0
	Bayburt	4	1,144	0.5
	Gümüşhane	20	3,237	1.3



Region	Province	Number of Settlements Affected	Population of Settlements Affected	Percentage of the Total Affected Population (%)
	Erzincan	29	4,312	1.7
	Giresun	2	1,148	0.5
Central Anatolia	Sivas	77	18,534	7.5
	Yozgat	52	23,248	9.4
	Kırşehir	15	6,187	2.5
	Kırıkkale	20	7,525	3.0
	Ankara	31	13,238	5.4
	Eskişehir	52	12,936	5.2
West Anatolia	Kütahya	20	8,030	3.3
	Bilecik	7	871	0.4
	Bursa	45	11,618	4.7
	Balıkesir	31	21,226	8.6
	Çanakkale	24	16,005	6.5
Thrace	Tekirdağ	2	1,001	0.4
	Edirne	14	29,286	11.9
TOTAL	20	570	246,966	100.0

Source: Address Based Population Registration System (ABPRS), TUIK 2012 and 2013

Table 3 shows the population change rate between the years 2007 and 2013 in the regions affected by the project. A detailed table on the population of the four affected regions between the years 2007-2013 is given in Table 1 of Annex 1.2.

Table -3: Comparisons of Population Change Rate for the Project Affected Regions and Turkey

Regions	Total population		Average Annual Change Rate	Total Change Rate
	2007	2013	%	%
Eastern Anatolia	2,048,344	2,032,420	-0.1	-1
Central Anatolia	6,825,600	7,410,998	1.4	9
Western Anatolia	4,822,004	5,187,006	1.2	8
Thrace	1,124,858	1,273,057	2.1	13
Turkey Total	70,586,256	76,667,864	1.4	9

Source: Address Based Population Registration System (ABPRS), TUIK 2013

1.3.2 Project affected persons (PAPs)

This section presents the characteristics of the persons affected by the project's RoW (PAPs). The information provided below is based on the data found in the parcel database that was provided to Golder on July 1st 2013 by TANAP.



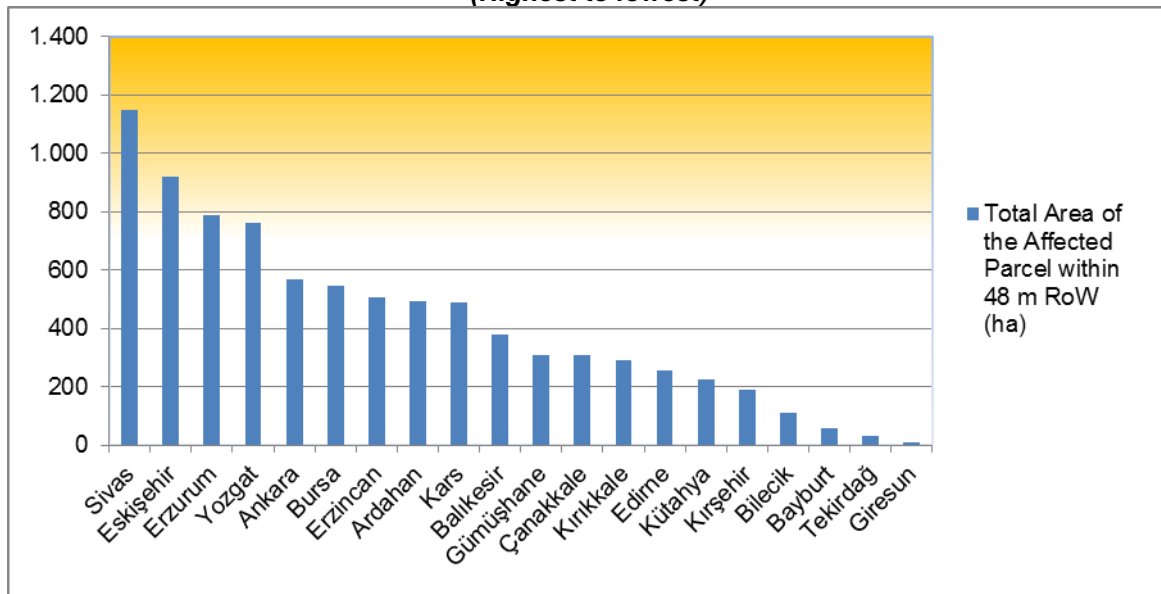
The analysis of the existing parcel database indicates that the number of registered owners of privately owned land within the 48 meter study corridors 60,041 and that many of the owners reside in communities outside the settlements listed in the previous section.

Note that, as agreed with TANAP, the width of the construction corridor was taken as 48 meters and referred as the 'study corridor' in the preparation of this RAP. This was agreed because the pipeline centerline was not determined at the moment of the RAP's preparation. The RoW will eventually be 36 meters subsequent to centerline determination so the figures mentioned in the present RAP represent the maximum resettlement impact the project will have.

The total number of parcels within the 48 meter study corridor is 22,080 parcels⁶. The total area of these affected parcels is approximately 8,401 hectares which represents an average size of 2.4 ha per affected parcel in the study corridor. Since the RAP covers the 48 meter study corridor, an additional calculation was made to estimate the surface area that would be affected in a 36 meter RoW. Without having the exact limits of the 36 meter RoW a simple extrapolation was made. It is expected that the 36 meter RoW of the pipeline will affect 6,301 hectares of land (75% of 8,401 ha). A detailed table showing the distribution of affected parcels for the 48 meter study corridor and 36 meter RoW according to provinces and regions is presented in Table 3 of Annex 1.2.

Out of the 8,401 ha of affected parcels, the most affected provinces are Sivas and Eskişehir which count for close to 25% of the total area affected (Figure 4).

Figure 4: Total Area of Affected Parcels within the 48 m study corridor, by Provinces (Highest to lowest)



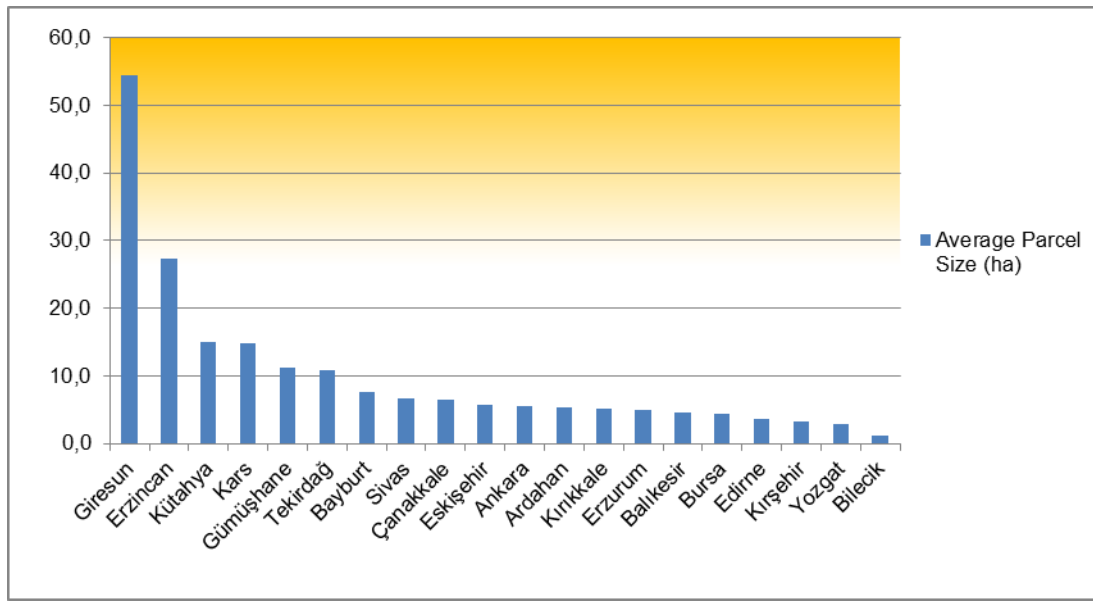
Source: GIS Database for 500 m parcel and owner data Rev.F, PLG 01-06 TANAP, November 20, 2013.

⁶The number of affected parcels may not be significantly reduced when the pipeline corridor is adjusted to 36 meters but the proportion of land taken from the affected parcels will be about 4 percent.



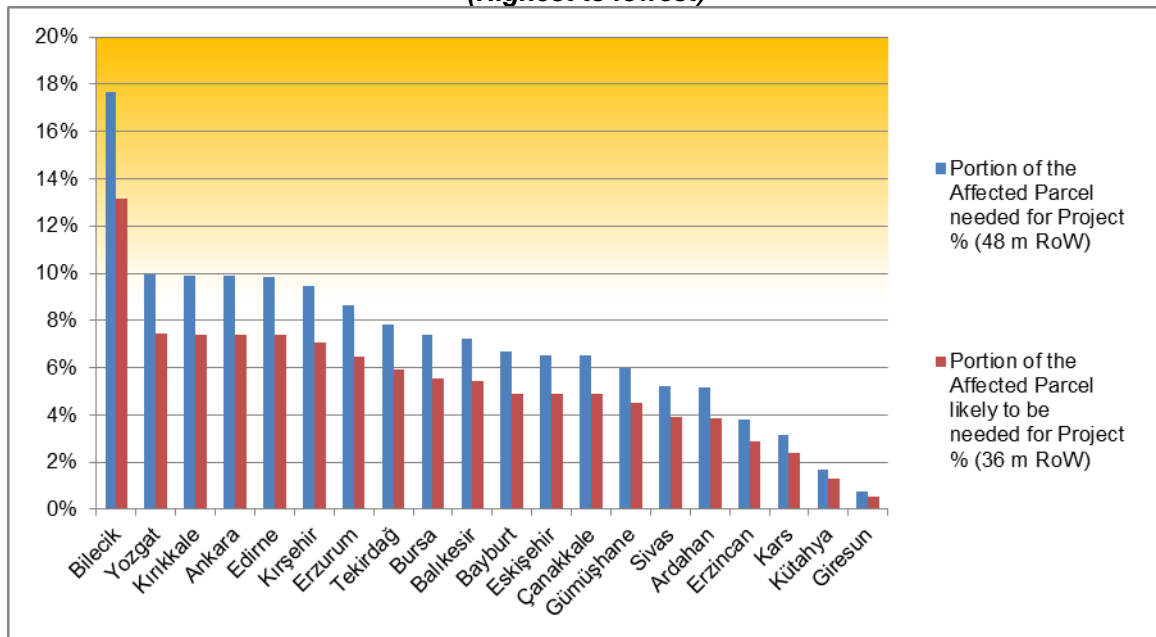
Several eastern and central Anatolia provinces such as Giresun, Erzincan, Kütahya and Kars all appear to have relatively large size holdings (Figure 5). As expected, where the average size of plots is larger the proportion affected by the Project is relatively lower (Figure 6).

Figure 5: Average Parcels Total Size by Province (Highest to lowest)



Source: GIS Database for 500 m parcel and owner data Rev.F, PLG 01-06 TANAP, 2013.

Figure 6: Proportion of the Affected Parcels within the 48m study corridor and 36m RoW (Highest to lowest)



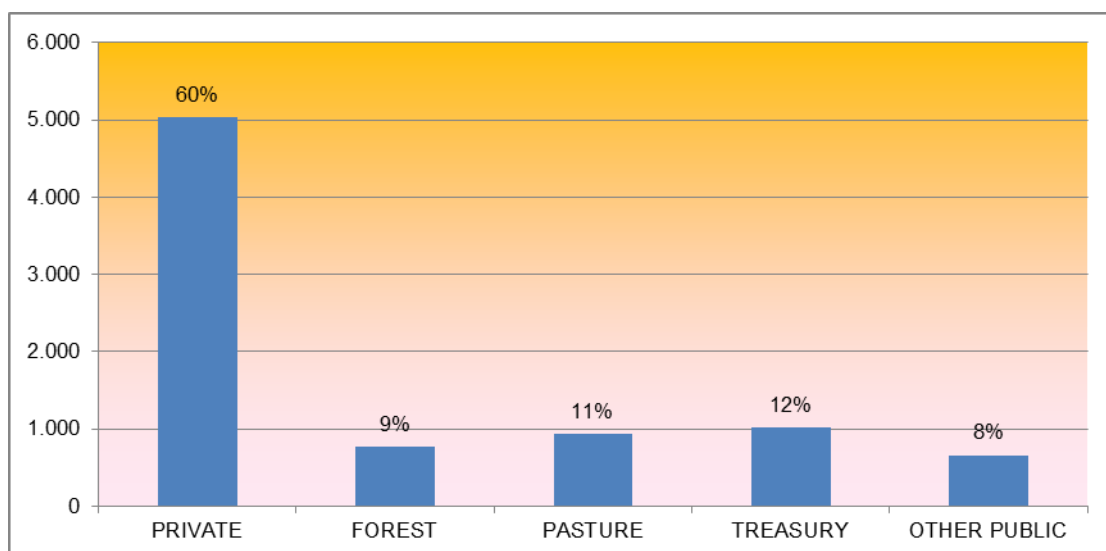
Source: GIS Database for 500 m parcel and owner data Rev.F, PLG 01-06 TANAP, 2013.



The greater the size of the affected plot, the smaller is the proportion affected. For instance, Bilecik which has very small average holding size, has the largest proportional losses. As such, the land owners in Bilecik are expected to experience greater livelihood impacts as compared with landowners in Giresun, where affected plots are large and the passing of a narrow pipeline corridor results in extremely modest potential impacts.

Among the 8,401 hectares of land affected by the 48 m study corridor, nearly two-thirds (60 percent) is privately owned, nine percent belongs to the Ministry of Forestry and Water Affairs and 11 percent is pasture land (that belongs to the Ministry of Food, Agriculture, and Livestock) and 12% is Treasury land (Figure 7). The remaining 8 percent is owned by other public institutions, including the Village Legal Entity.

Figure 7: Area of Affected Land in extended 48 meter study corridor by Type of Ownership



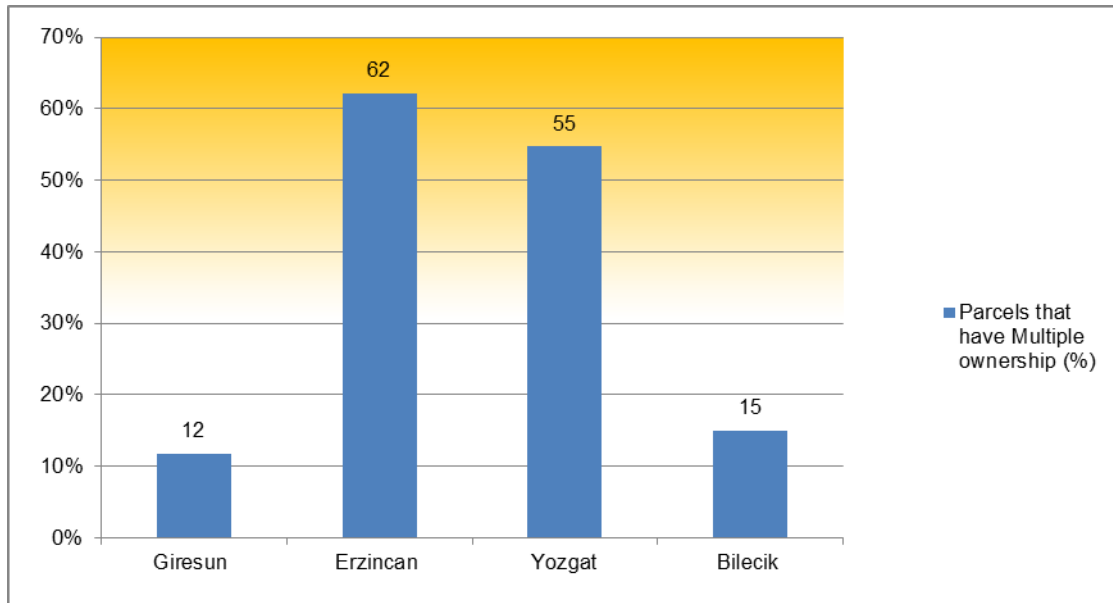
Source: GIS Database for 500 m parcel and owner data Rev.F, PLG 01-06 TANAP, 2013.

Considering that the magnitude of public and privately owned land affected by the Project and the populations affected by land acquisition activities are distributed over 1,805 km of a pipeline; the adverse impacts at any one point are likely to be minimal. This applies to potential livelihood impacts of pasture lands and forests lost to the Project. An example of this would be the total amount of pastureland lost to the Project. A total of 931 ha for the extended 48 meter study corridor and 698 ha for the 36 meter RoW are estimated to be lost to the Project. The pasturelands that are lost are distributed over 1,805 km, 20 provinces and 570 communities; as such the community specific adverse impacts may average 1.2 ha and is negligible. The situation of the forest lands is similar. Total area of forest lands affected is 769 ha for the 48 meter study corridor whereas it is anticipated to be 577 ha for the 36 meter RoW. The community specific impacts of forest land losses would average 1 ha/settlement, which again is minimal. A significant community impact in some of the provinces can be compensated through a Resettlement Fund within the scope of this Project.



Throughout Turkey there is widespread fragmentation of land and the ownership of even the smaller parcels by multiple owners is common. The data shows that joint ownership of affected parcels is more prevalent in some provinces than in others. For instance, in Yozgat and Erzincan, the average size of the affected parcels is large, and more than half of the affected plots have multiple owners; joint ownership is less prevalent in Bilecik and Giresun (Figure 8).

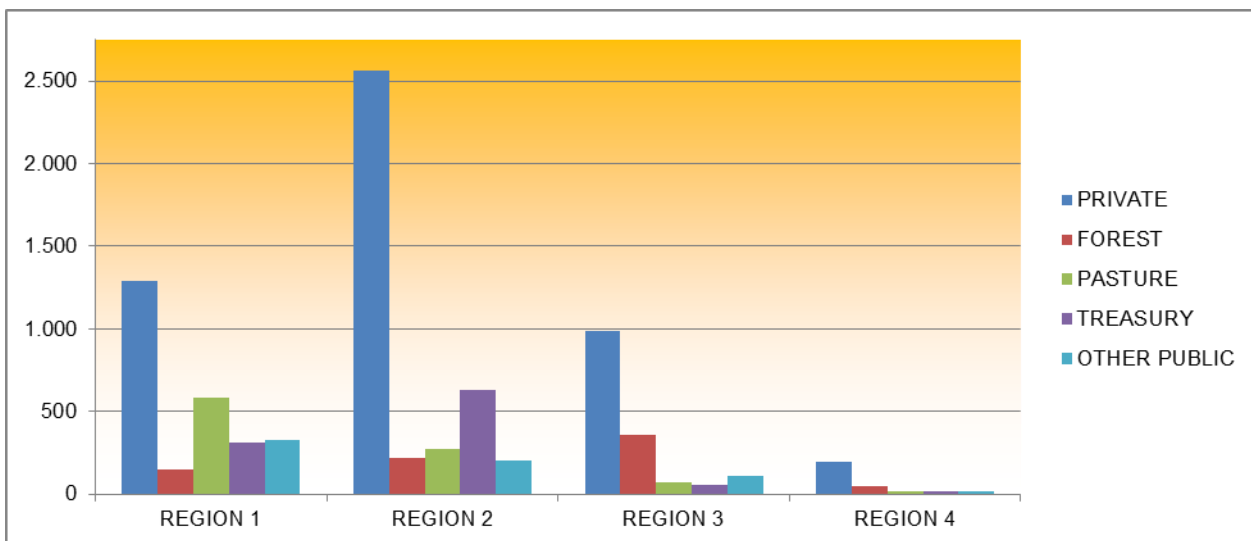
Figure 8: Parcels that have Multiple Ownership in Giresun, Erzincan, Yozgat and Bilecik



Source: GIS Database for 500 m parcel and owner data Rev.F, PLG 01-06 TANAP, 2013.

There is no regional pattern in the distribution of affected parcels. The area of privately owned lands affected is highest in Region 2 with 2,562 ha, whereas this figure is lowest with 196 ha for Region 4 (which has also the lowest number of affected provinces). Region 3 has the highest amount of forest lands affected by the Project's 48 meter study corridor (359 ha). The area of affected pasture lands is highest in Region 1 with 581 ha while the highest figure for affected treasury lands is in Region 2 (633 ha). The highest figure for other publicly owned lands are in Region 1 with 330 ha (Figure 9).

Figure 9: Ownership of Land Affected by Region (in 48 meter study corridor)



Source: GIS Database for 500 m parcel and owner data Rev.F, PLG 01-06 TANAP, 2013.

As RAP was being prepared, engineering studies pertaining to AGIs, access roads and temporary facilities were not completed; thus land requirements and livelihood implications of these components were not well defined. However, each of the auxiliary facilities are estimated to need modest amount of land that will have to be permanently or temporarily acquired. Moreover, when the construction activities will start, a number of new access roads will be needed and some of the existing ones may have to be widened. In addition, access to individual parcels may require passage through others for a short period of time. The construction activities may cause dust and other types of damage to existing crops. The movement of debris from the affected land may require additional traffic activity and deposit areas. All of these will likely have livelihood impacts but cannot be identified during the planning stage of the Project. The grievance mechanism proposed in the RAP in section 7.5, is designed to manage resettlement related grievances including any additional resettlement related impacts the project may have during its construction phase. Nevertheless, funds will be set aside to address emerging issues, including unexpected land acquisition requirements; funds will also be set aside to monitor livelihood impacts of construction activities. Table 4 shows the identified land requirements of the pipeline and the auxiliary facilities.

Table -4: Land Requirements of the Pipeline and its Auxiliary Facilities

Pipeline	
Total Length	1,805 km
Number of provinces crossed by the pipeline	20
Number of settlements who's rural lands are crossed by the pipeline	570
Total number of parcels affected in 48 m study corridor	22,080
Total number of parcels privately owned in 48 m study corridor	18,013
Land affected by pipeline - 48 m study corridor	8,401 ha
Number of land owners (except heirs) affected by the pipeline's 48 m study corridor	60,041
AGIs	



Number of Compressor Stations	7
Number of Metering Stations	4
Number of Block Valve Stations	49
Number of Pigging Stations	12
Land affected by AGIs	TBD
Other Facilities	
Number of main camps	8
Number of fly camps	17
Number of pipe stock yards	14
Total area affected by other facilities	TBD
Access Roads	
Length of access roads	TBD
Total area affected by access roads	TBD
Total area required for Permanent Land Acquisition	TBD
Total area required for Temporary Land Acquisition	TBD

TBD: To be determined

1.4 Responsibilities for Land Acquisition

HGA signed between the Government of Turkey and TANAP, appoints and authorizes Ministry of Energy and Natural Resources (MENR) as the Designated State Authority (MENR in order to provide necessary assistance to facilitate the implementation of TANAP. The Government of Turkey has appointed BOTAŞ to be responsible for the implementation of the land acquisition and resettlement aspects of the Project. BOTAŞ, as the Lands Right Entity (LRE) will coordinate land acquisition activities. TANAP will be responsible for the implementation of this RAP.

1.5 Objectives of the Resettlement Action Plan (RAP)

This Resettlement Action Plan has been developed for the Project within the framework of relevant national laws, applicable World Bank Group policies (OP 4.12), IFC (International Finance Corporation) performance standards (PS5) and the Equator Principles., The RAP describes the framework and procedures that the Project will follow for the acquisition and compensation of land and assets for the Project.

The Project mainly implicates economic displacement. Impacts on residential areas will be avoided and thus physical displacement will be kept to a minimum. The RAP encompasses the temporary and permanent acquisition of land that will affect people's livelihoods. If the Project succeeds in avoiding physical displacement, it would have been sufficient for it to be guided by a Livelihood Restoration Plan; however there might be some residential units affected by the construction of the pipeline, its auxiliary facilities and/or the construction of roads to facilitate the Project implementation. Hence, a full-fledged RAP is presented in this report.



The construction of TANAP will require the acquisition of approximately 8,401 hectares of land along the 48 meter study corridor. In order to avoid physical dislocation and to minimize economic displacement for affected populations, the Project has adopted several measures:

- The pipeline route is engineered to avoid impacts on residential areas and homes as much as possible;
- Permanent land acquisition is kept to a minimum by establishing easement and allowing people to use the land with some restrictions after it is reinstated;
- Land acquisition through willing buyer/seller arrangements is the preferred approach;
- Permanent and temporary acquisition of land through expropriation will be minimized within the social and legal constraints;
- Livelihoods will be restored through compensation and other measures as necessary;
- Stakeholders are consulted throughout the entire planning and implementation process;
- Project information is disclosed in a transparent manner;
- A RAP Fund is established to mitigate the Project's adverse impacts on PAPs during land acquisition and construction;
- Loss of community resources is avoided as much as possible.

The objectives of the RAP are to:

- Identify the Project Affected Persons (PAPs);
- Describe the socio-economic status of the Project area;
- Review the national and international legal and policy requirements;
- Assess the social and economic impacts on directly and indirectly affected households and communities;
- Establish a consultation and participation process by engaging stakeholders involved in the land acquisition/land lease process;
- Develop a methodology to minimize and/or restore the potential economic and livelihood losses;
- Establish a monitoring and evaluation mechanism;
- Outline the requirements for RAP completion audit;
- Present a budget and a timeline for RAP implementation.

WB/IFC policies state that involuntary resettlement refers both to physical displacement (relocation or loss of shelter) and to economic displacement (loss of assets/resources or access to assets/resources that leads to loss of income sources or other means of livelihood) as a result of project-related land acquisition and/or restrictions on land use. IFC's Performance Standard 5 recognizes that project-related land acquisition and restrictions on land use can have adverse impacts on communities and persons that use this land.



Resettlement is considered involuntary by international policies⁷ when affected persons or communities do not have the choice to refuse land acquisition or restrictions on land use that result in physical or economic displacement. This occurs in cases of (i) lawful expropriation or temporary or permanent restrictions on land use 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.

The RAP aims to outline the measures TANAP is committed to adopt in order to comply with local and international social sustainability standards. It will also show that TANAP will create efficient mechanisms of monitoring compliance within these guidelines, and will allocate sufficient monetary resources to cover the costs of mitigation, compensation and monitoring.

The details on the implementation arrangements for the RAP Fund have not yet been formulated. The principles of the RAP Fund are specified in Chapter 5, and its implementation arrangements will be undertaken in a participatory manner, in consultation with the affected persons and communities.

Project affected populations fall into three main categories:

- Private land owners;
- Public land owners;
- Users of private and/or public lands.

The RAP aims to ensure that all affected parties are compensated and assisted in restoring their livelihoods in that:

- Mechanisms for fair compensation for private land (whether formally or customarily owned) are available;
- Adequate measures are taken to provide compensation to the public sector, especially for the acquisition of Treasury and forest lands;
- The rights of the users of private land are recognized and the users are compensated for affected immovable assets and standing crops;
- The rights of users of public lands who are not owners of public lands, especially forests and pastures, compensated for affected immovable assets and standing crops on those lands;
- Other measures are taken to ensure that livelihoods are restored and/or improved when compensation alone is not adequate for this purpose.

⁷World Bank OP 4.12



1.6 Progress Up To Date

A comprehensive GIS database was established by the Authority Liaison, Mapping, Land Acquisition and Ground Investigation Services Contractor (LASC) over the past year for the identification of the affected assets and their owners. At the time of the preparation of this RAP, the inventory of affected assets was only completed for one forth (481 km) of the pipeline route where immovable assets were determined.

Moreover, the Front-end Engineering Design (FEED) works undertaken by the Engineering Contractor (EC) were not yet finalized either. Hence, the works carried out and studies realized for the elaboration of this RAP were based on current and available data such as the results of the recent field survey, the 500 m parcel and owner data that were transmitted by TANAP. After the engineering studies are completed, the RoW will be 36 meters (24m + 12 m) and will allow the mobility of heavy machines, piling of topsoil and stringing of pipes on either side of the centerline during construction works. However the RAP, including the sample of affected households for the socio-economic survey, is based on the 48 meter study corridor.

The RAP also drew its socio-economic baseline data from the recent Golder surveys that were carried-out between February 20th – March 5th 2014, from earlier socio-economic surveys in the area and from surveys of project affected persons that were undertaken as part of the Environmental and Social Impact Assessment (ESIA) for the Project.

Activities that provided input to the preparation of the RAP by TANAP, the Social Impact Assessment Team (Çınar Mühendislik and Golder Associates), and the RAP team (Golder Associates) can be summarized as follows:

Input provided by TANAP:

- GIS Database for 500 m parcel and owner data;
- Revision F of the pipeline;
- TANAP's Land Acquisition Strategy;
- TANAP's Integrated Management System Policy;
- TANAP's land acquisition budget;
- Land acquisition flow charts for different types of lands.

Input provided by the Social Impact Assessment Team (Çınar Mühendislik and Golder Associates):

- Socio-economic survey results for the ESIA Studies :
 - Visiting a significant number of affected communities during preparation of the ESIA, including for information/discussion on land acquisition and valuation issues. The SIA team conducted 513 village headmen questionnaires, 2253 Household questionnaires, 307 focus group meetings (with women, young people and fishermen) and 151 in-depth interviews (municipality, district governship and other institution



officials) in order to define the socioeconomic profile of the population in the area of influence of the Project (Pipeline, Above Ground Installations, camp sites and pipestock yards).;

- Conducting focus group discussions with women in communities affected through land acquisition.
- Stakeholder Engagement Plan;
- Social Impact Assessment.

Input provided by Authority Liaison, Mapping, Land Acquisition and Ground Investigation Services Contractor (LASC):

- 500m corridor land and ownership structure GIS data (according to Rev F of the pipeline);
- Launching a census of affected assets and completing asset inventory for 481 km of the pipeline.

Input provided by the RAP team (Golder Associates):

- Representative socio-economic survey of affected parcel owners/users and conducting 876 interviews;
- Village headmen interviews with 132 headmen within a sample of communities crossed by the pipeline;
- Focus group discussions with women within a sample of communities crossed by the pipeline;

1.7 Scope of RAP

The present RAP is divided in the following chapters:

Chapter Two - Project Description: provides a detailed narrative of the TANAP Project, including the description of the pipeline route and its auxiliary facilities, as well as the consideration of alternatives and measures taken to avoid resettlement and minimize land expropriation;

Chapter Three - Policy and Legislative Framework: describes the national legislative and legal framework for resettlement, expropriation and compensation and World Bank/IFC policies in these areas, including the IFC's manual of good practices on public consultation and disclosure;

Chapter Four – Overview of the Project Affected Population: outlines the socio-economic characteristics of the project affected populations and includes the findings of the RAP's socio-economic survey;

Chapter Five – Land Acquisition Process: describes the land acquisition procedures and implementation responsibilities, including experience to date with implementation, especially with regard to recent Turkish legislation;



Chapter Six – Resettlement Related Potential Impacts of the Project: outlines the possible project impacts for both permanent and temporary land acquisition on various categories and uses of land and resources and describes the resettlement measures that will be adopted for the compensation of entitled PAPs according to their temporary and/or permanent losses of land, immovable assets and sources of livelihood;

Chapter Seven – Public Consultation and Disclosure: defines the process of public consultation and disclosure for the RAP and makes the provisions for grievances and dispute resolution for resettlement related impacts during project implementation;

Chapter Eight – Monitoring and Evaluation: outlines the monitoring and evaluation mechanism for the RAP, including the provision for expert monitoring;

Chapter Nine – Costs and Budget for Compensation: presents TANAP's budget for its implementation;

Chapter Ten – Implementation Schedule: presents the RAP's implementation schedule.

In addition, a number of annexes are provided to support the main RAP document.



2.0 PROJECT DESCRIPTION

2.1 Pipeline Route

The TANAP pipeline route commences in the North-Eastern corner of Turkey at the Georgia Border. The pipeline route will pass through the provinces of Ardahan, Kars, Erzurum, Erzincan, Bayburt, Gümüşhane, Giresun, Sivas, Yozgat, Kırşehir, Kırıkkale, Ankara, Eskişehir, Bilecik, Kütahya, Bursa, Balıkesir, Çanakkale, Tekirdağ and Edirne and will finish at the border of Greece in İpsala/Edirne. The total length of the TANAP pipeline within the borders of Turkey will be 1,805 km from Turkgözü to Ipsala (excluding 30km length of Eskişehir lateral line). The length of the onshore pipeline is approximately 1,787 km and the length of the pipeline for the Marmara Sea crossing is approximately 18 km.

A more detailed description of the Project is provided in Chapter 2 of the ESIA Report.

2.2 Pipeline Route Configuration

The pipeline route was determined through the following phases; pre-feasibility, feasibility, basic engineering, intermediate route determination and detailed engineering. In the course of the FEED design, several routing and design options were considered for the Project. Details to the route selection process are discussed in Chapter 5 of the ESIA report.

TANAP will have an onshore pipeline diameter of 56" till Eskişehir off-take and 48" from Eskişehir to Turkey/Greece border, 30" lateral line from Eskişehir to Botaş system and 2 of 36" pipelines are planned for the marine crossing through the Sea of Marmara.

The pipeline route is tied to four fixed points; one at the Georgia Border in the North-Eastern corner of Turkey, two scheduled off-takes (one in the West Anatolian region of Eskişehir and one in the European Thrace region of Sarköy), and an end point at the Greek Border.

The average width of the construction corridor (RoW) is planned to be 36 meters in accordance with the standard international pipeline construction criteria to enable the deposit of the topsoil and subsoil within the scope of the construction phase of the project and also to maintain the construction works. This RAP has considered an extended study corridor of 48meter due to the ongoing route selection process.

At road, railway and river crossings the RoW may need to be widened since the construction activities will require a wider area by nature. Similarly, the RoW will be widened at rocky areas which require explosion, wetlands which require drainage or areas which require special construction techniques due to soil characteristics. However, the RoW will be narrowed to 30 m in forest lands and environmentally sensitive areas.



There will be seven intermediate compressor stations at intermediate points for fulfilling pressure requirements.

There will be four metering stations; at the Georgia Border, Greece border, Eskisehir offtake and one at the Thrace off take.

There will be two off-take structures to feed the Turkish national natural gas grid, one at Eskişehir (OFF-ES) and one at Thrace (OFF-TR).

There will be 49 block valve stations (BVS) along the pipeline route located to meet the ASME (American Society of Mechanical Engineers) standard requirements.

A total of 12 pigging stations (one on each side of the Marmara Sea passage, one at each of the 7 compressor stations, and at the metering stations at the ends of the pipeline at the Turkish border) will be installed.

The offshore section of the pipeline will be laid on the sea-bottom. The pipe-laying operation will take into account the geometrical restraints of the anticipated laying method and lay vessel, as well as the most unfavorable environmental conditions under which laying will proceed.

2.3 Above Ground Installations (AGIs)⁸

2.3.1 Compressor Stations

Compressor stations are designed to increase the gas pressure so as to adjust the gas flow to the desired throughput. Each compressor station will be operated by gas turbines and the gas supply will be provided from the gas flow in the pipeline.

There will be seven compressor stations (2 at First Stage, 4 at Second Stage, and the final one at Third Stage) at intermediate points for fulfilling pressure requirements. A branch (Lateral) pipeline shall transport the gas from the Eskisehir Compressor Station (CS-5A) to the tie-in point to the BOTAS system which is located close to existing BOTAS Station in Eskisehir. A separate compressor train is foreseen for gas supply to BOTAS in CST-5A.

2.3.2 Pigging Stations

Pigging stations are installed to allow cleaning of the pipeline and prevent corrosion. Within the scope of the natural gas pipeline project a total of 12 pigging stations will be installed: one at each of the seven compressor stations, one at each entry and exit point of the two metering stations; and at one standalone station of the Marmara Sea passage.

⁸ Note that the exact locations of the various AGIs were not available during the preparation of this RAP.



2.3.3 Metering Stations

AGIs will include 4 gas metering stations. These will be the facilities for controlled transport of natural gas on both sides of the pipe at country boundary crossings and at 2 off-take stations identified in Turkey.

2.3.4 Block Valve Stations

Block Valve Stations (BVSs) are the structures installed to turn off the gas flow and provide partial isolation as required in an emergency. Within the project scope, 49 block valve stations are planned.

2.3.5 Pressure Reduction Stations

Natural gas is usually highly pressurized as it travels through transmission pipelines but needs to be brought down to the contractual specifications for delivery before it reaches the consumers. Pressure reduction station located in Thrace off-take station will be used to bring the natural gas to the required specifications.

2.3.6 Cathodic Protection System

A cathodic protection (CP) system, based on an impressed electric current, will be used in order to prevent and/or control the corrosion on the exterior of the pipeline. If the protective electric current is interrupted corrosion will continue to develop at normal levels depending on the material/environment combination. If the feeding current is insufficient for the entire pipeline's protection corrosion will develop, but at a reduced rate.

2.3.7 Off Take

Two off-take stations are planned to be installed in Turkey. An off-take station could consist of a custody metering system, a pressure reduction system and potentially a gas heating and cooling system.

2.4 Access Roads

Generally existing roads will be used to provide access to the construction RoW and various AGIs. These access roads are used on a temporary basis to transport personnel, equipment, vehicles, heavy trucks, and materials to project work areas. Some of these roads may not support heavy construction equipment and, therefore, would be used only for light truck traffic (e.g., pickup trucks).

In most cases, the roads used for pipeline construction and operations are existing paved or graveled public roads that would not require modification unless the road base were to deteriorate and make driving difficult or unsafe for both public and construction traffic. Two-track and dirt roads may require some level of improvement to support construction equipment, vehicles, and ongoing



maintenance during the construction period, especially when rain or snow occurs and travel over the roads degrades their condition. Road improvements such as blading and filling would be restricted to the existing road footprint (i.e., the road would normally not be widened unless for safety purposes) wherever possible and where there is evidence that the road was graded previously. If necessary, the equipment is pulled along the RoW by bulldozers, and the road or property is returned to its original state.

New access roads will be required in some areas, particularly the mountainous areas. Existing roads and bridges would likely have to be improved for safe pipe and personnel transport.

New access roads will be designed with adequate slope and cross-fall drainage to channel storm water safely to off-road soak ways, thereby preventing erosion or siltation.

Access Roads to Compressor and Metering Stations:

Access roads to compressor stations and metering stations will be constructed with a sub-base, an asphalt base and top course in accordance with the project specifications.

Access Roads to Block Valve and Pigging Stations:

The access roads to block valve and pigging stations will be constructed with sub-base and a gravel wearing course.

The access roads to facilities (compressor & metering stations, block valve and pigging stations) will be determined before construction and will be assessed regarding environmental impact and adequate mitigation/compensation as defined in the ESMP.

2.5 Temporary Facilities

2.5.1 Camp sites

During the construction phase that will begin with the land preparation works, one of the first construction activities will be the installation of the camps where the project workers will live. These sites may also be used for storage for pipe, machinery and other equipment to be used in the installation of the pipeline. The camps that will provide accommodation, messing, and other basic needs for the workers throughout construction, will be installed at the most appropriate locations along the route in terms of logistics and local conditions.

Most of the installed housing units will be containerized on pre-installed concrete sleepers and connected to the pre-installed water and sewage lines and electric cabling.

All construction camps will be fenced, lighted and guarded. The construction camps which are temporary will be removed after the construction period. The whole area will be restored after demobilization of infrastructure.



Travel time may be reduced by adopting an arrangement based on stationary camps together with smaller, intermediate camps or “fly camps”, so as to minimize the distance and travel time between camp and work site. Intermediate camps accommodate smaller workforces and may be more easily moved as construction progresses along the pipeline route. It is planned that there will be 8 main camps and 17 temporary camps for the project.

2.5.2 Pipe yards

The pipe yards where the pipes will be stored will be established at the beginning of the construction phase.

There will be various types of pipe yards; the main yards where TANAP receives pipe from the mills would be at conveniently located major ports (of possibly train freight facilities).

The contractors for each spread will receive pipe from the appropriate TANAP central pipe yard and transport it to the pipe yard allocated to the specific spread.

The pipe yards will be fenced and levelled areas with proper entry/exit gate(s). There will be a containerized tally office, a store office and a QA/QC office.

It is anticipated that there will be 14 pipe yards; 3 of which will be central pipe yards.

Topsoil will be stripped on the whole area before the pipe yards are established and the stripped soil will be stored under appropriate conditions and will be used during the restoration works of the temporary plant areas after the construction phase is completed. Sand and gravel will be spread on the areas if necessary.

2.6 Construction of the Pipeline

The construction of the TANAP Project is expected to last for 5 years (including early works), and a phased approach will be pursued;

The Initial Stage is anticipated to start with the "early works" in 2014 and finish in 2018 to carry out construction activities for the pipe lay down areas and construction camps, utilizing local contractors to help further assure the construction program for the 56" pipeline section. Other components for the early works will include the road upgrades, bridge/ infrastructure strengthening / replacement and the salvage excavation of the archaeological sites that could not be avoided during the routing works.

The First Stage will be the construction activities on the 56" pipeline section, which will span approximately to 3.5 years, starting from the end of Q1 in 2015. Mechanical completion is scheduled for December of 2017 and first gas to Eskisehir off take via the 30" lateral by June 2018, allowing six months for commissioning.



The Second Stage is the construction activities on the 48" section which will span 4 years with the commencement in Q1 2015. The first year will be for "early works", identical to those referenced for the 56" section. Mechanical Completion is scheduled for December of 2018 and first gas to Trans-Adriatic-Pipeline (TAP) by July 2019.

The pipeline construction will be carried out at the spreads of the route with the provisionally defined KPs(Kilometer Points).

During the construction of the pipeline, a maximum of 48 km of length of pipeline will be under construction at one time. A total of 700 m of the pipeline length will be lowered to the trench and backfilled in one day. Depending on the engineering requirements especially at the crossings the burial depth of the pipeline will differ between 1 and 4 meters. The reinstatement will be done as soon as the pipe is covered in theory but in practice because of weather or schedule issues it happens in a month after the trench is closed.

The construction of the pipeline will require a number of temporary facilities to be established such as camps pipe stock yards and access roads.

For the offshore section, the pipeline will be laid on the sea-bottom. During offshore pipeline construction works, limited dredging will be performed at the coastal area at both sides of the Dardanelle strait.

During installation of the offshore pipeline, activities such as pipe lying, trenching and the placement of anchors associated with anchored lay barges will disturb seafloor habitat. These activities will be restricted to designated work areas.

Pipeline and third party cable crossings shall be avoided where feasible and export lines are to be deviated such that the potential for interference is avoided. Where crossings cannot be avoided, a crossing design will be developed that takes into account the installation techniques, separation distances and protection measures. The pipeline crossing profile will be checked for in-place stresses for hydro test, operational and environmental loads. The stability of supports is to be checked for sliding and overturning moments. Crossing design is also to take into account soil bearing strength and the requirement for additional support to minimize or avoid the creation of an unsupported span.

The post-construction testing operations will be carried out to ensure that the installed pipeline complies with the appropriate regulations and can be declared suitable for its intended use. The testing of the pipeline will be conducted upon completion of all pipeline construction work including final reinstatement, if possible, which is dependent on the weather. A complete hydrostatic test of the entire pipeline is implemented in order to confirm its integrity.



2.7 Operation of the Pipeline

The operation of the pipeline will be through the Main Control Center located in Ankara and the Back-up Control Centre that will be established and located within the Compressor Station CST-5 in Eskişehir, Turkey. From these locations, all the pipeline facilities connected to the related SCADA system, such as compressor stations, metering stations, pigging stations, gas off-take, and block valve stations will be continuously monitored, controlled and supervised. Both control centers will be configured and equipped identically except that the MCC will have precedence and will be able to take and hold control over the BCC. Control centers will be equipped with operational consoles, engineering consoles, data storage and management systems, and communications to all facilities. The control centers will have direct communications to the operations centers of the South Caucasus Pipeline Company (SCPC) and Trans-Adriatic-Pipeline (TAP) pipeline systems.

Under normal operating conditions; the gas control addressing the management of natural gas entering the pipeline will ensure that all customers receive timely delivery of their portion of this gas. Sophisticated control systems are required to monitor the gas as it travels through all sections of a lengthy pipeline network. To accomplish the task of monitoring and controlling the natural gas traveling through the pipeline, the main and backup control centers collect, assimilate, and manage data received from instrumentation, metering and compressor stations along the pipeline.

Most of the data that is received by a control station is provided by the Supervisory Control and Data Acquisition (SCADA) system. This system is a sophisticated communications system that takes measurements and collects data along the pipeline and transmits it to the main and backup control centers. Flow rate through the pipeline, operational status, pressure, and temperature readings may all be used to assess the status of the pipeline at any time. The SCADA system works in real time, meaning that there is little time lag between the measurements being taken along the pipeline and their transmission to the control centers.

Aside from normal and steady state operations, centralized gas control allows the operators to vary the line pack to address expected changes in demand or planned equipment outages.

Emergency cases like minor loss of containment, such as fitting leaks, valve stem leaks, minor equipment mishaps and pipeline dents can usually be addressed without shutting down the system. Temporary flow reductions and pressure reductions may be necessary while repairs are affected.

Major loss of containment, such as pipeline rupture due to uncontrolled third party excavations, will likely require a system shutdown, isolation and blow down of the affected section, and replacement of the damaged pipe with pretested strategic pipe held at maintenance bases.

Loss of internal communications need not immediately result in shutdowns. The individual compressor and metering stations can continue on local control. As long as steady state conditions



prevail, the system can continue to deliver while repairs are made or backup communications established.

Even in the unlikely event of a complete fiber optic cable break, backup alternative earth satellite communication paths are available from each station to the Main Control Center and Backup Control Center.

The pipeline delivery system has been designed for an operational availability factor of 94.5% resulting in 8,280 annual operating hours. Maintenance centers will have to be centered within a two hour drive of the area of responsibility to ensure the project design operational availability figures. Typically, these maintenance centers will be located at each compression station with overlapping responsibility for 200 km in each direction.

Regular scheduled maintenance is a key to reliable operation. It requires trained maintenance personnel, an adequate stock of tools and spare parts, and a programmed maintenance schedule that addresses every piece of equipment in the system.

The offshore pipeline will be subject to a maintenance and inspection plan defined in order to identify damage, possible cause of damage and pipeline zone criticality. Within the inspection plan, as a rule, periodic direct inspections (by ROV) and indirect surveys (by geophysical instruments) will be carried out during the operation/non routine phase.

2.8 Water crossings

Among the 1,805 km pipeline route there are an estimated 200 water crossings including the Marmara Sea. As the engineering elements of these crossings are yet unknown, this RAP will not deal with livelihood implications of water crossings. A special emphasis in project's monitoring and evaluation will be put on the identification and mitigation of potential adverse livelihood impacts of water crossings.

2.9 Summary of Land Requirements

The land requirements for the Project's construction works are presented in Table 5 below. The need for permanent acquisition will include some of the AGIs such as; compressor stations block valve stations, pole locations and cathodic protection system in addition to the access roads that will be built. However the majority of the land required for the Project will be for temporary use.

Except for the permanent ownership rights that will be obtained for AGIs, all land acquired for permanent and temporary use will be made available to the ex-owner/users with some restrictions after the completion of the construction works.



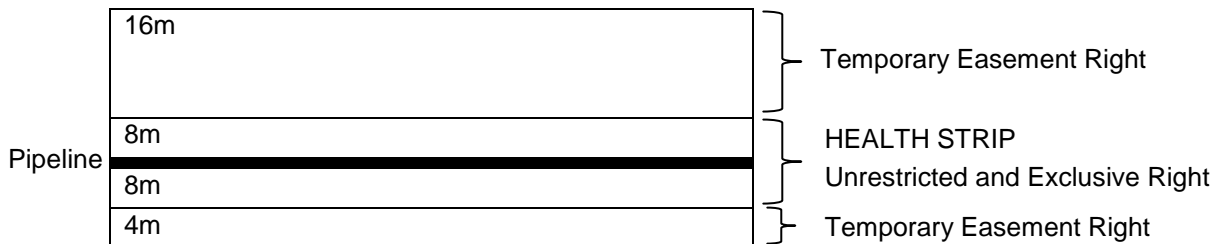
Table-5: Land Requirements of the Project

Pipeline System	Land Needed(ha)	Use	Right to be Obtained
Pipeline Construction Corridor (48 meter study corridor)	8,401	Permanent <i>and</i> Temporary	Unrestricted and exclusive right <i>and</i> Temporary easement right
Above Ground Installations (AGIs)	242	Permanent	Permanent ownership right
Main Camp Sites	318	Temporary	Temporary easement right or rental agreement
Fly Camps	234	Temporary	Temporary easement right or rental agreement
Pipe Stock Yards	319	Temporary	Temporary easement right or rental agreement
Sub-total (known land needs)	9,514		
Access Roads	TBD	Permanent	Permanent ownership right
Overhead Power Lines (OHPL)	TBD	Permanent	Unrestricted and exclusive right
Pole Locations	TBD	Permanent	Permanent ownership right
Cathodic Protection Systems	TBD	Permanent	Unrestricted and exclusive right
Total	TBD		

TBD: to be determined

The 36m RoW will be subject to both temporary and permanent land use. Unrestricted and exclusive rights will be established for the 16m health strip⁹, whereas temporary easement rights will be obtained for the remaining 20 meters starting from the border of 16m (Figure 10).

Figure 10: TANAP Construction Corridor (36 meter RoW)



⁹Ministry of Health has declared that the health protection strip is 7 m with +/- 1 meter tolerance.



3.0 POLICY AND LEGISLATIVE FRAMEWORK

This section outlines the principal policy and legislative framework that pertains to land acquisition, expropriation and involuntary resettlement in Turkey as it applies to TANAP. It provides a summary of the relevant WB/IFC policies and Equator Principles and the Turkish legislations. The local legislative framework provides resettlement options for those who are homeless and landless and whose entitlements are less clearly defined by international policies. The international policies, on the other hand, provide guidance on social sustainability of large investments and on community engagement. International policies draw attention to the need to treat land acquisition and resettlement components of these investments as separate development projects to ensure that adversely affected populations benefit from them.

TANAP is committed to follow international and national legal policies on land acquisition and resettlement. Both of these policies require the acquisition of immovable assets affected by the Project to be obtained through willing buyer/seller arrangements and TANAP will adhere to these policies.

There are several gaps between international and local standards in regard to the preparation of the Resettlement Action Plan (RAP). First, under Turkish law, RAP is not a requirement for investments that cause economic and physical displacement. Similarly, social impact assessment (SIA) is a requirement under international policy, but not under Turkish law. In addition, within the national legal framework there is a lack of specific requirements for consultation and disclosure of RAPs and SIAs. The activities relevant to RAP consultations and disclosure are less explicit in Turkish national legislation, thus requiring the application of IFC policies. These gaps are closed by the Host Government Agreement and Intergovernmental Agreements detailed below. On the other hand, the obligation to provide support for the homeless and landless that reside or use the pipeline's RoW is less specific in international instruments than in local legislation.

3.1 Primary Laws Pertaining to Land Acquisition

3.1.1 Turkish Constitution

The Turkish Constitution, Article 46, under Subsection 3 of the Section 3 with the heading of "Social and Economic Rights and Responsibilities", addresses expropriation issues. The article states that whenever a development project serves public interest, the government is authorized 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. The Article refers to the Expropriation Law.

The specific article of Constitution states that except special cases the compensation value and the decreed increased value will be paid in full and cash to the users. The compensation of the farmers farming the acquired land is paid in full and cash, in any case. Private users cannot benefit from expropriating public lands and assets without paying compensation to the public at large. Even



when land is acquired for public interest, expropriation agencies cannot benefit from the expropriation of private lands and assets without paying into a private bank account, in advance of actual land appropriation and project construction, the value of the expropriated assets.

There are no constitutional principles for resettlement in Turkey. However, Articles 44 and 45 of the Constitution indirectly relate with 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.

3.1.2 The Intergovernmental Agreement (IGA) and Host Government Agreement (HGA)

The Intergovernmental Agreement (IGA) between the Governments of the Republic of Turkey and the Azerbaijan Republic was signed on June 26, 2012 and subsequently was ratified and enacted into law by two countries. The IGA establishes the basis for the transport of natural gas from the Caspian Sea, across the territories of Azerbaijan and Turkey, through realization of an export pipeline, and it confers the twin status of international law and the prevailing domestic law in each country on the legal and commercial terms of the Project

The Host Government Agreement (HGA) between the Government of the Republic of Turkey and Trans Anatolian Natural Gas Pipeline Company B.V. was signed on June 26, 2012 and was published in Official Gazette on March 19, 2013 and has become effective as Law No. 6375 of the Republic of Turkey. This HGA further established the legal basis within Turkey for the implementation; operation and decommissioning of the Turkish section of the Trans Anatolian Natural Gas Pipeline and is an integral part of the IGA.

The HGA identifies the Ministry of Energy and Natural Resources as the Designated State Authority (DSA) to acquire and grant to Trans Anatolian Gas Pipeline Company B.V. all the land rights in Turkey necessary to construct and operate the pipeline and conduct Project activities. The Government of Turkey has appointed BOTAŞ to be responsible for the implementation of the land acquisition and resettlement aspects of the Project it does not get involved in the design, procurement, and construction of the pipeline and does not participate in its operation; these tasks shall be carried out by TANAP.

Article 5 of the Host Government Agreement (HGA) states that: “the Host Government hereby authorizes and appoints the Ministry of Energy and Natural Resources of the Republic of Turkey, to act as the Designated State Authority”. The Agreement states that if requested by TANAP Project Entity, the Designated State Authority (DSA), shall provide assistance for the issuance of rights, licenses, visas, permits, certificates, authorizations, approvals, consents and permissions provided in the Agreement and for the provision of information, documentation, data and other



materials. The Agreement also states that the DSA will “promptly following the Effective Date, nominate a direct point of contact for the TANAP Project Entity with respect to TANAP Project”.

Article 7 of the Agreement includes TANAP Project Entity will have the “rights to establish such branches, permanent establishments, offices and other forms of business or presence in the Territory as may be reasonably necessary in the opinion of any Project Participant to properly conduct Project Activities, including the right to lease or, where appropriate, purchase or acquire any real or personal property required for Project Activities or to administer the businesses or interest in the TANAP Project”.

Article 16 of the HGA states that: “the Host Government shall authorize and appoint a State Entity for the purposes of performing State’s obligations in relation to Land Rights (the Land Rights Entity).” Further, “The Land rights and, in particular, the rights of exclusive use, construction, possession and control (excluding ownership) respecting the Project Land as shall be granted by the State Authorities to the TANAP Project Entity in this Agreement constitute rights to property other than ownership”. The Host Government shall assist the TANAP Project with the acquisition and exercise of Land Rights, subject always to observing the rights of any other Entity in respect to any other infrastructure (including pipeline) which pre-exists the notification of the Construction Corridor by the TANAP Project Entity to the Host Government.

This article of the HGA also states that the Host Government will use its Reasonable Endeavors to expedite process in respect to Land Rights. TANAP Project Entity will meet verifiable and appropriate costs and expenses in relation to the acquisition of the Land Rights. These will include “paying costs and expenses arising as a result of any additional obligations and requirements generated from the application of Environmental and Social Standards as defined in Article 17 and/or principles set forth in the Performance Standard 5 of the International Finance Corporation (Land acquisition and Involuntary Resettlement).” TANAP Project Entity will also be responsible for paying land acquisition costs as per National Laws to the Persons from whom the land Rights were acquired (State Authorities or other Persons or Entities). It will indemnify the Host Government against any such costs and expenses and all claims.

“In respect of Project land, the Host Government shall, in the case of state land, make land rights available to the TANAP Project Entity in accordance with the procedures that are established under the National Laws, and cause other relevant State Authorities to do so. In the case of non-State Land, assist the TANAP Project Entity in acquiring Land Rights in accordance with the procedures that are established under the National Laws.”

“Where the Land Rights Entity has the established capability and expertise to conduct and manage the process of acquiring Land Rights on behalf of third Parties, the Host Government shall ensure that an offer is made to the TANAP Project Entity to do so, on its behalf on reasonable cost based term.” The Agreement’s Article 16 also states that “the TANAP Project Entity shall not be subject to



the restrictive provisions of the Land Registry Law regarding acquisition *in rem* for foreign Persons and foreign capital companies.”

The HGA ensures that “the Host Government shall grant to the TANAP Project Entity:

- the exclusive and unrestricted rights *in rem* (excluding ownership) to use, occupy, possess, control and construct upon and/or under the land within the Project Land (as appropriate) for the purpose of conducting the Project Activities; and
- the right to restrict or allow, at the TANAP Project Entity’s sole discretion, use, occupation, possession and control of, and construction upon and/or under the Project Land by any other Persons except for those required for the public services that would need to be procured by State Authorities. State Authorities shall always use Best Endeavors not to intervene with the Project Land and not adversely to affect the Project Activities.

The complete HGA is provided in Annex 3.2.

3.1.3 Law on the Transit Transport of Petroleum through Pipelines (no. 4586, dated 23 June 2000)

The Law on the Transit Transport of Petroleum through Pipelines (no. 4586, dated 23 June 2000) deals with expropriation and registration in its Article 8.

Accordingly,

- Council of Ministers can designate a public institution or organization to issue permits, and deal with expropriation and other issues pertaining to the pipeline route and other facilities;
- This public institution or organization is authorized to take decisions for the expeditious expropriation of affected assets. It is also entitled to resolve legal conflicts that may arise during the process of expropriation;
- LRE can either expropriate and/or establish unrestricted and exclusive right easement to acquire the land;
- The expenses of expropriation and/or easement and any material damage to the third parties are considered as land acquisition cost;
- The cost of land acquisition is paid by the investor;
- State-owned lands, the unregistered and unidentified areas affected as well as the unrestricted forest lands along the transit pipeline route shall be registered in the land registry on behalf of the Treasury. Subsequently, these lands shall be allocated for the use of LRE;



- Pasture lands, meadow, and summer and winter grazing grounds on the transit oil pipeline route that is not subject to the Pasture Law No: 4342 shall be registered on behalf of Treasury. Subsequently, these areas shall be allocated to LRE;
- The use of forest areas are regulated by the Forestry Law No: 6831;
- Unrestricted and exclusive rights declared in favor of LRE shall be allocated or transferred to oil right holders (ones with certificate) of the Project; and
- Pipeline and related facilities shall be registered in the cadastral registry. The registry will reflect the purpose for which the property will be used unless otherwise allowed by the General Directorate of LRE.

3.2 Expropriation Law (No. 2942)

As stated in Article 1, this Law sets the procedures to be followed during;

If and when it is required for public interest;

- the expropriation of immovable owned by real persons or legal identities subject to private law,
- the calculation of the expropriation fee,
- registration of the immovable asset and its appurtenances in the name of the expropriation administration,
- reclamation of the unused immovable assets,
- mutual rights and obligations as well as the procedures and methods for the settlement of the conflicts pertaining to them.

The relevant articles of the Law that will be made reference to during the Project's land acquisition activities are explained briefly in the following sections. The complete version of the Law is presented in Annex 3.3.

3.2.1 Article 3 - Requirements for Expropriation

For the implementation of large projects that concern issues such as energy, irrigation and afforestation etc., administrations may expropriate by paying the fee for the immovables, resources and their easement rights in cash or as down payment in equal instalments, as required for the conduct of public services or interventions they are obliged to provide according to laws.

3.2.2 Article 5 – Authorities that Decide on Public Interest

Article 5 of the Law specifies the competent authorities that can take the public interest decision. In case of the Project, this decision is taken by LRE and approved by the Ministry of Energy and Natural Resources.

The public interest decision for TANAP was taken on February 7, 2014.



3.2.3 Article 7 – Initial Procedures to be Performed for Expropriation and Administrative Annotation

The administration that is to perform the expropriation prepares or commissions a scaled plan indicating the borders, surface area and type of the immovable assets of resources on which expropriation is to be constituted or appurtenances is to be constituted by way of expropriation, enables that the owners of the expropriated immovable asset, the ownerships if no title deed registrations are present and their addresses by binding them to documents through an inquiry it would conduct on the land registry, tax and population registry records as well as additional inquiries.

After the administration takes the decision on expropriation, the related annotation of the expropriation in the title deed is notified to the title deed administration where the mentioned immovable asset is registered. If the owner changes after the notification date, the title deed administration is obliged to notify the administration of any changes to occur in the ownership or in the rights in kind that are separate from the ownership.

If the document to be obtained from the court indicating that a request for the identification of the expropriation fee and the registration in the name of the administration as per the Article 10 is not submitted to the title deed administration within six months starting on the annotation date, this annotation is ex officio deleted from the title deed records.

3.2.4 Article 8 – Procurement Procedure

According to Article 8, after the expropriation decision is made, the administration will appoint one or more valuation commissions (consisting of at least 3 people) to identify the value of immovables. Additionally, one or more negotiation commissions (again consisting of at least 3 people) will be assigned for negotiations.

After the administration has notified the owner of its intent to take over the immovable, shall the owner or its representative apply to the administration (within 15 days after notification) with the intent of selling the immovable, negotiation meetings are held on the date identified by the commission and if an agreement is reached on an amount that is not more than the estimated value, an official report is signed.

The administration prepares the amount stated in the report within forty 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 expropriate fee is paid as soon as the transfer of rights is realized.

In cases where an agreement is not reached or transfer is not realized, action is taken as per the Article 10 of this Law.



3.2.5 Article 10 – Identification of the Expropriation Fee by Court and Registration of Immovable in the Name of the Administration

Article 10 states that, if the expropriation cannot be realized through procurement, the administration applies to the court of first instance in the locale of the immovable and requests that the expropriation fee for the immovable asset be identified and decision be made for its registration in the name of the administration in return for the payment of this fee.

Within 30 days of the application of the administration, the Court notifies the owner of the immovables through an annotated invitation on the date of hearing. To those whose addresses could not be found after inquiries an announcement is made according to Notification Law (No. 7201) 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 and in one of the newspapers circulated across Turkey.

On the day of the hearing, the judge invites the parties to reach an agreement on the value of the immovable. If an agreement is reached, the judge considers this fee to be the expropriation fee. In cases where an agreement is not reached, the judge schedules an expedition (within ten days) to identify the value of the immovable asset and a date for the second hearing (within thirty days after the expedition).

On the second hearing, if the parties fail to agree on the value once again, the judge will assign a new expert committee for the valuation within fifteen days and then identifies a fair and equitable expropriation fee by referencing both the reports and statements of the parties and experts. The identified fee is the expropriation fee of the immovable, resource or its easement rights. The Court grants fifteen days to the administration for the fee to be deposited in a bank on behalf of the owner. In cases where the right holder could not be identified, the court decides on the registration of the immovable in the name of the administration under the circumstances that the bank receipt indicating the amount was blocked to be given to the right holder to be revealed in the future and that this decision is notified to the title deed department and the bank where the fee was deposited. The provision on registration is definitive and the parties reserve their rights for appeal pertaining to the fee.

3.2.6 Article 11 – Principles for the Identification of the Expropriation Fee

This article states that “The expert committee to be formed as per Article 15 will go to the location of the immovable or resource to be expropriated with the court delegation, hear the statements of related parties present and drafts a justified report that identifies the expropriation fee”.

The identification of the value of the immovable does not take into account any value increase caused by the public works and services realized through expropriation as well as any profit that would be caused by future uses.



During the establishment of easement rights, shall there be any value decreases in the immovable or the resource due to expropriation will be justified. This decrease in value is the expropriation cost.”

3.2.7 Article 12 – Partial Expropriation

The value of the partially expropriated immovable is defined in this Article, whereas it also states that if the part of the immovable excluded from expropriation is suitable for utilization under the public works legislation, the expenses and cost required for the restoration of any installations to a usable status will be calculated and added to the expropriation fee.

The value of the immovable property that is partially expropriated shall be estimated as follows:

- e) Provided that there does not exist any change in the value of the non-affected part of the immovable property, the value of the partially expropriated immovable property shall be equivalent to the proportion to be expropriated at the amount determined for that immovable property according to the provisions of the Article 11.
- f) If there is a decrease in the value of the non-affected part, the value of the partially expropriated immovable property will consist of the expropriation fee determined for the affected part of the immovable property in compliance with the paragraph (a) plus the amount corresponding to the decrease of value of the non-affected part.

Shall the remaining part of a partially expropriated immovable is not suitable for utilization, this part also has to be expropriated upon the written application made by the legal owner within thirty days of the notification of the expropriation decision in cases where no lawsuits were filed in the administrative court against the expropriation procedure.

If an immovable asset subject to joint ownership that was partly expropriated was divided among stakeholders and left to the possession and utilization of one or more stakeholders, and if the partial expropriation performed involves the whole or a part of this land, any procedures related to the expropriation will then be conducted only in relation to this stakeholder(s) and the expropriation fee is paid to them in proportion with their stakes. The stakeholder(s) has/have the right to file a lawsuit only for this part. They have no remaining rights on the part of the immovable that was not expropriated and their names are removed from the list of stakeholders. The expropriated areas are registered in the land registry in the name of the administration. Any conflicts arising out of the enforcement of this article are resolved by the judicial courts.

3.2.8 Article 14 – Right to a Lawsuit

A lawsuit for cancellation of land acquisition decision in the administrative court or for correction of the material errors may be filed against the expropriation procedure within thirty days as of the date of notification issued by the court as per the Article 10 -the date of notification is replaced by the date of announcement in the newspaper by the court for those who could not be notified- by the owner of the immovable asset subjected to expropriation.



Any lawsuits filed in the administrative court are processed with priority.

3.2.9 Article 18 – Dispute on the Ownership

The administration identifies whether there are any disputes on the immovable to be expropriated by performing an inquiry at the title deed administration, land survey directorate and civil courts in the location of the immovable. Shall the inquiries indicate that there is a dispute on its ownership or that it was subject to a lawsuit, the entirety of documents prepared as per the Article 10 are submitted to the civil court of first instance of the location of the immovable and is requested that the expropriation fee of the immovable is determined as well as its registration is made in the name of the administration in return for the payment to be made to the right holder as soon as they have been determined.

The initial and consequent instalments of the expropriation fee identified by the court are deposited in the time deposit accounts with quarterly terms each at the bank designated by the court.

The process to be followed in order to resolve the disputes on ownership will be in line with the procedures defined in the relevant legislation.

3.2.10 Article 19 – Registration of Immovable Assets not Registered in the Land Registry and Ownership Rights

The administration initially identifies whether the immovable not registered in the land registry is one of the public assets listed in Article 16 of the Cadastral Law (No. 3402). If the immovable is not one of the public assets listed in this article, and that the ownership for the immovable is present and a claim for acquisition is made on the basis of ownership, the administration conducts an investigation at the location of the immovable by means of the experts selected as per the Article 9, collects the evidences and specifies the state of affairs in a record.

The entirety of the documents prepared by the administration and collected according to the Article 10 of the Expropriation Law is submitted to the civil court of first instance at the location of the immovable.

The court identifies the expropriation fee for the immovable asset as per the procedure and duration specified in Article 10. If the court deems it sufficient to declare the immovable asset to be within the scope of the Turkish Civil Law on the expropriation date and to have been acquired through ownership, it conveys the expert report on the identification of the expropriation fee to the administration and this report along with the other documents given by the administration to the owner.

The status of the immovable is communicated to the highest public official in charge of assets in that area while it is also announced at least once in a local newspaper issued in the location of the immovable and a newspaper circulated across Turkey.



If no objections are raised by the Treasury or any third parties within thirty days as of the last announcement, a period of fifteen days is granted to the administration for the expropriation fee to be deposited in the bank stated in the announcement as down payment and in cash or as the first instalment in the name of the owner. Upon the submission of the payment receipt, the Court decides on the registration of the immovable asset in the name of the administration and the payment of the expropriation fee to the owner. Whereas, this decision is communicated to the land registry office and the bank where the money is deposited.

If an objection is raised within this period by the Treasury or third parties, the court decides on the registration of the immovable asset in the name of the administration after the identified expropriation fee is deposited in a deposit account opened in the bank to be paid in the future to the person who would prove their rightful ownership.

3.2.11 Article 25 – Limitation of Rights and Transfer of Ownership to the Administration

The expropriation procedure is initiated through the notification conveyed by the Court as per the Article 10, in regards to exercising of rights and fulfillment of obligations. The transfer of ownership to the administration is realized based on the decision for registration taken by the Court.

The owner of the immovable 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 after the date of the registration decision taken by the Court. The value of activities performed after this date is not taken into account.

An additional paragraph added in 2013 states that for large projects such as dams, irrigation networks and pipelines, highways, railways, harbors and airports, the decision for the public interest is announced in the mukhtar's office of the neighborhood and/or village where the immovable to be expropriated are located. After the last day of the announcement (public interest), the cost of the fixed installations on the immovable and the trees planted are not taken into account in the identification of the expropriation fee. This limitation for the immovable may not be more than five years after the announcement has been made.

3.2.12 Article 27 – Urgent Expropriation

For the expropriation of immovable required in cases of need or urgency for the defense of the country or in extraordinary situations decided by the Council of Ministers or envisaged in special laws as part of the enforcement of the Law on the Obligation for National Defense number 3634, the immovable asset at stake may be confiscated by means of the administration depositing the amount for the value of the said immovable asset identified by the court as per the principles in the Article 10 (Amended statement:24/04/2001 - 4650/Article 15) and via the experts selected as per the Article 15 at the bank stated in the invitation and announcement made according to the Article 10 (Amended statement:24/04/2001 - 4650/Article 15) within seven days upon the request by the



related administration with the procedures other than the value appreciation to be completed later on.

3.2.13 Article 30 – Transfer of an Immovable Owned by an Administration to Another Administration

This article articulates that immovable, resources and easement rights owned by public legal persons and agencies may not be expropriated by another public legal person or agency.

The administration that requires the immovable, resource or easement rights identifies the fee according to the Article 8 of Expropriation Law. It lodges a written application at the administration owning the asset by stating the amount it would pay on the basis of this fee. If the owner of the asset fails to abide by the transfer and respond within sixty days, the conflict is settled via an affirmed decision within two months after being inspected by the relevant administrative office of the Council of State upon application by the receiving administration.

If the parties fail to reach an agreement on the price, the receiving administration lodges an application at the court according to the procedure written in the Article 10 within thirty days as of the notification date of the Council of State decision asking for the expropriation fee to be identified. In the adjuration process to be conducted in this case, the court does not enforce the provisions of the Law dated 9/6/1938 and number 3533.

A period of fifteen days is granted to the receiving administration for the fee identified as the expropriation fee as per the procedure envisaged in the Article 10 to be deposited in the bank specified by the administration in order to be given to the asset-owning administration and the receipt of the fee deposited to be submitted. This period may be extended as necessary for only once by the court. The court decides on the registration of the immovable asset in the name of the administration and the expropriation fee to be paid to the asset-owning administration upon the submission of the receipt indicating that the expropriation fee was deposited by the receiving administration in the bank in the name of the asset-owning administration and this decision is notified to the title deed department and the bank where the money was deposited. The provision on registration is definitive and the parties reserve their rights for appeal in relation to the fee.

The immovable, resource and the easement rights thus taken over is deemed to have been received via expropriation and it cannot be used for transfer purposes or for any public purposes other than those allowed by the transferring administration. Otherwise, the transferring administration may receive the immovable back as per the Article 23. This matter is annotated in the field of declarations in the title deed log.

3.2.14 Recent Amendments with Significant Influence on Owner/User Rights

With an amendment made in Article 10 of the Expropriation Law in 2013, if the lawsuit filed for the identification of the expropriation fee cannot be finalized within four months, a legal interest is



incurred on the identified amount as of the expiration of this period. In cases where the right holder cannot be identified, the necessary precautions are taken for the expropriation fee to be put into a deposit account for its benefits.

With an additional clause added to Article 19 of the Law, users of lands registered under the name of another person, or which have no owner and/or have not been acquired by the right holder, will be compensated for the minimum equipage value of the buildings and the fee appreciated for trees according to Article 11.

Another amendment made in 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 such as dams, irrigation networks and pipelines etc. in advance of receiving a notification on land acquisition activities of such projects. With this change, the public interest decision is announced (for a duration of 15 days) in the mukhtar's office of the neighborhood and/or village where the immovable assets to be expropriated are located. Although this change serves a good purpose of notifying the right holders, additional information on the impact areas of the Project is not provided with the announcement.

The same amendment also states that the cost of the fixed installations on the immovable assets and the trees planted are not taken into account in the identification of the expropriation fee after the 15 day announcement period for the public interest.

3.3 Supplementary Laws and Regulations Pertaining to Land Acquisition

3.3.1 Forest Law -No. 6831

In accordance with the Forest Law, the Project must obtain permission from the Ministry of Forestry and Water Affairs to perform activities in forests or lands classified as forest and is required to indemnify damages to public forests resulting from the construction of the pipeline. According to Law (17.06.2004 article 5192/1), the Ministry has the authority to give permission for the use of forestland. This permission cannot be longer than 49 years.

The amendment made in the Forest Law in 2004 (Official Gazette dated 3 July 2004, number 25511) states that "in case of public interest or exigency concerning the location or construction of defense, transportation, energy, communication, water supply, wastewater, petroleum, natural gas, infrastructure facilities and solid waste disposal sites; sanatoriums, dams, ponds and cemeteries; governmental health, education and sports facilities and related places in governmental forest areas, real and legal persons can be licensed by the Ministry of Forestry and Water Affairs in return for a determined value." In accordance with this clause LRE will apply for the required licenses from the Ministry of Forestry and Water Affairs.



In addition to the Law itself, the regulation on “Permits to be Given on Land Considered Forest Areas” (Official Gazette dated 22.03.2007 numbered 26470) settles the methods and principles of the approvals, permits and easement rights to be given according to the 16, 17, 18 and 115th articles of the Forest Law as well as defining their costs for works and transactions that will be realized.

Section 10 of this regulation defines the terms on which other state authorities are provided with permission to establish roads, buildings and other facilities. Article 42 depicts that in cases of public interest, permission to utilize forest lands can be given to other state authorities for the establishment of facilities used in fields such as petroleum, natural gas, solid waste, infrastructure etc.

Another regulation recently published in the Official Gazette numbered 28976 and dated April 18, 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 utilizing forest land. Subsequently, the Project will be subject to pay the following fees; afforestation fee, land permit fee, or village fee and erosion fee. Among these fees each will be paid only once in the beginning of the permit whereas the land permit fee will be paid annually.

3.3.2 Pasture Law -No. 4342

According to this Law based on the views of the Pastureland Commission (comprising of the manager of the district management of Ministry of Food, Agriculture and Livestock, an agricultural engineer from the Ministry itself, a jurist, a representative of the National Property Directorate, a technician from the Title Deed Registry and Cadaster Directorate and a representative of the Chamber of Agriculture) the Governors in Project affected provinces have the authority to give permission for altering the classification of pasturelands.

. Neither the right of the public nor of the specific users of pastures is recognized under the local legislative framework¹⁰. Compensation will be paid for pasture lands to the relevant public agencies.

As per Article 8 Clause (f) of Law on Transit Transportation of Petroleum Through Pipeline No:4586, the status of common property such as pasture, meadow and winter quarters, within the Project’s RoW and the AGI locations, will be changed to Treasury land by the Ministry of Energy and Natural Resources. Once their status has been changed as Treasury, the unrestricted and exclusive rights will be established in the name of the expropriating administration. Payment for such lands will be made to the Treasury based on Article 30 of the Expropriation Law.

¹⁰According to article 14 of this Law, “Common lands such as pastures, meadows, plateaus, winter quarters that are located along the route of the transit pipeline project shall be removed by the Ministry of Energy and Natural Resources on its own decision without being subject to the provisions of the Pasture Law no. 4342. It shall then be registered in the name of the Treasury and thereafter an individual and permanent right shall be established in the favor of the public institution assigned for expropriation”.



3.3.3 Cadastral Law -No. 3402

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.

In accordance with the Project, section 4 (principles for the determination of ownership rights), 6 (financial provisions) and 9 (transitions and final provisions) of the Law will need to be referenced.

3.3.4 Agricultural Reform Law on Land Arrangement in Irrigated Areas (No. 3083)

The Agricultural Reform Law regulates several issues for lands that are irrigated and that have been determined by the Council of Ministers. The Law covers matters regarding land consolidation and allocation of land for other purposes rather than agriculture in case of need. It is stipulated in the Law that in areas where agricultural production has no longer economic viability due to fragmentation, land consolidation works will be realized to prevent fragmentation that will result in having an effect both on the livelihood and the work force of any family. The articles referencing land consolidation issues and that will be considered by the Project are Articles 6 and 13.

In addition to the Law, the regulation on “Implementation of the Agricultural Reform Law for Land Arrangement in Irrigated Areas” deals with the provisions pertaining to the implementation of the Law 3083. Article 5 states that ownership of land belonging to real persons or public corporate entities cannot be transferred, conveyed, mortgaged and sold within 5 years after the decision of Council of Ministers has been announced in the Official Gazette. All restraints will be annotated to the land registry soon as this decision is officially announced.

Article 6 of the same regulation specifies the conditions for the sale of such lands and immovable assets on them within the 5 year limitation period defined in Article 5. However, as stated in the last clause of this article, the Project will not be subject to this procedure since expropriation activities carried out by other public authorities are exempted of this situation.

Yet, the Project will need to consider and take mitigation measures with respect to other articles regarding land consolidation under section four of this regulation.

3.3.5 Law on Soil Protection and Land Use (No. 5403)

The first two articles define the purpose and scope of the Law briefly as setting the principles for agricultural lands to be improved, protected against misuse, properly categorized and prevented against fragmentation.

In respect to the Project, Article 13 of the Law will be referenced in terms of using irrigated agricultural land out of its purpose. The article states that under the circumstances that alternative



areas do not exist and the Soil Protection Council approves, these types of lands can be used for the exploration and operation activities related to petroleum and gas, or for investments and plans that have been decided as public interest by relevant ministries. The Project will need to reference this Law during the land acquisition activities shall there be any irrigated agricultural land required for the installation of AGIs.

In the process of land consolidation new lands (and parcels) emerge. According to the Article 17 of this Law, once the council of Ministers' decision on the consolidation site is published in the official gazette, any operation on the transfer of ownership, disposition, lien and conveyance of the land subject to consolidation will require the permission of the authority undertaking the consolidation activity.

In the event that the land consolidation works are not finalized prior to the land acquisition, LRE will take into consideration the current state of the land and proceed with the acquisition process with the current owner(s). However, in cases where the consolidation process is near finalization, LRE will wait until the registration works are completed and update the expropriation dossiers in order to proceed with the new records.

In the areas where the land consolidation process is completed and the newly formed parcels are given to their rightful owner, there are no differences between the regular buying and selling procedures for private registered lands.

According to the Soil Protection and Land Use Law, there are restraints for areas to be subdivided into smaller divisions. However, if there is a decision for expropriation this restriction is not valid.

3.3.6 Resettlement Law -No. 5543

The Resettlement Law provides for government-assisted resettlement in the rural and urban areas. For now, no residential areas or units are present in Revision F of the 48m study corridor. The analysis of the RoW (Revision F) indicates that only a couple of stables and barns may fall within the 36 m RoW. In the very unlikely case where one should find a residential or commercial structure in the final 36 meter RoW, the project will need to act according to the resettlement law and to entitle those who are forced to relocate as a result of land acquisition for investments in public interest.

3.3.7 Law of Population Services- No. 5490

There is a number of important changes in the legal framework that facilitates land acquisition for large scale projects such as TANAP. One of these changes concern the Law of Population Services (no. 5490) that has been put into effect in April 2006. 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. The residence registration system is based on the



declaration of individuals. People who change their residence are required to inform the changes to the population registration offices in counties to which they move. The delay in registration is subject to fines.

The requirement for Turkish citizens to register their residential addresses significantly facilitates the disclosure of land acquisition arrangements. It makes it possible for projects to inform all owners and users of affected immovable assets to be invited for land acquisition negotiations. This is especially so in the case of TANAP where all affected assets are in villages and municipalities that have already been registered in the land registry (and thus included in cadastral system).

3.3.8 The Notification Law-No. 7201

The Notification Law No. 7201, 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. According to the Law, provisions for notification include mail to known addresses; seeking support from local authorities; publication through an advertisement placed in a national newspaper 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. The specificity and broadness of the Law support international policies' emphasis on communications and consultation.

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 LRE for negotiated settlement. Should the owner reside in a foreign country, a 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.

3.3.9 Land Registry Code (Official Gazette No. 28738)

This code aims to keep the land registry records in order with respect to the Civil Law (No. 4721). It comprises of 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.

Although all land registry activities will be carried out in line with this Code, most relevant articles that will be of interest to the Project are article 5, 8, 10, 24 and 25.



Article 5 states that land registry records are records kept under the responsibility of the State to indicate the rights on immovable assets whereas Article 8 defines what type of immovable are recorded in the land registry. Article 10 specifies that unrestricted and exclusive rights shall be registered in a separate page of the land register. The same article defines that this right can also be transferred to third parties. This article allows LRE to transfer the unrestricted and exclusive rights to TANAP soon as it has registered it under its name.

Articles 24 and 25 of this Code protect the rights of the illiterate, disabled and non-Turkish speaking right holders.

3.4 Consultation Requirements for Land Acquisition of the Legal Instruments

The key legal instruments that regulate land expropriation and resettlement require different levels of consultation with the affected populations; the consultation requirements of these laws and their reference to stakeholder engagement do not correspond to international standards. The Expropriation Law focuses primarily on the provision of information to the affected owners of immovable assets. The Law also requires consultations and negotiations for the valuation of the expropriated assets; this requirement instructs the expropriation agency to work together with all relevant local institutions, including branches of the Ministry of Food, Agriculture and Livestock, other government departments and real estate firms, as well as with the affected populations.

The Resettlement Law incorporates a level of consultation with affected persons and communities that goes beyond mere information provision. These concern the choice of resettlement sites rather than on encompassing broader aspects of the resettlement process, such as house design, community layout, etc. Consultation with the affected people is essential in the framework of Government assisted resettlement since the compensation payments for residential structures, together with other immovable assets on them, are kept by the resettlement agency to finance the new resettlement arrangements. Because the resettlement homes are often more costly than the traditional homes the affected people reside prior to the project, the difference between the value of affected assets and the actual costs of new residential units are paid by the affected people over a period of time. Thus, the concept of replacement cost that is privileged by the WB and IFC, is not used in Government assisted resettlement arrangements. As a result, owners of affected assets often reject Government assisted resettlement; only those families that use (but not own) the Project affected homes consider participation in such arrangements.

Regulation for the Execution of Resettlement Law states that the disclosure shall be held by written notification and be posted for 30 days at an apparent place (such as schools, mosques, cooperative buildings etc.).

In accordance with the Cadastral Law, the regions to be surveyed shall be notified via the Official Gazette, radio, television and local newspapers and other traditional ways, 30 days prior the beginning of cadastral works. At least 15 days prior to the cadastral surveys, the Cadastral



Manager shall notify the village to be surveyed and the adjacent village and municipalities by traditional ways. The Cadastral Technicians shall inform the villagers by the traditional ways, about the place to be surveyed, seven days before they start the cadastral survey.

3.5 International Policies

Several international policies are relevant to TANAP's approach to land acquisition and livelihood restoration. Among these, the most important are the Equator Principles that guide the standards by which private sector banks would support investments, IFCs sustainability principles that guide the actions of international financial agencies, United Nations' principles and guidelines pertaining to human rights.

3.5.1.1 Equator Principles

The commitment of the private sector to Equator Principles (EP) was renewed and a set of stronger principles were adopted to strengthen environmental and social risk management framework starting in June 4th, 2013 (Annex 3.4). The renewed framework (EP III) has extended its scope to Project-Related Corporate Loans and Bridge Loans, and clarifies the requirements for application to Advisory Services. Under EP III, Equator Principles Financial Institutions will benefit from greater consistency in implementation, enhanced transparency through extended reporting and will address emerging environmental and social concerns. EP III re-affirms commitment to IFC's principles on environmental and social sustainability, including Performance Standard 5 (PS5) Land Acquisition and Involuntary Resettlement (Annex 3.5), but also to the United Nations Guiding Principles on Business and Human Rights by undertaking due diligence¹¹, through compliance with all applicable laws and to respect human rights.

EP III requires that Assessment Documentation will be prepared and will accurately and objectively evaluate the environmental and social risks and impacts of Projects. EP III also elaborates the need for the preparation of an Environmental and Social Management Plan (ESMP) which summarizes the client's commitments to address and mitigate risks and impacts identified, through avoidance, minimization, and compensation/offset. It states that this may range from a brief description of routine mitigation measures to a more comprehensive management plans such as a resettlement action plan (RAP) and will follow guidance offered by IFC Performance Standards.

An important strength of the Equator Principles is the incorporation of covenants linked to compliance. For all Projects, the client will covenant in the financing documentation to comply with all relevant host country environmental and social laws, regulations and permits in all material respects. To assess Project compliance with the Equator Principles and ensure ongoing monitoring and reporting after Financial Close and over the life of the loan, the EP may require the recruitment of an Independent Review by an Independent Environmental and Social Consultant. It is possible that project retain qualified and experienced internationally recognized external experts to verify its

¹¹ As referenced in the "Guiding Principles on Business and Human Rights: Implementing the United Nations 'Protect, Respect and Remedy' Framework".



monitoring information instead of an independent Environmental and Social Consultant to. TANAP will retain a recognized expert to verify its monitoring efforts shortly after the completion of the RAP. EP will require that projects such as TANAP (Category A) with substantial social and environmental impact to ensure that, at a minimum, a summary of the ESIA and the RAP is accessible and available online.

3.5.1.2 IFC's Sustainability Framework

IFC's sustainability framework articulates the Corporation's strategic commitment to sustainable development, and is an integral part of its approach to risk management. The Sustainability Framework comprises IFC's Policy and Performance Standards on Environmental and Social Sustainability, and IFC's Access to Information Policy. The Policy on Environmental and Social Sustainability describes IFC's commitments, roles, and responsibilities related to environmental and social sustainability. IFC's Access to Information Policy reflects IFC's commitment to transparency and good governance on its operations, and outlines the Corporation's institutional disclosure obligations regarding its investment and advisory services.

IFC's Performance Standards require that projects such as TANAP identify risks and impacts, and design strategies to help avoid, mitigate, and manage risks and impacts, including stakeholder engagement and disclosure obligations in relation to project-level activities.

When host country regulations differ from the levels and measures presented in the Environmental Health and Safety Guidelines, projects are expected to achieve whichever is more stringent. If less stringent levels or measures are appropriate in view of specific project circumstances, a full and detailed justification for any proposed alternatives is needed as part of the site-specific environmental assessment. International policies require that this justification should demonstrate that the choice for any alternative performance level is protective of human health and the environment. For instance, in the case of TANAP, there are many land ownership issues that will make it difficult to acquire land through negotiations; the RAP will list these conditions and fully explain why, in a number of situations, expropriation will be used to acquire land and/or to restrict use rights.

Involuntary resettlement refers both to physical displacement (relocation or loss of shelter) and to economic displacement (loss of assets or access to assets that leads to loss of income sources or means of livelihood) as a result of project-related land acquisition. Resettlement is considered involuntary when affected individuals or communities do not have the choice to refuse land acquisition 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.



IFC also states negotiated settlements help avoid expropriation and eliminate the need to use governmental authority to remove people forcibly. 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. This is an important principle that guides TANAP's approach to the TANAP project's land acquisition and resettlement activities.

According to IFC (PS5) the main objective is to ensure that potential adverse impacts on the community are mitigated through planning and that appropriate measures are undertaken so that the people displaced receive benefits from investment projects.

WB/IFC policy objectives require that:

- Involuntary resettlement be avoided where feasible, or minimized, exploring all viable alternative project designs;
- Where it is not feasible to avoid resettlement, resettlement activities be conceived and executed as sustainable development programs, providing sufficient investment resources to enable the persons displaced by the project to share in project benefits;
- Displaced persons be meaningfully consulted and should have opportunities to participate in planning and implementing resettlement programs; and
- Displaced persons be assisted in their efforts to improve their livelihoods and standards of living or at least to restore them, in real terms, to pre-displacement levels.

The policy covers direct economic and social impacts that both result from investment projects, and are caused by the involuntary taking of land resulting in (a) relocation or loss of shelter; (b) loss of assets or access to assets; or loss of income sources or means of livelihood, whether or not the affected persons must move to another location; or the involuntary restriction of access to legally designated parks and protected areas resulting in adverse impacts on the livelihoods of the displaced persons.

The policy applies to all components of the project that result in involuntary resettlement, regardless of the source of financing. IFC also states that if land acquisition for the project causes loss of income or livelihood, regardless of whether or not the affected people are physically displaced, the Project sponsor (i.e. TANAP) must ensure that livelihoods are not adversely affected. These would require that the rights of the customary or traditional owners as well as those of the squatters and recently arrived economic migrants who occupy land prior to the cut-off date be recognized.

IFC policies state that payment of cash compensation for lost assets, especially for cultivable land, may be appropriate where:



- Livelihoods are not land-based;
- Livelihoods are land-based but the land taken for the project is a small fraction of the affected asset and the residual land is economically viable; or
- Active markets for land, housing, and labor exist, displaced persons use such markets, and there is sufficient supply of land and housing. Cash compensation levels should be sufficient to replace the lost land and other assets at full replacement cost in local markets.

In 2012, IFC further modified its policies and introduced several new elements. Performance Standard 1 refers to private sector responsibility to respect human rights. It emphasizes the need for stakeholder engagement beyond Affected Communities and clarifies levels of stakeholder engagement under different circumstances. It requires the development of a formal environmental and social policy reflecting principles of the performance standards. It also introduces participatory monitoring (when appropriate) as an option during implementation. Performance Standard 2 introduces quality requirements for workers' accommodation and requires ongoing monitoring of working conditions for workers under the age of 18. It also requires establishing policies and procedures to manage and monitor compliance of third parties with Performance Standard 2.

Performance Standard 5 extends the scope of application to restrictions on land use, and strengthens consultation requirements.

As required by IFC's PS5, TANAP, will:

- Promptly compensate economically displaced persons for loss of assets or access to assets at full replacement cost;
- Provide replacement property (e.g., agricultural or commercial sites) of equal or greater value, or cash compensation at full replacement cost where appropriate, to persons with legal rights or claims to land which are recognized or recognizable under the national laws;
- Compensate economically displaced persons who are without legally recognizable claims to land such as crops, irrigation infrastructure and other improvements made to the land) other than land, at full replacement cost.
- Provide additional targeted assistance (e.g., credit facilities, training, or job opportunities) and opportunities to improve or at least restore their income-earning capacity, production levels, and standards of living to economically displaced persons whose livelihoods or income levels are adversely affected; and
- Provide transitional support to economically displaced persons, as necessary, based on a reasonable estimate of the time required to restore their income earning capacity, production levels, and standards of living.

The valuation methods used by local Commissions do not necessarily follow international standards and may result in valuation significantly below full replacement cost. This will present a



challenge for TANAP as it will be allowed to use the land once the valuation commissions determine the asset prices and the payments are deposited in the name of affected owners. However, TANAP will attempt to gain access to land and establish easement through negotiations at different points throughout the pipeline and these prices will minimally reflect replacement costs. The negotiated prices will establish a standard against which the local Valuation Commissions will make their evaluation for the rest of the parcels; as such Commission valuations are likely to be equal to or exceed the negotiated prices throughout the pipeline.

3.5.1.3 Human Rights Focus in Resettlement and Land Acquisition Processes

In the past decade human rights concerns were incorporated in resettlement planning and implementation were fully reflected in WB/IFC, EBRD, ADB, the Organization for Economic Co-operation and Development's Guidelines for Aid Agencies on Involuntary Displacement and Resettlement in Development Projects, and other international policies. The responsibilities of the private sector with respect to social and environmental sustainability as well as human rights also gained greater attention. The UN Declaration of Human Rights states that all persons have a right to viable livelihood. Therefore, if people's livelihoods deteriorate as a result of a resettlement, it is likely that this will be cast as an abuse of those people's human rights.

The United Nations' Basic Principles and Guidelines on Development-Based Evictions and Displacement¹², specify that compensation should be provided for any economically assessable damage. It should also be appropriate and proportional to the circumstances of each case. At a minimum, project-affected persons should have access to (a) essential food, potable water and sanitation; (b) basic shelter and housing; (c) appropriate clothing; (d) essential medical services; (e) livelihood sources; (f) fodder for livestock and access to common property resources previously relied upon; and (g) education for children. Access to such facilities can be ensured through the provision of replacement land and/or cash compensation, together with other rehabilitation measures described below.

UN Basic Principles emphasize that the Project-affected persons have a right to adequate replacement land and structures. To be considered adequate, the replacement land and structures should satisfy the following criteria: (a) accessibility, without excessive time being spent or financial burden being incurred in commuting to the place of work or income generating resources; (b) habitability i.e. adequate space, protection against weather and ensuring health and safety; (c) security of tenure; (d) equivalent productive potential where cultivable land was acquired; (e) proximity to cultural property such as temples and other places of ritual significance; and (f) access to civic infrastructure and essential services such as health and education.

Basic Principles and Guidelines on Development-Based Evictions and Displacement reflect on the right to adequate housing as a component of the right to an adequate standard of living and the right to non-discrimination (E.CN.4/2006/41). The Basic Principles stress that all persons, groups

¹²Annex 1 of the report of the Special Rapporteur on adequate housing as a component of the right to an adequate standard of living.



and communities have the right to resettlement including the right to alternative land of better or equal quality and to adequate housing, including livelihood sources. Compensation should also cover lost opportunities, including employment, and land-to-land compensation should be prioritized.

The Basic Principles state that differential impacts on marginalized sectors of society must be assessed; that timely and appropriate information to groups particularly vulnerable must be given; and the whole process should be conducted with full consultation and participation throughout the entire process. The Basic Principles clearly state that no resettlement shall take place until a comprehensive resettlement policy consistent with the Basic Principles and internationally recognized human rights principles is in place; that the right to the continuous improvement of living conditions may not be infringed upon; and affected persons, groups and communities right to full and prior informed consent regarding relocation must be guaranteed.

Guiding Principles on Business, United Nations, and Human Rights (2002) state that the responsibility to respect human rights is expected of all business enterprises wherever they operate. It exists independently of States' abilities and/or willingness to fulfill their own human rights obligations, and does not diminish those obligations. And it exists over and above compliance with national laws and regulations protecting human rights.

Addressing adverse human rights impacts requires taking adequate measures for their prevention, mitigation and, where appropriate, remediation. The responsibility of business enterprises to respect human rights refers to internationally recognized human rights – understood, at a minimum, as those expressed in the International Bill of Human Rights and the principles concerning fundamental rights set out in the International Labor Organization's Declaration on Fundamental Principles and Rights at Work. The responsibility to respect human rights requires that business enterprises:

- Avoid causing or contributing to adverse human rights impacts through their own activities, and address such impacts when they occur;
- Seek to prevent or mitigate adverse human rights impacts that are directly linked to their operations, products or services by their business relationships, even if they have not contributed to those impacts.

In order to identify, prevent, mitigate and account for how they address their adverse human rights impacts, business enterprises should carry out human rights due diligence. The process should include assessing actual and potential human rights impacts, integrating and acting upon the findings, tracking responses, and communicating how impacts are addressed. Human rights due diligence should make particular efforts to track the effectiveness of their responses to impacts on individuals from groups or populations that may be at heightened risk of vulnerability or marginalization.



A comprehensive human rights assessment of a resettlement process involves, among others, the collection of:

- disaggregated baseline data on household organization, assets, living standards, productive activities and skills, incomes and access to basic services;
- disaggregated baseline data on household access to resources and opportunities, including sustenance and livelihood opportunities; educational and recreational facilities. Information on the barriers to accessing these resources and opportunities for all affected persons or particular groups is also collected;
- data on community organization and communal assets, productive activities, skills and resources; and
- data and studies on patterns of exclusion, marginalization and discrimination faced by affected persons, including for example affected women, children, disabled persons, the elderly, and ethnic and other minorities. Particular attention should be paid to the potential disproportionate impacts of displacement on vulnerable and marginalized groups such as women and the elderly. International requirements also state the significance of gender issues¹³.

TANAP will primarily cause economic displacement and in most cases, will do so temporarily. Although some land will need to be acquired permanently for the AGIs. It will nevertheless ensure that human rights concerns are addressed and required emphasis is given...

3.6 Comparative Analysis Between National and International Policies

The main gaps between Turkish Laws and World Bank Group Policies and the project-specific mechanisms to address the latter (to the extent possible) are summarized in the following table.

¹³ "In recent years, women's circumstances and opportunities have improved in many ways and in many countries, yet significant gaps remain. The World Bank's 2012 World Development Report *Gender Equality and Development* maintains that closing such gaps is both an important core development objective and "smart economics": "Greater gender equality can enhance productivity, improve development outcomes for the next generation, and make institutions more representative."

In updating the Sustainability Framework, gender requirements were strengthened and made more explicit. The Performance Standards address potential gender-differentiated aspects of impacts and opportunities, as well as gender-responsive consultation processes. They also highlight specific areas in which the private sector plays a unique role. Gender is an important aspect when communities might be or have been exposed to communicable diseases as well. This can have a higher impact on vulnerable groups which may include women in their roles as caretakers." *IFC's Sustainability Framework: From Policy Update to Implementation, December 2012*



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Table -6: Gaps between Turkish Legislation and World Bank Group Policies

World Bank Group Policies	Turkish Legislation	Project Specific Mechanisms to Bridge the Gaps
Identification of Potentially Adverse Impacts of Land Acquisition		
Adverse direct and indirect livelihood impacts of the land acquisition and other immovable assets identified and minimized. Lost livelihoods and decreased living standards are restored and improved.	There is no provisioning in the Turkish Law for livelihood restoration.	Host Government Agreement (HGA) confirms and reiterates international requirements.
Affected populations and impacts should be: <ul style="list-style-type: none"> • identified through thematic maps, a census, • an inventory of affected assets, • socio-economic surveys and studies, • analysis of surveys and studies, • consultation with affected populations. 	<p>Inventory of assets are required by Turkish Law. Land acquisition through expropriation requires the preparation of a census of affected immovable assets, and a list of their owners.</p> <p>No studies, surveys and consultations are required. Consultations for negotiated purchase of immovable assets are required by Article 8 of Expropriation Law.</p>	<ul style="list-style-type: none"> • An impacted assets inventory is prepared • Representative socio-economic household survey is conducted and qualitative social studies are done • Surveys, GIS and Corine database is analyzed • Consultations are carried out in different stages with a range of stakeholders. Extensive consultations will form the basis of willing buyer/seller arrangements
Physical Displacement		
Involuntary resettlement should be avoided or minimized where feasible.	There is no provision regarding the minimization of resettlement in Turkish Laws.	<ul style="list-style-type: none"> • All project specific alternatives are evaluated and the alternative that would result in a minimal level of physical resettlement is selected. • Dwellings are by-passed along the route thru engineering design.
All PAPs losing homes are entitled to resettlement	Resettlement entitlements are limited to certain categories of PAPs.	Effect on dwellings will be eliminated through design. If dwellings are affected, will



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World Bank Group Policies	Turkish Legislation	Project Specific Mechanisms to Bridge the Gaps
	Each nuclear family within affected dwellings is entitled to a resettlement home; this provisioning exceeds international standards.	be handled individually for each case in accordance with international principles.
Resettlement plans should be developed in cases where displacement is unavoidable.	No legal provisioning forces the project proponents to prepare social impact assessment and/or resettlement action plan under Turkish Law. Resettlement Law 5543 provides resettlement options to displaced PAPs by asking their preferences for urban versus rural resettlement.	<ul style="list-style-type: none"> Physical displacement is avoided as much as possible through engineering design. Should a few dwellings be within the final RoW or affected during construction, cases will be individually handled by meeting all requirements of international policies.
Homes and residential land will be compensated by use of replacement value. Amortization is not allowed. Rural, urban and residential land is compensated by use of market prices.	<p>Lost homes are not compensated by use of replacement value.</p> <p>Homes are compensated by use of their cost of construction with high quality material in the market.</p> <p>Amortization is taken into account.</p> <p>Residential land is compensated by its market prices, by using net capitalization method.</p>	<p>Replacement values without amortization will be used for structures and urban land will be compensated by use of market prices.</p> <p>Lands will be compensated using market values.</p>
Economic Displacement		
The loss of assets or access to assets that results in loss of income or other means of livelihood should be restored.	<p>Economic displacement is implicit in the Expropriation Law that allows compensation for lost assets based on discounted net income.</p> <p>Valuation of agricultural land, trees, vineyards etc. is based on Net income capitalization method and will</p>	The HGA reiterates international agreements.



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World Bank Group Policies	Turkish Legislation	Project Specific Mechanisms to Bridge the Gaps
	consider additional factors that may have an impact on the immovable asset.	
Displaced persons should be assisted in their efforts to improve their former living standards, income earning capacity and production levels, or at least to restore them.	Resettlement Law has provisions for livelihood restorations for those who opt for State assisted resettlement.	Income restoration is based on net income capitalization calculations for private land. RAP Fund will develop additional strategies and investments to restore income losses due to lost community resources and/or due to construction activities.
Economically displaced (loss of income as a result of land acquisition) PAPs and/or communities should be compensated and offered other assistance where required.	No legal provisioning is made in the Turkish legislation except for those that opt for State-Assisted Resettlement.	Fair compensation will be paid for immovable assets. TANAP and its contractors will ensure that the land used for the construction activities will be reinstated and given back to the owner. To restore /improve livelihoods RAP Fund will be used.
<p>Project related losses of the affected people should be compensated in full and in cash prior to the actual acquisition of immovable assets.</p> <p>All transaction costs should be paid.</p> <p>Not only title deed holders, but also customary owners, tenants, public land users and squatters are entitled to compensation.</p>	<p>Only the legal owners can receive monetary compensation (via the expropriation of lands).</p> <p>Users rights on public and private property are recognized due to recent changes in the Turkish Law. Traditional rights are recognized (with the exception of forest lands that do not recognize user rights).</p>	<p>All PAPs will be entitled to compensation, which will contribute to restoration of their livelihood to at least the levels previous to the project as per HGA.</p> <p>Market or full replacement values will be used where applicable.</p> <p>Owners as well as users will be compensated for assets.</p> <p>Damage to structures and crops will be compensated.</p> <p>RAP Fund will be used to cover damage</p>



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World Bank Group Policies	Turkish Legislation	Project Specific Mechanisms to Bridge the Gaps
		and to compensate all new assets required in the course of construction.
Common Property Resources		
International policies require compensation for livelihood losses of individuals and communities that result from acquisition of pasturelands.	No legal provisioning is made in the Turkish legislation. The pasture and meadow losses of the families or the associated income losses of villages cannot be compensated.	<p>During project implementation potential impacts will be investigated and compensation will be designed to be financed by the RAP Fund.</p> <p>TANAP will follow the methodology developed by Yıldız Technical University to compensate common losses.</p> <p>Compensation will be complemented with Community Development Programs in areas where livelihoods are affected as a result of reduced access to natural resources is affected. RAP Fund will be used to finance these activities.</p>
In cases where easement restricts a community's access to commonly held resources in forests such as non-timber forest resources (such as medicinal plants, construction or craft materials) and woodlots for timber and fuel wood the displacement must be compensated.	<p>There is an exception for forestland where, no compensation payments can be made to those who use these lands.</p> <p>Compensation for forest land is paid directly to the relevant government agency.</p>	TANAP will compensate the users of forest lands for the crops and other immovable assets that people might have planted or built on these lands as per HGA.
Monitoring and Evaluation		
Procedures to monitor and evaluate the implementation of a Resettlement Action Plan will be established.	No legal provisioning is made.	<p>Special emphasis will be placed for the monitoring of land related implications of construction activities as per HGA.</p> <p>TANAP will retain a recognized expert to verify its monitoring efforts shortly after the</p>



RESETTLEMENT ACTION PLAN (RAP) FOR TANAP PROJECT

World Bank Group Policies	Turkish Legislation	Project Specific Mechanisms to Bridge the Gaps
		<p>completion of the RAP.</p> <p>TANAP's RAP will incorporate monitoring of input, output, process, and impacts indicators and the use of internal, external and participatory monitoring arrangements.</p>
Grievance		
<p>A grievance mechanism will be established to receive and facilitate resolution of concerns and grievances of affected people and communities about the Project.</p> <p>In order to resolve concerns promptly, an understandable and transparent consultative process that is culturally appropriate and readily accessible should be used.</p> <p>Affected Communities and people will be informed about the grievance mechanism in the course of the stakeholder engagement process.</p>	<p>The use of a grievance mechanism is not provisioned.</p> <p>However reference can be made to the Law on the Use of the Right to Petition no 3071 and Law on the Right to Information No 4982</p>	<p>TANAP will establish a grievance mechanism to receive and facilitate resolution of concerns regarding resettlement issues as per HGA.</p> <p>Consultative arrangements will be made. Grievance mechanism will allow women to reach TANAP easily.</p> <p>Grievance mechanism will respond to the special needs of vulnerable people; the elderly and illiterate.</p>
Consultation / Participation		
<p>All people affected by land acquisition activities and other key stakeholders should be consulted and involved in resettlement planning.</p>	<p>There is no provision regarding to public participation in Turkish Laws.</p> <p>There is no requirement for Stakeholder Participation Plan.</p> <p>The Law of Notification ensures that all affected people are informed in writing.</p>	<p>Current international standards of Stakeholder Engagement will be met by TANAP as per HGA.</p> <p>A public consultation and disclosure plan will be established and implemented as per RAP is completed.</p>



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World Bank Group Policies	Turkish Legislation	Project Specific Mechanisms to Bridge the Gaps
<p>The resettlement site must be chosen through consultation with all displaced people and host communities.</p>	<p>The Resettlement Law allows consultation in the process of selecting the resettlement sites to those who opt for State-Assisted Resettlement.</p>	<p>Resettlement will be avoided as much as possible. If any homes are affected these are likely to be individual cases.</p>
<p>Consultation with affected population and officials of local government, civil society is essential for understanding the types and degrees of adverse effects.</p> <p>Project should ensure that;</p> <ul style="list-style-type: none"> • opportunity is created for all stakeholders to comment on the RAP, • all stakeholders to have access to project information, which is clear and understandable, • consultation locations are accessible to all who want to attend • vulnerable and minor groups are also consulted 	<p>The Expropriation Law requires consultations and negotiations with local government agencies and the private sector for the valuation of the immovable assets; this requirement instructs the expropriation agency to work together with all relevant local institutions, including branches of the Ministry of Food, Agriculture and Livestock, other government departments and real estate firms, as well as with the affected populations.</p> <p>For notification and communication with stakeholders, Notification Law details the process of notification for landowners and land users whose address are unknown as determined by the Notification Officer.</p> <p>There is no provision regarding to the participatory consultation process for the implementation of; also RAP is not a legal requirement.</p>	<p>TANAP will perform all stakeholder engagement activities according to the Stakeholder Engagement Plan developed for the Project as per HGA.</p> <p>This plan incorporates consultative requirements with regard to land acquisition.</p>
<p>Vulnerable Groups</p>		
<p>Compensation will be based upon consideration of restoration of affected livelihoods and living standards.</p>	<p>Living standards are not specifically considered.</p>	<p>Improvement of livelihoods and living standards are considered Inga.</p>



RESETTLEMENT ACTION PLAN (RAP) FOR TANAP PROJECT

World Bank Group Policies	Turkish Legislation	Project Specific Mechanisms to Bridge the Gaps
<p>Particular attention is to be paid to the needs of vulnerable groups, especially those below the poverty line, the landless, the elderly woman and children.</p>		<p>Compensation will be complemented with Community Development Programs in areas where livelihoods are affected as a result of reduced access to natural resources and where special vulnerabilities exist.</p> <p>The entitlements of landless users are recognized.</p> <p>Special effort is made to encourage female owners to attend to negotiations and to register their entitlements.</p>
Gender		
<p>International policies address gender-differentiated aspects of impacts and opportunities, as well as gender-responsive consultation processes.</p> <p>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.</p>	<p>Customary law in the Project areas may deny women the right to ownership and management of cultivated lands. These customs are not recognized by the Civil Law, which states that all siblings and extended family members, regardless of gender and age, have similar inheritance rights.</p>	<p>TANAP will ensure that compensation arrangements should be issued in the names of both spouses or heads of households.</p> <p>Project's consultation process will capture both men's and women's views, if necessary through separate forums or engagements.</p>
Human Rights		
<p>Human rights issues are embedded in resettlement planning.</p> <p>The sponsor should ensure that the safeguarding</p>	<p>There are no provisions in the Turkish laws.</p>	<p>Human Rights Issue is not specifically address by the HGA.</p> <p>TANAP will recognize HR principles.</p>



RESETTLEMENT ACTION PLAN (RAP) FOR TANAP PROJECT

World Bank Group Policies	Turkish Legislation	Project Specific Mechanisms to Bridge the Gaps
of personnel and property is carried out in accordance with relevant human rights principles and in a manner that avoids or minimizes risks to the Affected Communities.		



One important gap concerns the difference between the economically and physically affected people. These two categories are handled under different laws in the case of Turkey and those who have the right to compensation are not considered vulnerable or in need of assistance. Under the local legislative system, the social impacts, including those relating to land acquisition and displacement (or involuntary resettlement) are not treated systematically.

RAP will detail the land valuation methodology used and how it would reflect replacement cost. At the same time, procedures for acquisition of private and state owned land will be clearly defined, utilizing Land Acquisition Law of 2942 and Project specific regulations. RAP implementation procedures will define steps to avoid problems confronted by other projects, including those pertaining to absentee owners, missing titles, unregistered inheritance claims, incorrect title deeds, incomplete cadastral information, private use of forest and treasury etc.



4.0 OVERVIEW OF THE PROJECT AFFECTED POPULATION

4.1 Introduction

A socio-economic survey¹⁴ with 876 households was conducted in February 2014 to depict the Project Affected Household's (PAH) composition, their socio-economic wellbeing, their land and asset ownership and their land use patterns.

The aim of the socio-economic survey is to characterize the PAH's livelihoods, land use and asset ownership patterns, incomes and expenditures and their other land based earnings.

4.2 Survey Methodology

The surveys were conducted through a sampling¹⁵ from all Project affected parcels within the 48 meter study corridor (Revision F) (Table -7). The sample was extracted from the GIS database for 500 m parcel and owner data that was submitted to Golder by TANAP.

The survey included close ended questions as well as open ended questions. Open ended questions in the survey were analysed under frequency based main headings and recoded in SPSS.

In depth interviews¹⁶ with village headmen were held in 132 villages. The interviews were deciphered and then coded into SPSS in order to summarize the main findings. The results of the village headmen qualitative interviews are used in this chapter to complement the results of the socio-economic surveys.

Moreover, women's focus group meetings were conducted in 16 settlements to depict women's perception of economic displacement and their concerns regarding the TANAP Project. The women's focus group meeting results are discussed under the gender heading in this chapter.

As mentioned previously, the provinces affected by the pipeline have been divided into four homogenous regions for comparison purposes. Table 7 also presents the survey samples and number of village headmen interviews for each of the four regions.

¹⁴ Survey questions (household and settlement questionnaire, focus group discussion questions) presented in Annex 4.1.

¹⁵ Please see Annex 4.2 for further information on sampling and survey methodology.

¹⁶ Please see Annex 4.3 for summary tables generated from Village Headmen In-Depth Interviews



Table -7: Regions for Socio-Economic Survey Analysis

Region	Region Name	Provinces	Number of surveys	Number of Village headmen interviews
Region 1	Eastern Anatolia	Ardahan, Kars, Erzurum, Erzincan, Bayburt, Gümüşhane, Giresun	276	41
Region 2	Central Anatolia	Sivas, Yozgat, Kırşehir, Kırıkkale, Ankara, Eskişehir	404	65
Region 3	Western Anatolia	Bilecik, Kütahya, Bursa, Balıkesir, Çanakkale	165	23
Region 4	Thrace	Edirne, Tekirdağ	31	3
Total			876	132

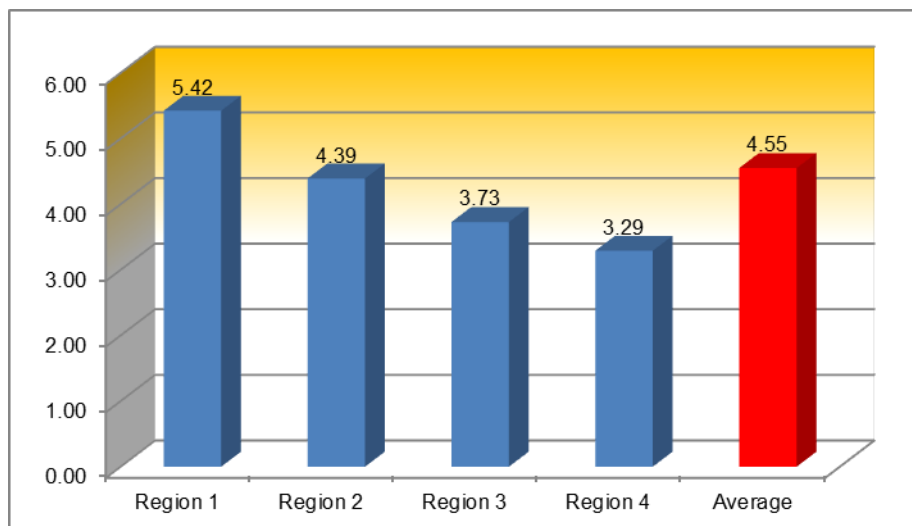
Source: Golder's Socio-Economic Field Study for RAP, February 2014

4.3 Household Socio-Economic Profile

4.3.1 Demographic Profile

Household composition varies according to the region; on average household size is 4.55¹⁷ among all PAHs. However, the household size decreases from East to West, with the highest household size recorded in Region 1 (Eastern Anatolia) with 5.42 and lowest seen in Region 4 (Thrace) with 3.29 (Figure 11).

Figure 11: Household Size by Region



Source: Golder's Socio-Economic Field Study for RAP - Household Survey, 2014

¹⁷ According to Turkish Statistical Institute's 2013 publication of household composition data, average household size 3.7. <http://www.tuik.gov.tr/PreHaberBultenleri.do?id=13662>



When the seasonal living patterns is analysed, it is observed that the majority of the PAHs live in their villages throughout the year (90 percent). In the regions 2 and 3 (Central and Western Anatolia) only 10 percent of the PAHs spend five to six months of their time in their village, and live elsewhere for the remaining time. The village headmen interviews revealed that the population of the villages increases during summer months. Turkish is spoken in all PAHs. In addition to Turkish, in Region 1 (Eastern Anatolia) and Region 2 (Central Anatolia) Kurdish is a spoken language. Tatar is spoken at only a handful of households in Region 2.

During the interviews with village headman, information on schooling facilities and number of students was obtained (Table 8). A number of schools were closed since the schools were combined in some of the settlements. However the government have been transporting the students to other settlements with free of charge shuttle services. Moreover, the schools in the settlements provide education until the end of grade 4, from grade 4 onwards; the children need to go the nearest school that provides secondary school education. On average, 17% of PAHs send their children to a school in the vicinity. Boarding schools are options for higher education; however the number of students that attend boarding school is significantly lower than the number of students that attend schools in the vicinity.

Table 8: Education Facilities by Region

	Number of settlements	Number of settlements that have schools in the region	Average number of students per settlement	Average number of households that send their children to schools outside the settlement	Average number of boarding school students per settlements
Region 1	41	31	197	25	13
Region 2	65	28	55	17	6
Region 3	23	11	89	25	6
Region 4	3	1	14	26	5

Source: Golder's Socio-Economic Field Study for RAP - Village headmen in-depth interviews, 2014

Health care in the Project affected settlements depends on the number of health care facilities and proximity to the nearest health centre. One-third of the settlements have a health care centre, and for those settlements that do not have health centres within the village, the proximity to the healthcare facility is on average 14 km (Table 9). The family doctors pay routine visits to the villages to screen the children's health and do vaccinations.

Table 9: Healthcare in the Project Area

	Number of settlements	Number of settlements that have healthcare facilities in the region	Proximity to the nearest healthcare centre (km)



Region 1	41	19	13
Region 2	65	12	17
Region 3	23	16	16
Region 4	3	2	11

Source: Golder's Socio-Economic Field Study for RAP - Village headmen in-depth interviews, 2014

4.3.2 Home and Amenities

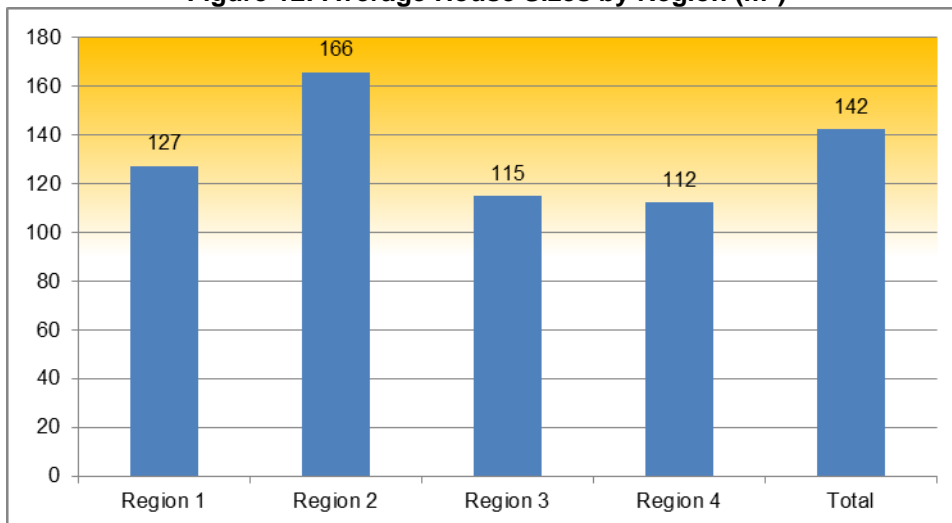
The TANAP Project is not expected to cause many physical displacements if any. Yet, the data on PAHs immovable asset ownership is assessed to understand their livelihoods and to provide information in case the Project finds residential units within the final RoW.

On average, the house size of PAHs is 142 m² (Figure 12) and most of the homes comprise four rooms. The smallest homes are in Region 4 - Thrace (112 m²) and the largest are in Region 2 – Central Anatolia (166 m²).

Majority of the PAHs (76 percent) have toilets in their homes, only a quarter of the PAHs stated that their toilet is outside their homes.

Ninety-five percent of the PAHs have access to a centralized water supply system.

Figure 12: Average House Sizes by Region (m²)



Source: Golder's Socio-Economic Field Study for RAP - Household Survey 2014

The interviews with village headmen illustrate that even though 95 percent of the PAHs have access to centralized water supply, they find the water quality poor. Especially in Region 1 (Eastern Anatolia), poor drinking water quality impacts more than a quarter of the PAHs. Overall, one third of the PAHs do not have access to centralized sewerage (Table 10). Settlements in Eastern Anatolia suffer the most from access to poor quality infrastructure. Electric cuts were voiced mostly in Western Anatolia (Region 3).



Table -10: Access to Infrastructure in Project Affected Settlements (% settlements)

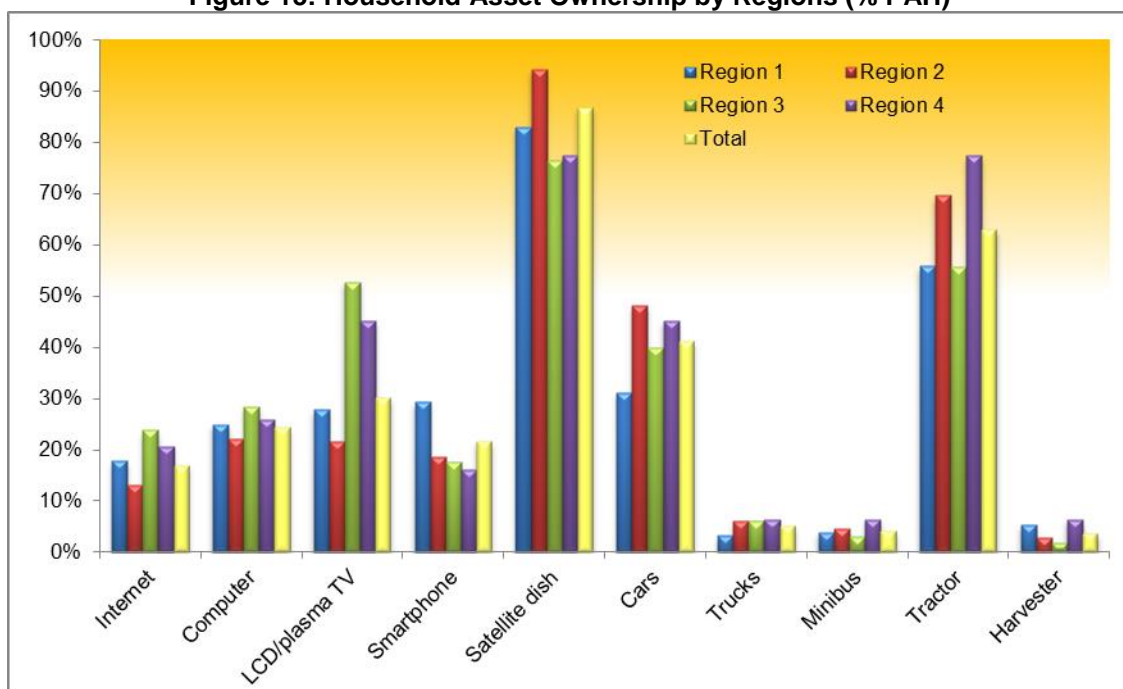
Regions	Number of Settlements	Lack of Centralized Sewerage	Intermittent Electric Supply	Poor Quality Drinking Water	Road Blocks in Winters Due To snow
Region 1	41	39%	66%	27%	54%
Region 2	65	38%	40%	18%	20%
Region 3	23	13%	87%	22%	22%
Region 4	3	0%	0%	0%	0%
Total	132	33%	55%	21%	30%

Source: Golder's Socio-Economic Field Study for RAP - Village headmen in-depth interviews, 2014

The utilization of satellite dishes are wide spread throughout the Project area (Figure 13). Ownership of tractors is also common which illustrates the importance of agriculture in the Project affected settlements. However, ownership of advanced agricultural equipment such as harvester is rarely seen in the Project area. Forty one percent of the PAHs own cars.

Access to computers and internet is limited. Close to 85 % of the PAHs do not have access to internet and 24% of the PAHs stated that they have a computer at home. Almost one-third of the PAHs have LCD screen or plasma screen TVs at home. The use of limited technology should be considered by the Project (both for informing and for handling grievances) while accessing PAHs. Since internet access is limited, other forms of media should be utilized for information dissemination.

Figure 13: Household Asset Ownership by Regions (% PAH)

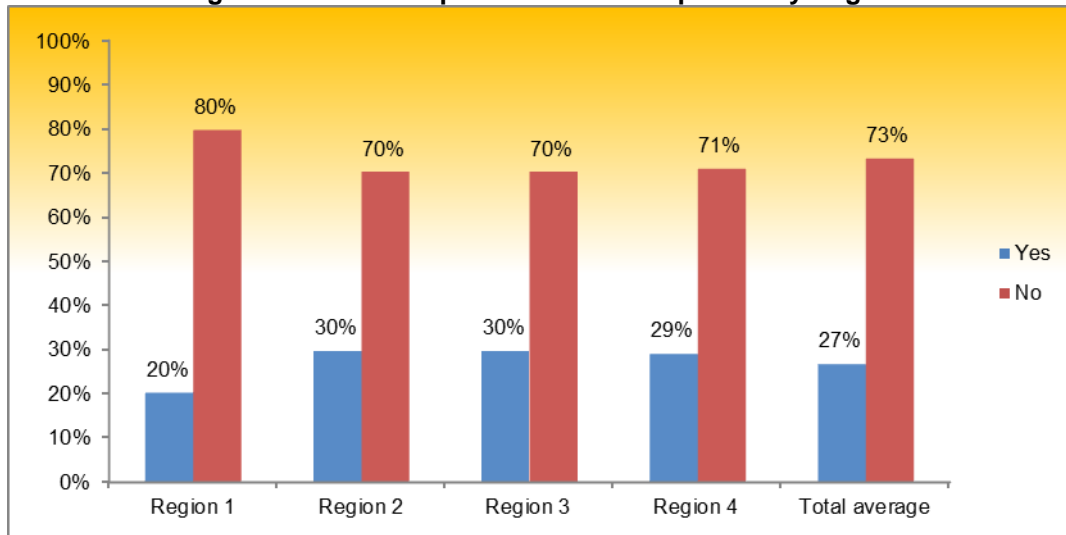


Source: Golder's Socio-Economic Field Study for RAP - Household Survey, 2014



The PAHs were also asked about their total immovable asset holdings. The survey included a question on ownership of additional properties such as summer homes, homes, offices etc. Except for Region 1 (Eastern Anatolia), on average almost one third of the PAHs own properties in addition to the one they currently use. Region 1 has the lowest rate of ownership of additional properties, with only one-fifth of the PAHs declaring ownership of such assets (Figure 14).

Figure 14: Ownership of Additional Properties by Region



Source: Golder's Socio-Economic Field Study for RAP - Household Survey, 2014

The survey asked about PAH's valuation of their homes¹⁸ (where their home and garden is), cost of rebuilding their homes if they were to rebuild it elsewhere, and total net value of their present assets. These figures reflect PAH's own perception on the financial value they consider that their assets are worth.

On average, value for homes and gardens of existing property is estimated around 119,216 TL (Table 11). Cost of rebuilding the same home is similar to the existing value except in Region 3 and Region 4 (Western Anatolia and Thrace). The difference in value could be due to the age of the home, even though the current home may be low in value because it is an old or outdated structure, a replacement house (at replacement cost) would have high building costs.

Valuation of the PAHs total assets on average is 362,889 TL. The lowest total asset value is rated in Region 1 (Eastern Anatolia) with 294,732 TL and the highest is priced in Region 4 (Thrace) with 423,294 TL.

¹⁸ The question includes all immovable assets such as barns, homes, garden, orchard, that are currently present in the PAH's home parcel.



Table -11: Home and asset valuation according to the PAHs (TL)

Regions	Land value of the home and garden plot (TL)	Cost of rebuilding the same home (TL)	Cost of acquiring all immovable assets (land, home, orchards)(TL)
Region 1	129,916	112,352	294,732
Region 2	123,634	117,750	418,923
Region 3	95,388	129,196	401,789
Region 4	68,519	153,889	423,294
Average	119,216	119,236	362,889

Source: Golder's Socio-Economic Field Study for RAP - Household Survey, 2014

Note that these prices may have been inflated by PAHs. This information on costs is meant to inform the reader on the perceived values by the PAHs and should not be used to calculate compensations. Only market prices and valuation at replacement cost (without depreciation) could be used to calculate compensations.

4.4 Land and Immovable Assets

4.4.1 Parcels Characteristics

According to the survey results, almost 60 percent of the land impacted by the TANAP Project is rain-fed, and 40 percent of the land is irrigated. Fifty-nine percent of the PAHs stated that they have more than one parcel impacted temporarily or permanently by TANAP Project's land acquisition¹⁹. Only 18 percent of the PAHs stated that they have trees in the parcel impacted by the Project. There are on average 122 trees per parcel on the "parcels with trees". On average for parcels with trees/orchards/vineyards, 987 m² has trees/orchards or vineyards on it, which comprises 3 percent of the total parcel size of the PAH (Table 12).

Table -12: Affected Parcel Size (ha) and Ratios

Regions	Total Parcel size (ha)	Impacted parcel size along the 48 m study corridor	Impacted parcel size (ha) along the 36 m construction corridor	Ratio of impacted parcels along the 36 m construction corridor (%)	Impacted parcel size (ha) along the 16 m corridor	Ratio of impacted parcels along the 16 m corridor (5)	Average parcel size with trees/ Orchards/vineyards (m ²)	Parcel with trees/ Orchards/ Vineyards (%)
Region 1	5.75	0.41	0.28	5%	0.13	2	624	1
Region 2	3.51	0.35	0.24	7%	0.11	3	841	2

¹⁹ Note that this information is a general characterisation of the parcels and that that only the results of the inventory carried out by TANAP can identify the real project impacts within the RoW.



Region 3	1.59	0.26	0.18	11%	0.08	5	2071	13
Region 4	1.73	0.25	0.18	10%	0.08	5	418	2
Total average	3.79	0.35	0.24	6%	0.11	3	987	3

Source: Golder's Socio-Economic Field Study for RAP - Household Survey, 2014

4.4.2 Ownership Structure

In order to understand the impact of loss of impact caused by land acquisition on the PAHs, it is critical to understand the parcel's ownership structure. The higher the number of shareholders in a parcel, the more difficult it is to acquire the parcel through willing buyer seller negotiations²⁰. Furthermore, sharing land compensations with a high number of shareholders makes it impossible for the actual user of the parcel to fully restore the income derived from the parcel if the income is divided amongst all shareholders like it is prescribed by the Turkish Law²¹. Therefore, in cases where the compensations are shared amongst high number of shareholders, it is vital to understand the land's usage patterns.

Actual users of the land need to be compensated according to livelihood losses, since their compensation for the loss of land will not be enough to recover their livelihoods, due to sharing the compensation multiple shareholders.

According to the results of the survey, one third of the PAHs have sole ownership, 17 percent of the PAHs share the parcel they own with two to four other persons, and almost half of the PAHs share the affected parcels with five or more shareholders (Figure 15).

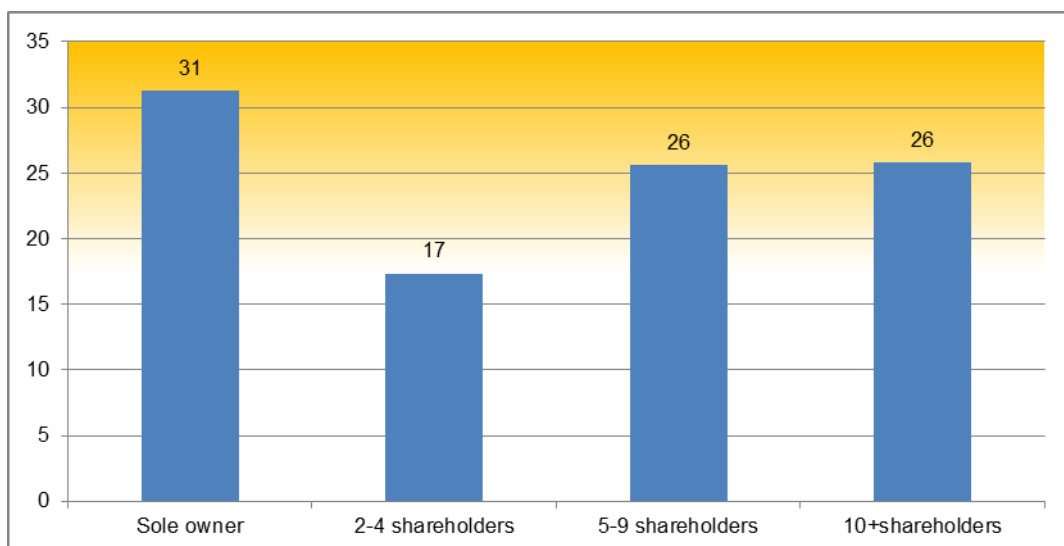


Figure 15: Number of shareholders per parcel (% HH)

²⁰ According to survey results, the highest number of owners per parcel is 322. When the number of shareholders is high, it is difficult to reach a consensus amongst all owners. Almost a quarter of the PAHs have parcels shared by more than 10 PAHs.

²¹ TANAP plans to compensate the loss of income to the actual user. See entitlement matrix in section 6.9.

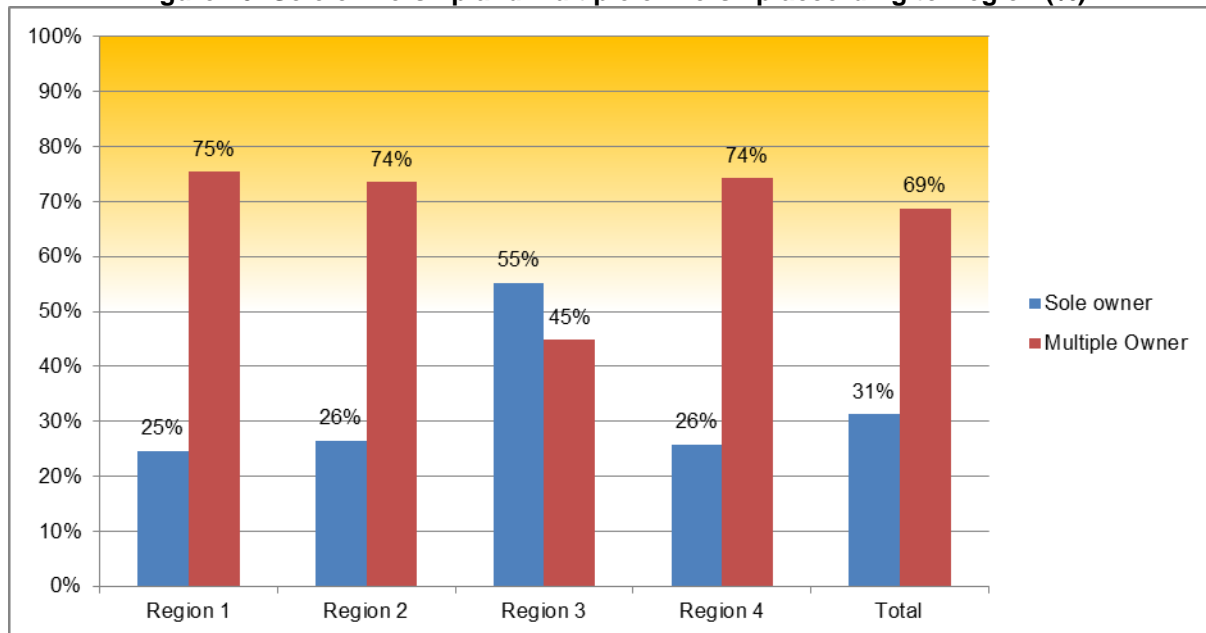


Source: Golder's Socio-Economic Field Study for RAP - Household Survey, 2014

Regional survey results indicate that the four regions are relatively homogenous, but that Region 3 presents the highest proportion of PAHs (55 %) that have sole ownership on their land (Figure 16).



Figure 16: Sole ownership and multiple ownership according to Region (%)



Source: Golder's Socio-Economic Field Study for RAP - Household Survey, 2014

4.4.3 Impacts on Land

The analysis of the parcel size impacted by the Project, illustrates that on average PAHs will temporarily lose access to almost 9 percent²² of their immovable assets during construction. Nonetheless, the PAPs will be able to re-use their land once the construction is complete. Parcel sizes are the largest in Region 1 (Eastern Anatolia), and smallest in Region 3 (Western Anatolia). The highest parcel areas impacted by the Project are of 0.4 ha for Region 1 (Eastern Anatolia) and of 0.25 ha for Region 4 (Thrace). In Region 3, the ratio of the impacted parcel size to the total parcel size is higher (16%) because the average sizes of the parcels impacted are smaller. Moreover, 86 percent of the PAHs have additional land or parcels that they utilize other than the parcel impacted by the Project.

According to the survey results, PAHs own an average of 11.8 ha of land in addition to the parcel affected by the Project (Table 13). Therefore, when compared to total land holdings of the PAHs, the amount of land affected by the Project is less significant.

²² This figure illustrates the ratio of the land impacted by the Project to the total parcel size in the Project study corridor. The figures for total parcel size and land impacted are taken from the GIS Database for 500 m parcel and owner data provided by TANAP. At the time of the study, data on AGI locations was not available. Therefore, the socio-economic study does not include information on permanent land loss on the AGI locations.



Table -13: Average Hectares of Land Owned by PAHs in addition to Affected Parcels

	Total Additional land (ha)	Household number
Region 1	12.3	276
Region 2	14.5	402
Region 3	5.4	165
Region 4	7.3	31
Average	11.8	874

Source: Golder's Socio-Economic Field Study for RAP - Household Survey, 2014

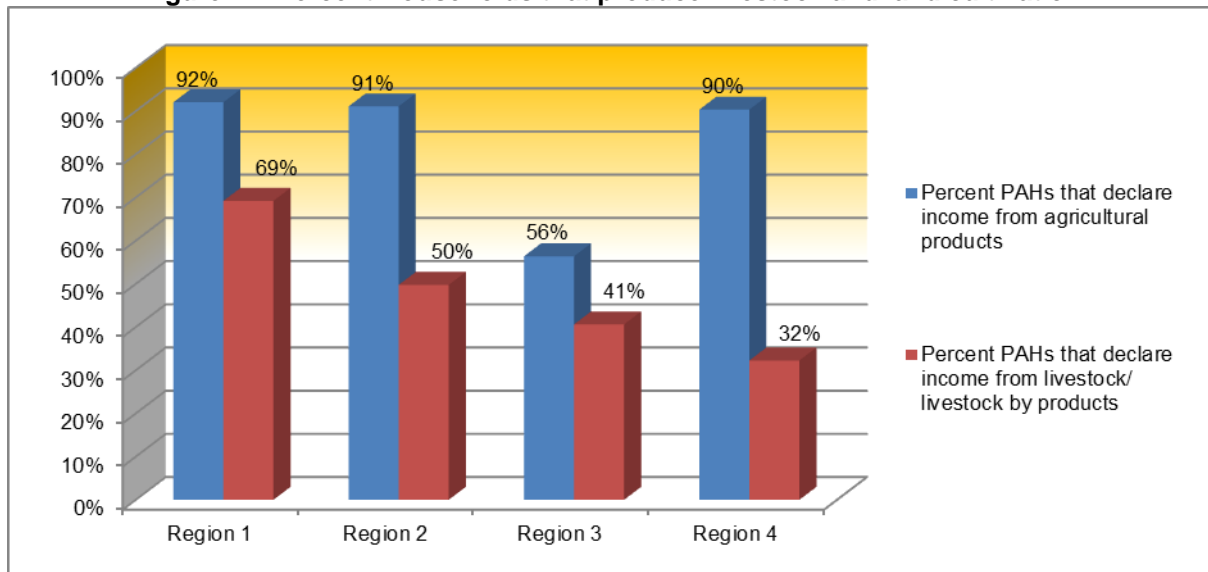
4.5 Agriculture

The TANAP Project crosses through predominantly rural areas. The land use patterns of the PAHs vary according to the region they reside in. Rural land based economic activities form the backbone of the local economy. Agricultural production is a significant source of income. Overall on average 85 percent of the PAH have declared annual income from sale of agricultural produce (Figure 17).

Except for Western Anatolia (Region 3) where agricultural production is around 56 percent, in Eastern Anatolia (Region 1), Central Anatolia (Region 2), and Thrace (Region 4), agricultural production is more than 90 percent. Livestock production is an important livelihood activity especially in the eastern provinces. There is a decreasing trend for engaging in livestock production from East to West Anatolia. The village headmen interviews also reveal the same pattern. Majority of the headmen in settlements in Eastern Anatolia and Central Anatolia mentioned livestock production as the key agricultural activity, whereas in Western Anatolia and Thrace, crop cultivation was the main income generating agricultural activity.



Figure 17: Percent Households that produce livestock and land cultivation



Source: Golder's Socio-Economic Field Study for RAP - Household Survey, 2014

4.5.1 Crop Cultivation

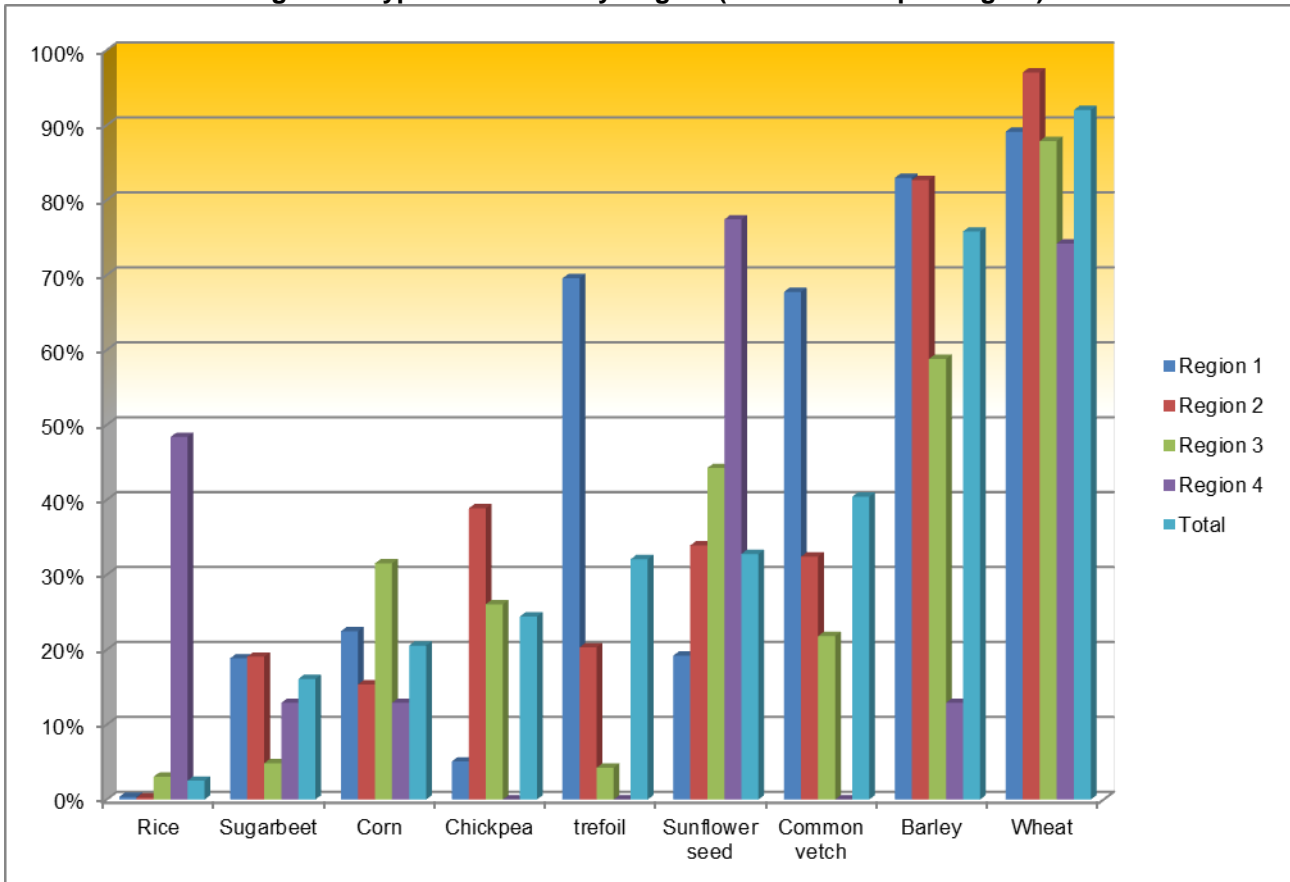
The type of produce also depends on the location of the affected land. Wheat is the most cultivated crop amongst the regions except for Thrace (Region 4) where the number of PAHs engaging in sunflower seed production exceeds those of wheat production. The village headmen interviews also revealed that grains (wheat, barley) are the most cultivated crops. Overall 92 percent of the PAHs stated that they cultivate wheat (Figure 18). Barley is the second most cultivated plant in the Project area, more than three quarters of the PAHs plant barley (76 percent).

Products that are used as animal feed such as common vetch and trefoil are cultivated the most in Region 1 - Eastern Anatolia (almost 70 percent), followed by Region 2 - Central Anatolia. Animal feed cultivation does not exist at all in Region 4 - Thrace.

However, rice is cultivated predominantly in Thrace and is negligible in Eastern and Central Anatolia. High income generating cash crops such sugar beet, corn and sunflowers are cultivated across all regions by less number of PAHs. Sugar beet is grown by almost one fifth of the PAHs in Eastern and Central Anatolia; whereas corn is produced by one third of the PAHs in Western Anatolia. The number of PAHs growing sunflowers increases significantly from East to West. Nineteen percent of the PAHs engage in sunflower cultivation in Eastern Anatolia, whereas in Western Anatolia the percentage doubles. The highest number of PAHs engaged in sunflower production is seen in Thrace. Chickpeas are produced the most in Central Anatolia (39 percent), followed by Western Anatolia (26 percent). When compared to wheat and barley, fewer PAHs engage in producing vegetables. Vegetables such as tomatoes are cultivated mostly in Thrace (29 percent).



Figure 18 Type of Produce by Region (% Producers per Region)



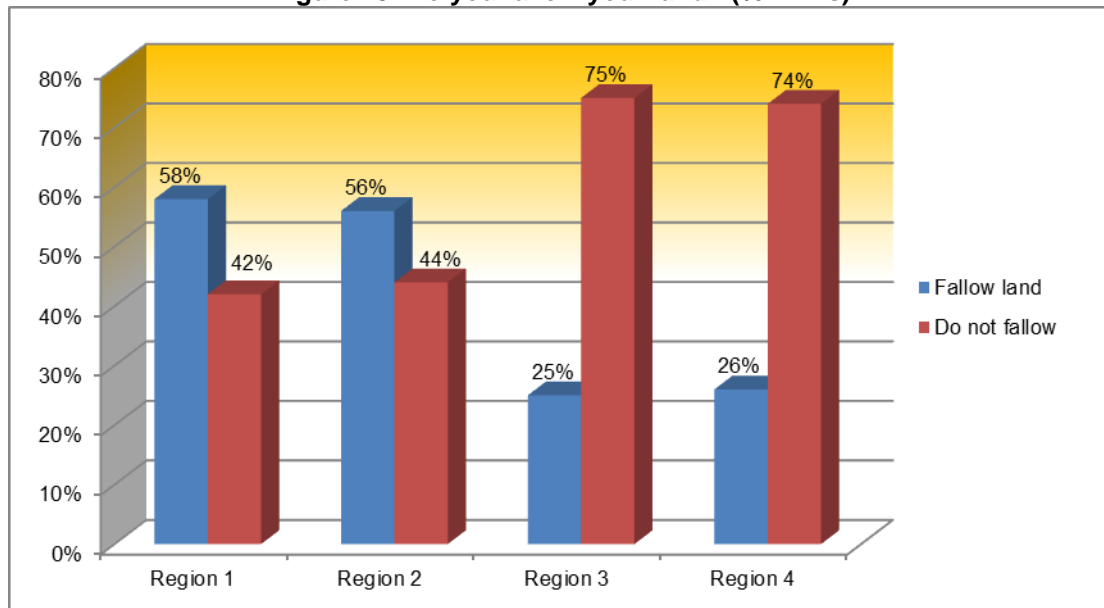
Source: Golder's Socio-Economic Field Study for RAP - Household Survey, 2014

4.5.2 Land Fallow Status

Majority of the PAHs cultivate their land annually, receive produce once a year (89 percent). Overall only 10 percent of the PAHs cultivate their land twice a year. Thrace is the only region where almost one-third of the PAHs cultivate twice a year. In order to receive higher yields, traditionally PAPs leave their land for fallowing every other year. In the Project area, fallowing is common especially in Region 1 (Eastern Anatolia) where 58 percent of the PAHs leave their land as fallow (Figure 19). In Western Anatolia (Region 3) and Thrace (Region 4) the fallowing rates are significantly lower. Only one quarter of the PAHs declare that they leave their land as fallow. The PAHs that leave their land as fallow, can only gain income from agricultural produce for a year. They utilize the annual income for two years to compensate for the fallow period. It is essential to understand the impact of fallowing for the PAHs annual income. If the construction takes place during a cultivation designated season, PAHs livelihoods may be adversely impacted by the timing of the construction. In order to mitigate any adverse impacts, the Project will compensate the PAHs accordingly.



Figure 19: Do you follow your land? (% PAHs)



Source: Golder's Socio-Economic Field Study for RAP - Household Survey, 2014

4.5.3 Irrigation

The survey posed two questions on irrigation status of the land. The first question was on if the parcel impacted by the TANAP Project was being actively irrigated and the second question was on the availability of irrigation facilities on the impacted parcel. The availability of irrigation does not necessarily indicate that the land is being actively irrigated.

According to the results of the survey, 40 percent of the PAHs stated that they are irrigating their land actively (Figure 20). However, when the PAHs were asked if there were irrigation facilities available, 22 percent declared that there are no irrigation facilities available (Table 14). Overall, 78 percent of the PAHs have said that their land could be irrigated using the existing infrastructure. The most common irrigation method is irrigation channels. Others category includes irrigation using nearby dam reservoir, village fountain, water pumps, boreholes, and water trucks (Figure 21).

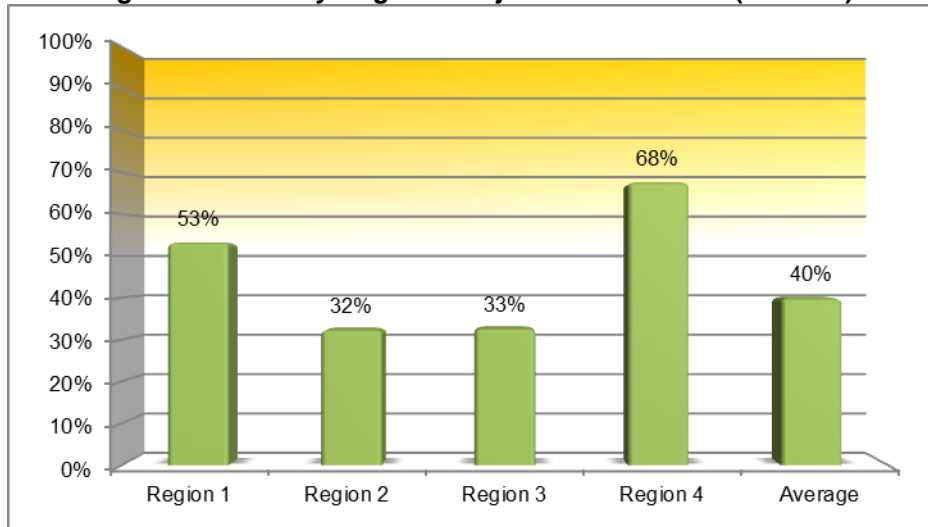
Table -14: Irrigated and non-irrigated impacted land (number of PAHs)

	Region 1	Region 2	Region 3	Region 4	Total
Land with Irrigation potential	191	320	148	24	683
Land Actively Irrigated	147	131	54	21	353
Land with no irrigation potential	85	84	17	7	193
Total PAPHs with no active irrigation	129	273	111	10	523

Source: Golder's Socio-Economic Field Study for RAP - Household Survey, 2014

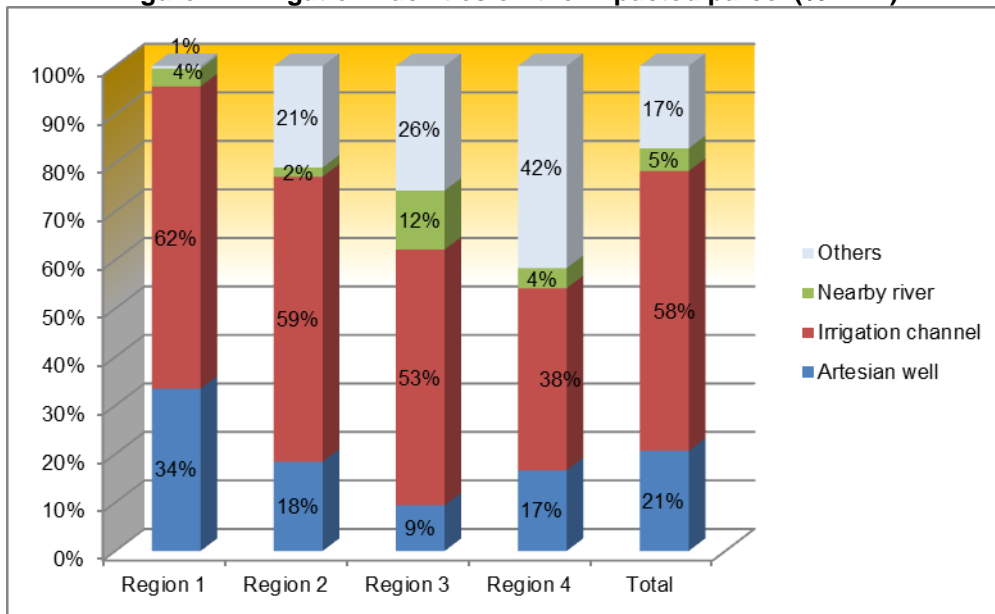


Figure 20: Actively Irrigated Project Affected Land (% PAHs)



Source: Golder's Socio-Economic Field Study for RAP - Household Survey, 2014

Figure 21: Irrigation Facilities on the impacted parcel (% PAH)



Source: Golder's Socio-Economic Field Study for RAP - Household Survey, 2014

On average, the size of the irrigated land to be acquired by the Project is 3.215 decares. Eastern Anatolian (Region 1) has the largest average irrigated impacted parcel size whereas Thrace (Region 4) has the lowest average impacted parcel size (Table 15). When irrigation in additional land is assessed, Eastern Anatolia also has the largest irrigated land size in their additional land.



Table -15: Irrigated parcel size by Region (decares)

Regions	Average size of the parcels impacted by the project and irrigated (da)	Household NumberN	Average size of the additional lands not impacted by the project and irrigated (da)	household Number
Region 1	3.66	146	87.09	131
Region 2	2.89	131	60.12	186
Region 3	3.04	54	36.22	78
Region 4	2.55	21	61.33	24
Total Average	3.22	352	64.17	419

Source: Golder's Socio-Economic Field Study for RAP - Household Survey, 2014

The village headmen interviews also revealed that almost three quarters of the settlements have irrigation potential, either by irrigation channels, or use of wells, nearby water sources (Table 16). Amongst those settlements that have irrigation, on average less than half of the land is being irrigated.

Table -16: Settlement based Irrigation information

Regions	Number of Settlements	Number of Settlements with Irrigation	For settlements that irrigate % Irrigated Land/Total land
Region 1	41	31	45%
Region 2	65	49	33%
Region 3	23	16	42%
Region 4	3	3	44%
Total of Settlements	132	99	Average 41%

Source: Golder's Socio-Economic Field Study for RAP - Village headmen in-depth interviews, 2014

4.5.4 Trees / Orchards / Vineyards

The PAHs were also asked about the trees/vineyards and orchards on the parcel that will be impacted by the Project. Only 18 percent of the respondents stated that they have trees planted on the impacted parcel (156 PAHs). The number of trees on each parcel varies significantly. Majority of the respondents have less than 10 trees on their parcels (Table 17)²³.

Trees are categorized under fruit²⁴ trees and non-fruit trees. The PAHs with more than 50 trees on the impacted parcel corresponds to around 3 percent of the total PAHs. Average number of fruit

²³ Note that only the TANAP inventory can identify the affected trees. Trees declared in this survey may be on portion of parcels that will not be affected by the project.

²⁴ Fruit trees include sourcherry, apricot, pear, cherry, quince, plum, apple, fig and peach. Non-fruit trees include oak, linden, poplar, pine. Cedar, spruces are considered among forest trees. Vineyards, olive trees, and citrus trees are also used as separate categories. None of the respondents declared ownership of citrus trees. There were only 6% of PAHs with olive trees, 4.5% of PAHs that have cedar trees and 4.5% of PAHs with a few grapes.



trees owned is 36 per PAH that has trees. Average number of non-fruit trees owned per PAH that has tree ownership is 42.

Table -17: Tree ownership (Number of PAHs)

Number of trees owned	Number of PAHs owning fruit Trees	Number of PAHs owning non-Fruit trees
10 trees or less	109	95
11-50 trees	22	35
51-100 trees	10	13
100 and more trees	15	13

Source: Golder's Socio-Economic Field Study for RAP - Household, Survey 2014

4.5.5 Sharecropping

The PAHs were also asked about the land leased or used in addition to the land owned by the PAH. If the PAHs use private land, they pay an annual rental fee to the owner of the land. They may also use the land as a sharecropper by receiving a share of the annual produce either as cash once the product is sold, or as product. On average 60 percent of the PAHs use additional land as a user or sharecropper. Average size of land used for sharecropping is 18.2 ha (Table 18). Price paid for sharecropping varies significantly depending on the region. On average 3,134 TL per hectare is paid for sharecropping.

Table -18: Average Land used as Sharecropper / user

	Average size of land (ha)	Number of PAHs	Price paid per hectare (TL/ ha)
Region 1	14.9	186	7,112
Region 2	21.9	268	1,070
Region 3	12.4	37	2,682
Region 4	10.4	21	16
Average total	18.2	512	3,134

Source: Golder's Socio-Economic Field Study for RAP - Household Survey, 2014

4.5.6 Agricultural Organisations

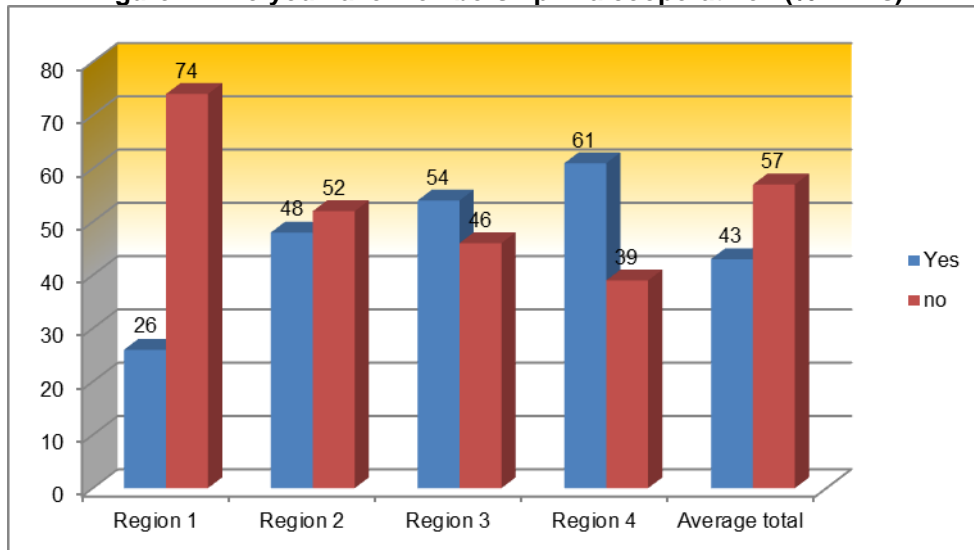
Local cooperatives are important instruments for rural development. Membership to cooperatives - if managed properly - provides opportunities for the farmers to reach scalability, especially considering the limited land size and livestock size per household.

According to the results of the survey, on average less than half of the population is member of a cooperative (Figure 22). In Eastern Anatolia (Region 1), this figure falls down to a quarter of the population, where as in Thrace (Region 4) 60 percent of the PAHs are members of a cooperative.



The type of cooperative depends on the produce, e.g. the sugar beet producers have stated that they are members of sugar beet coop. Most of the PAHs are members to Rural Development, or Agricultural Credit Cooperatives. Only a few PAHs mentioned membership to irrigation cooperatives (Table 19).

Figure 22: Do you have membership in a cooperative? (% PAHs)



Source: Golder’s Socio-Economic Field Study for RAP - Household Survey, 2014

Table -19: Types of Cooperatives by Regions

List of Coops	Number of Coops				
	Region 1	Region 2	Region 3	Region 4	Total
Livestock Unions	2	2	2	0	6
Tradesmen Guarantee Coop	0	0	2	0	2
Agricultural Sales Coop	0	1	12	0	13
Dairy collection coop	2	3	5	0	10
Forest coop	0	0	1	0	1
Sugar beet Coop	13	14	6	0	33
Irrigation Coop	1	5	1	2	9
Agricultural credit coop	16	23	16	3	58
Transportation Coop	1	1	0	0	2
Producers Union	0	0	0	1	1
Rural Development Coop	14	16	18	4	52
Chamber of Agriculture	0	3	2	0	5
Total	49	68	65	10	192

Source: Golder’s Socio-Economic Field Study for RAP - Household Survey, 2014

4.6 Livestock Production

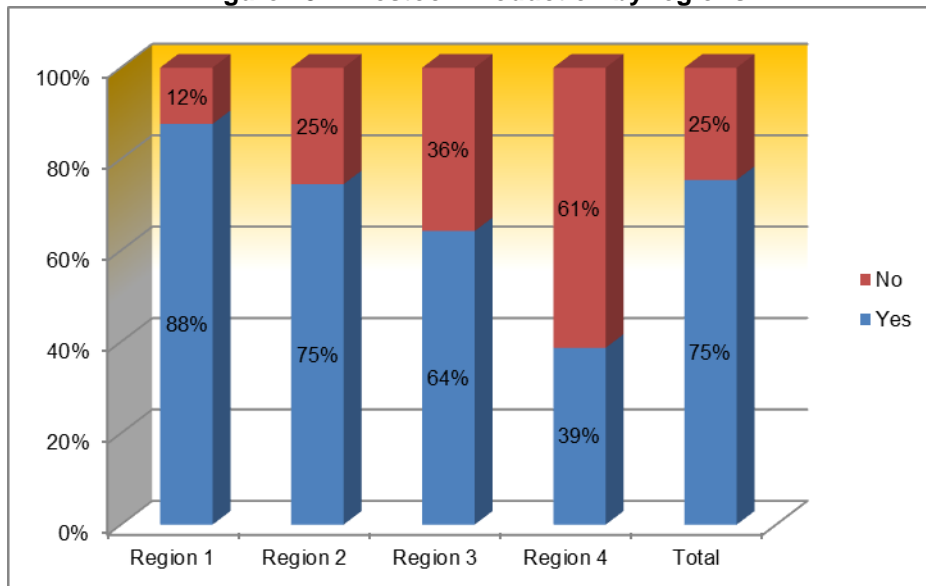
Livestock production is an important activity. According to the results of the survey 75 percent of the PAHs are engaged in livestock production. Livestock production is the highest in Region 1 - Eastern Anatolia (88 percent) and the lowest in Region 4 - Thrace (39 percent) (Figure 23).



RESETTLEMENT ACTION PLAN (RAP) FOR TANAP PROJECT



Figure 23: Livestock Production by regions



Source: Golder's Socio-Economic Field Study for RAP - Household Survey, 2014

The average number of livestock owned per household varies according to the type of livestock and the region. On average PAHs in Eastern Anatolia (Region 1) have the highest number of cows owned per household, whereas PAHs in Central Anatolia (Region 2) have the highest number of sheep. According to the results of the survey, 40 PAHs (4.5 %) are engaged in beekeeping, and more than half of these PAHs reside in Central Anatolia (Table -20).

Table -20 Average size of livestock owned per household

Regions	Cow	Bull	Sheep	Goat	Poultry	Beehive
Region 1	15	4	4	1	12	2
Region 2	8	2	37	6	15	1
Region 3	9	1	9	0	12	0
Region 4	7	1	14	1	13	5
Average	11	2	20	3	14	1

Source: Golder's Socio-Economic Field Study for RAP - Household Survey, 2014

4.6.1 Cattle

According to the results of the survey 269 PAHs (31 %) are engaged in cattle production. Even though the number of cattle owned by the PAHs varies according to region, most of the PAHs have less than 10 cattle except for Region 1 – Eastern Anatolia (Table -21). More than half of the population in Region 1 have more than 11 cattle per household (Figure 24). However, large herds of cattle are not common in the Project area. Only 2 percent of the PAHs in the Western Anatolian (Region 3) have declared ownership of more than 50 cattle.

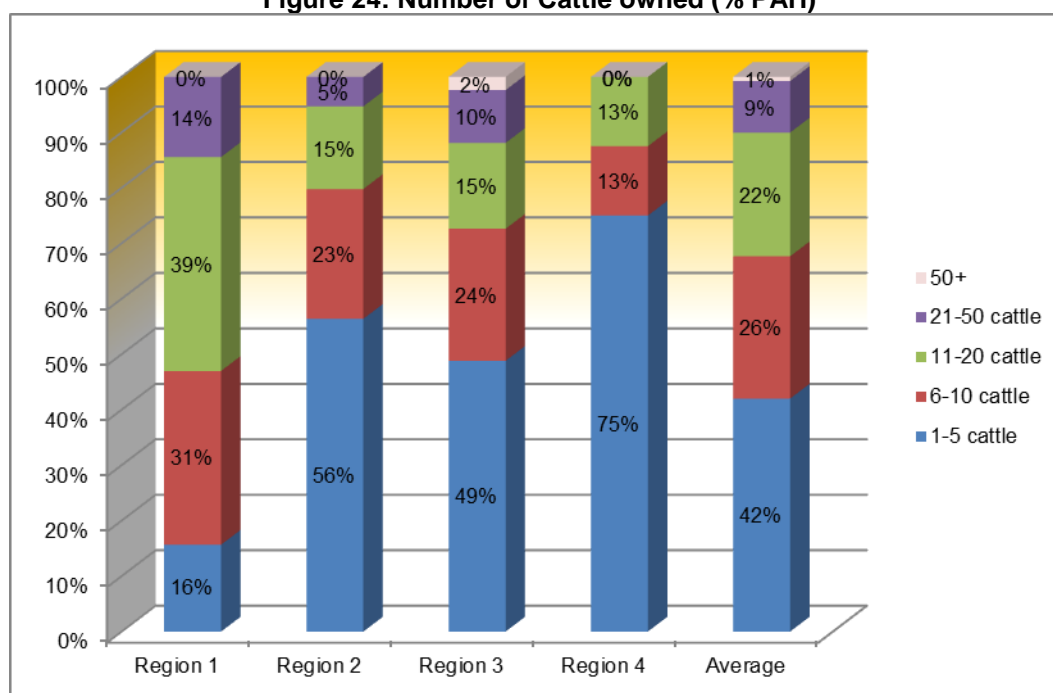


Table -21: Mean number of cattle produced per PAH

Regions	Mean # of cattle produced per PAH	Total # of household that produce	Total # of interviewed households
Region 1	15,4	83	276
Region 2	8,1	94	404
Region 3	9,4	84	165
Region 4	7,3	8	31
Average total	10.3	269	876

Source: Golder's Socio-Economic Field Study for RAP - Household Survey, 2014

Figure 24: Number of Cattle owned (% PAH)



Source: Golder's Socio-Economic Field Study for RAP - Household Survey, 2014

4.6.2 Sheep/Goats

The number of sheep/goats owned per PAHs on average is higher than the number of cattle. According to survey results 95 PAHs (11 %) keep sheep. Especially in Region 2 – Central Anatolia, amongst the PAHs that produce sheep, 72 percent have more than 50 sheep in their herds and the average number of sheep is 42 (Table -22 and Figure 25). The smallest number of sheep owned per PAH is observed in Region 1 – Eastern Anatolia.

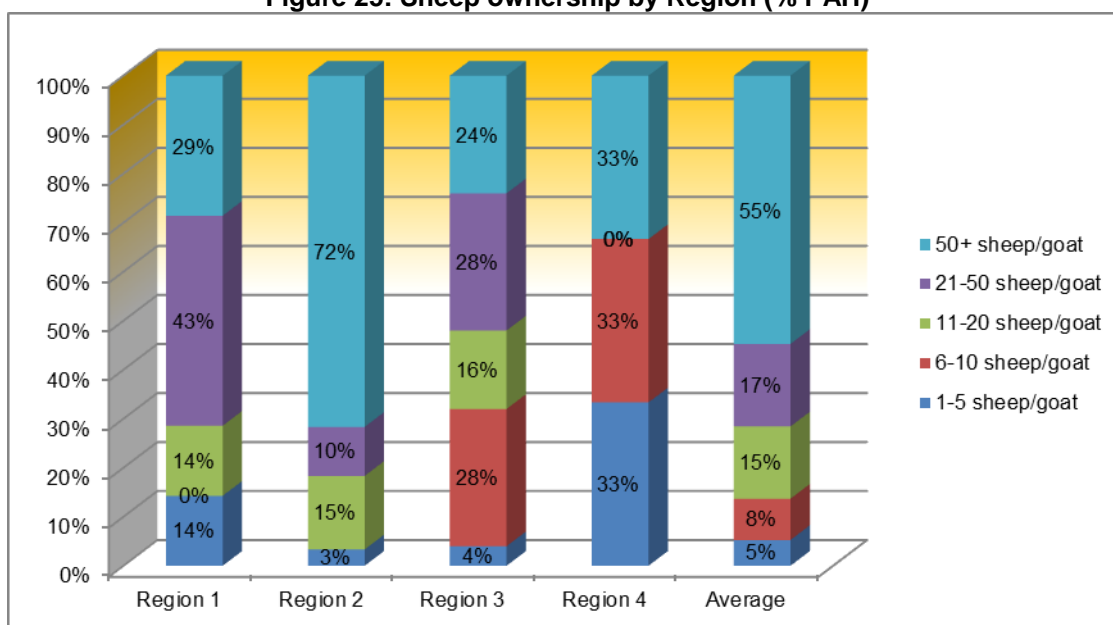


Table -22: Number of Sheep kept per PAH

Regions	Mean # of sheep kept per PAH	Total # of PAHs that keep sheep	Total number of interviewed households
Region 1	36.3	7 (2.5%)	276
Region 2	100.3	60 (14.8%)	404
Region 3	38	25 (15.2%)	165
Region 4	53.3	3 (10%)	31
Average total	77.7	95 (10.8%)	876

Source: Golder's Socio-Economic Field Study for RAP - Household Survey, 2014

Figure 25: Sheep ownership by Region (% PAH)



Source: Golder's Socio-Economic Field Study for RAP - Household Survey, 2014

4.6.3 Poultry

Poultry is widely kept by PAHs. Approximately 49 percent of PAHs have stated that they keep poultry; the PAHs keep 18 poultry on average (Table 23). Poultry is kept mostly for family consumption; yet there are a number of PAHs that keep poultry for larger scale production. The highest number of poultry is kept in Western Anatolia (Region 3) yet by fewer PAHs.

Table 23: Poultry keeping by Regions

Regions	Mean number of poultry kept per PAH	Number of PAHs that keep poultry	Number of PAHs that engage in poultry trade
Region 1	12,48	167 (60.5%)	21 (7.6%)
Region 2	15,22	227 (56.2%)	21 (5.2%)
Region 3	11,94	23 (13.9%)	3 (1.8%)
Region 4	13,08	9 (29.0%)	0 (0.0%)



Regions	Mean number of poultry kept per PAH	Number of PAHs that keep poultry	Number of PAHs that engage in poultry trade
Average total	13,61	426 (48.6%)	11 (1.2%)

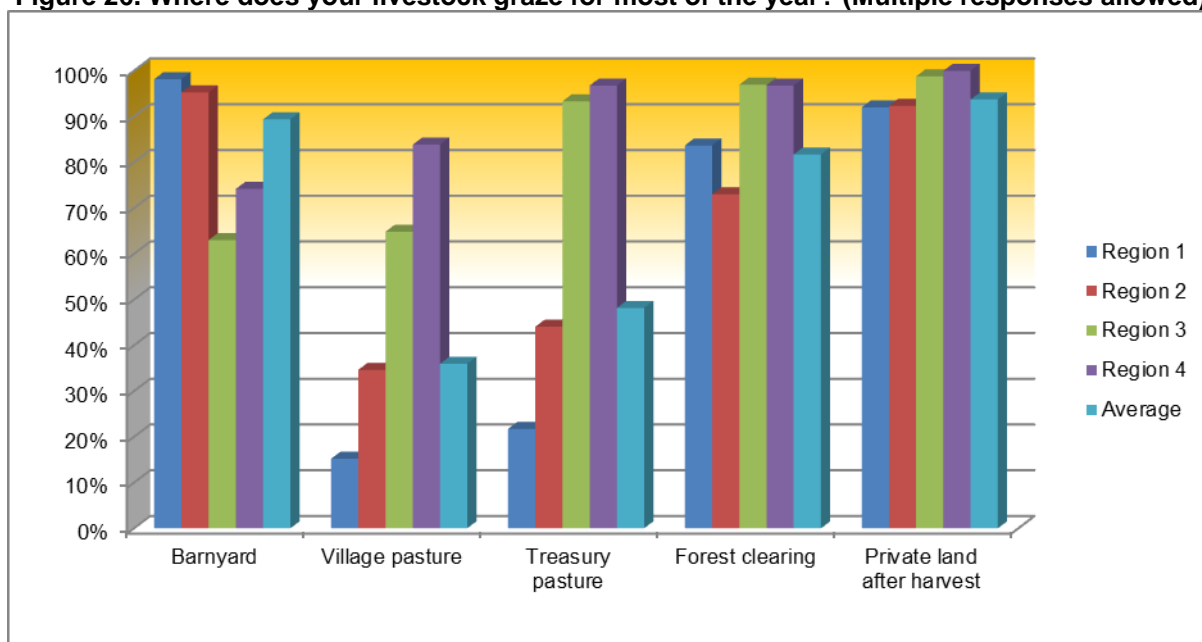
Source: Golder's Socio-Economic Field Study for RAP - Household Survey and Village Headmen In-depth Interviews, 2014

4.6.4 Grazing Livestock

An important component of livestock production is feeding of the livestock. In order to understand feeding patterns, the PAHs were asked a question “Where does your livestock graze for most of the year?”

The results of the survey illustrate that the PAHs use multiple feeding grounds (Figure 26). In Region 1 (Eastern Anatolia), PAHs use their barnyard, followed by their private land; and take their livestock to forest clearing. Pasture use is uncommon in Region 1. Yet in Region 3 (Western Anatolia) and Region 4 (Thrace) pasture use is more prevalent than the use of barnyards. This could be due to the weather conditions and varying productivity of the pastures. As the winters are longer and colder in Eastern and Central Anatolia, livestock have to be kept at barnyards for a longer period of time. Milder climate of Western Anatolia and Thrace allow the livestock to be kept outdoors for longer periods.

Figure 26. Where does your livestock graze for most of the year? (Multiple responses allowed)



Source: Golder's Socio-Economic Field Study for RAP - Household Survey, 2014

4.6.5 Income from Livestock Production

PAHs earn income from livestock production by sales of livestock, and sales of livestock by-products such as milk, cheese, yogurt, eggs. According to the results of the survey, 419 PAHs (47.8%) have sold cattle in 2013. Average number of cattle sold per household was 8.53.



Moreover, 73 PAHs (8.3%) have sold sheep in the month of January 2013. The average number of sheep sold monthly was 24.5 (Table -24).

Table -24: Average Number of Cattle and Sheep Sold per household

Regions	Average number of cattle sold annually per PAH	Number of PAHs that have sold cattle	Average number of sheep monthly per PAH	Number of PAHs that have sold sheep
Region 1	10.97	186	7.56	18
Region 2	6.63	172	38.18	38
Region 3	5.98	55	10.87	15
Region 4	10.83	6	20.00	2
Average total	8.53	419	24.52	73

Source: Golder's Socio-Economic Field Study for RAP - Household Survey, 2014

According to the declarations made by the interviewed PAHs, sales of livestock and livestock by-products provide cash income for more than half of the PAHs (54 percent). On average income from livestock production is 19,512 TL (Table -25). Income from livestock production is the highest in Eastern Anatolia (20,092 TL) and lowest in Thrace (10,600 TL).

Table -25: Average annual income from livestock production

Region	Average income TL	Number of PAHs
Region 1	20,092	191
Region 2	19,450	201
Region 3	19,378	67
Region 4	10,600	10
Average total	19,512	469

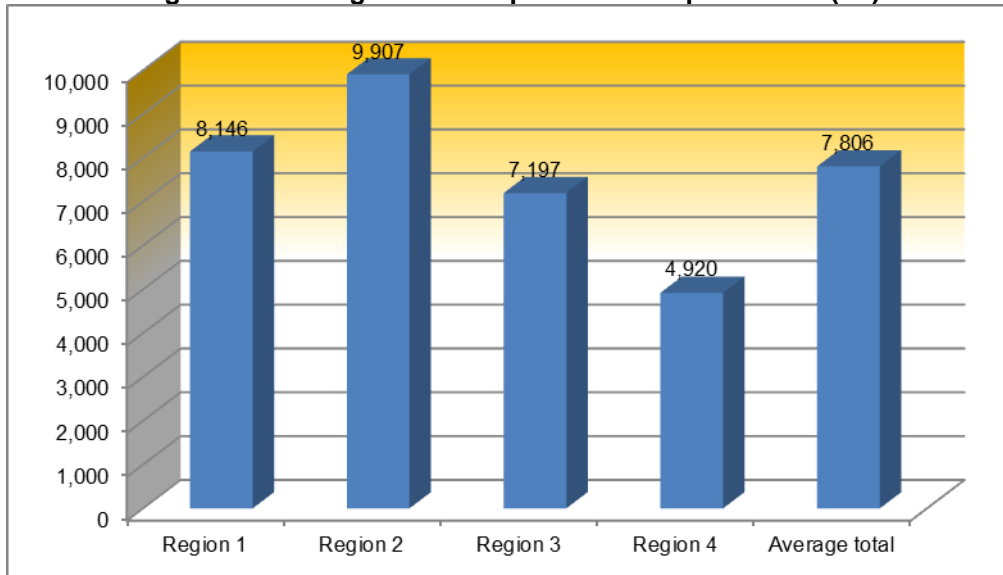
Source: Golder's Socio-Economic Field Study for RAP - Household Survey, 2014

Expenditures²⁵ related to livestock production such as animal feed, veterinary expenses comprise an important cost. On average PAHs spend 7,806 TL per annum for livestock related expenditures (Figure 27). Thrace (Region 4) has the lowest expenditures and Central Anatolia (Region 2) has the highest expenditures related to livestock.

²⁵ Expenditures for livestock production were asked on a monthly basis, the respondents reported their expenses for the month of January. January is the highest expenditure month, since all livestock is kept indoors and fed by purchased or grown animal feed. In order to calculate annual expenditures, the monthly expenditures in Region 1 and Region 2 are multiplied by six, whereas the expenditures in Region 3 and 4 are multiplied by four, considering the weather factor for accessing pastureland and outdoors for animal feeding.



Figure 27: Average livestock production expenditures (TL)



Source: Golder's Socio-Economic Field Study for RAP - Household Survey, 2014

4.7 Household Expenditures and Incomes

On average, households spend 27,295 TL annually on household related expenses (Table -25). Household expenses include food, utilities (heating, electricity), clothing, health, transportation, cigarettes and alcohol. The PAH's expenditures are significantly higher in Region 1 (Eastern Anatolia) when compared to other regions. The reason for this may be due to the higher food related expenses expressed by the PAHs in this region. On average the amount of money spent on food is 35 percent higher in Region 1 (Eastern Anatolia) than in Region 4 (Thrace). As winters are longer and harsher, food items have to be purchased in the Eastern regions when compared to Western regions where milder weather allows for longer production of in-kind food items.

Major items on the PAH's annual expenditures are for clothes, transportation, health and education. This item comprises more than half of the total household expenses. The second largest item on the expense list is food related expenses. Electricity and heating on average comprise 8 percent of the PAH's expenditures.



Table -26: Annual Household Expenditures (TL and % total expenditure)

	Kitchen Gas TL	%	Electricity TL	%	Food TL	%	Cigarettes and alcohol TL	%	Heating TL	%	Health, Education, Clothes TL	%	Total
Region 1	916	3	1,134	4	6,820	24	2,125	7	2,215	8	15,713	54	28,922
Region 2	951	4	1,231	5	5,376	20	1,382	5	2,451	9	14,868	57	26,259
Region 3	683	3	1,545	7	4,569	20	1,364	6	1,453	6	12,901	57	22,516
Region 4	593	3	870	4	4,471	20	1,827	8	1,457	6	13,545	60	22,764
Average	876	3	1,247	5	5,647	21	1,628	6	2,154	8	14,717	54	26,269

Source: Golder's Socio-Economic Field Study for RAP - Household Survey, 2014

Household incomes vary according to the region and income source. Average income per PAH is 53,770 TL. Average PAH declared income is the highest in Central Anatolia (Region 2) with 59,194 TL per annum (Table -27). Income from agriculture is a critical contributor to overall household income. Overall 70 percent of the PAH income is derived from agriculture. Agricultural income is lowest in West Anatolia (Region 3) (Figure 27).

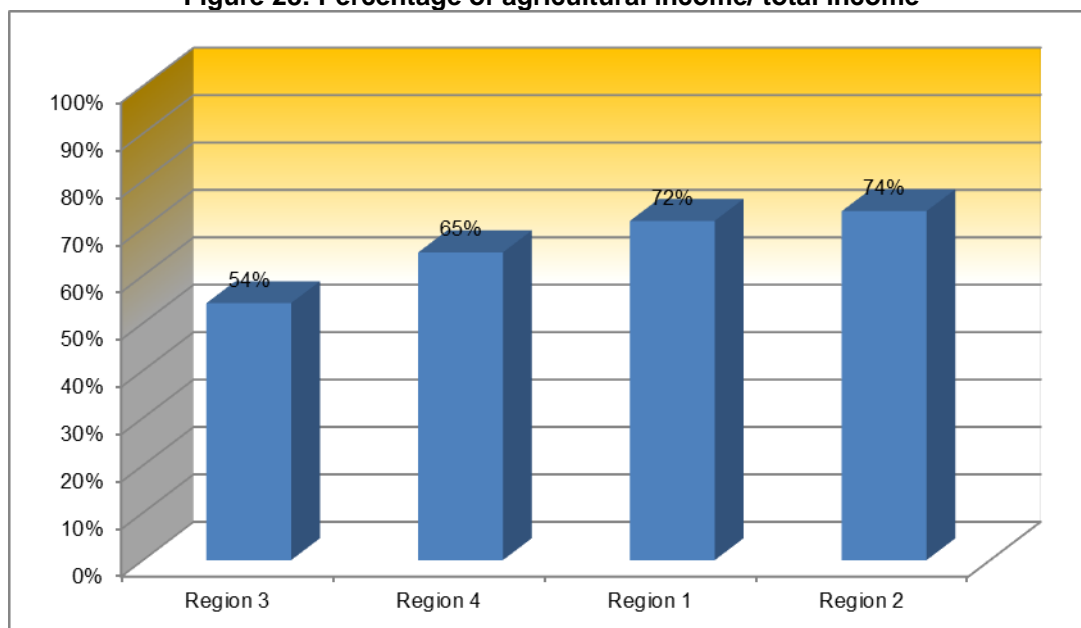
Table -27: Annual PAH Income levels

Region	Total Income (TL)	Income from agriculture (TL)	Income from agriculture (%)
Region 1	54,302	38,870	72
Region 2	59,194	43,584	74
Region 3	41,858	22,695	54
Region 4	41,750	27,106	65
Total	53,770	37,581	70

Source: Golder's Socio-Economic Field Study for RAP - Household Survey, 2014



Figure 28: Percentage of agricultural income/ total income



Source: Golder's Socio-Economic Field Study for RAP - Household Survey, 2014

4.8 Vulnerable Groups

4.8.1 Poverty²⁶

The interviews with village headmen revealed the level of poverty across the Project area. Though the ratio of poor in poverty does not show significant differences across the regions, the highest ratio of poor households across all settlements is in Thrace (14 percent). The average ratio of poor households across all regions was calculated as 21 percent and the ratio of well-off households were calculated as percent 15. These figures show that the majority of the households has middle income.

Table -28: Poverty according to Village Headman

Regions	Number of Settlements	Settlements of Poor Households	Settlements of Well –off Households	Percent of Poor Households	Percent of Well-off Households
Region 1	41	40	33	23%	25%
Region 2	65	60	58	21%	19%
Region 3	23	20	14	25%	8%
Region 4	3	3	3	14%	8%
Total	132	123	108	Average 21%	Average 15%

²⁶Poverty section is written based on in-depth interviews with village headmen. The village headmen were asked, if there are any households in the village that are considered by the villagers are "poor and vulnerable". As poverty is a complex multidimensional concept, the poverty concept used on this section is based on *perceptions* of the village headmen and villagers on who constitutes the poor and vulnerable in the village. In most of the cases, the perceived poverty is based on the material well-being of the PAPs such as lack of capacity to generate income, coupled with lack of assets, and dependence to others in order to sustain well-being.



Source: Golder's Socio-Economic Field Study for RAP - Village Headmen In-depth Interviews, 2014

4.8.2 Gender Issues

In order to explore the Project's resettlement impact according to gender, 16 focus group discussions were led in the Project area. The goal of the focus group discussions was to understand women's land ownership and land use patterns, and their vulnerability due to potential adverse Project impact. One of the main findings of the focus group discussions was that most of the women had previous experience with land acquisition. The land acquisition experience varied from hydroelectric power plants to irrigation channels, however, this illustrates that the women know the potential adverse impacts pertaining land acquisition such as low compensation schemes, and appeal process.

Women's land ownership patterns vary throughout the Project area. Even though women do have ownership and titles for the land they say "We are shareholders but we are not the decision-makers". Women's reluctance to answer questions on land use and productivity is more related to their perception that land based issues fall under men's domain. Nevertheless, women were very vocal about their concern regarding the land conditions once the Project is completed.

Main issues raised by the women were pertaining to livelihood impacts of the Project. Throughout the Project area, women voiced their concern regarding the timing of the construction. Especially in more Western provinces such as Thrace and Western Anatolia, harvest season is critical for livelihoods. "Damage to land" has direct impact on the livelihoods of the PAPs, because most of their incomes are land based. Damage to land also limits the grazing grounds for the livestock, posing threat to loss of income from livestock production. Health and safety for children and livestock was also pointed out during the meetings. Especially PAPs that had previous experience with pipeline expropriation, had faced loss of livestock due to open trenches and pit left once the teams had completed construction. The third issue that was identified was the importance of location of access roads to the pipeline. The PAPs would not like their parcels to be split/divided by the pipeline and access roads. According to the women, once the parcels are divided, the productivity falls significantly. Therefore, they would like the Project to pay special attention to route of the pipeline and access routes. Another concern regarding the pipeline was regarding the depth of the pipeline. The women feel that if the pipeline is located closer to the ground level, than agricultural production, such as cultivation using tractors, may harm the pipeline. Harm to pipeline, on the other hand could lead to gas leaks, which poses threats to PAPs health and safety.

The women that had previous expropriation experience with pipelines. The grievances of the women regarding pipeline expropriation can be summarized as:

- Significant loss of land productivity: Most of the women described the stones, rocks left on their land, which made land cultivation impossible upon project completion. The top



layer of the land, which is critical for agricultural production, was destroyed, and women affirmed that the land was never reinstated to its original status.

- Health and safety risks to livestock: The pits and trenches dug for the constructions were not covered up as land was not reinstated to its original status. The women stated that their livestock fell into these holes/trenches during grazing or has significant damage.
- Health and safety risks to the children: The children playing on the PAPs parcels, fell into the pits, which posed risks to their overall health.
- Access roads and split up parcels: The access roads when they split up the parcels, lead to decreased productivity. Some of the women acknowledged that they had to discontinue cultivation because the size of their land was no longer scalable.
- Low compensation payments: The women believe that if compensation payments are enough to restore livelihoods, and land is reinstated in its original position upon Project completion, the Project's impact would not be adverse. However, in pipeline expropriation case, the payments were significantly lower than their expectations. Therefore the PAPs had to appeal to achieve just compensations.
- Limitations to land availability also limits grazing grounds for livestock: Even if the land loss is temporary, lack of available land for grazing is a burden for PAPs. Lack of available land increases animal feed costs of the PAPs. Majority of the women confirmed that lack of access to their private parcels, would necessitate feeding of the livestock in the barns which increases costs of keeping livestock significantly. The women also agreed that if such expenses are compensated through Project's land acquisition scheme, than the Project's adverse impact may be mitigated.

On the positive side, the most visible benefit of the Project was "employment". Most women believe that men will be impacted more by the Project since they can be employed and they are the ones that work on the field or "outside" the village borders. Majority of the women consider the pipeline passing through the fields would be more of men's concern since women do not leave the village grounds. As long as construction teams do not interfere with village life and they are out of village boundaries they are welcome. The Project area is conservative. Even though there has not been any recorded conflict with migrant workers, women explicitly stated that if the teams enter the village, and do works within the village, they would disrupt women's daily routine. However, if the construction camps are outside the village, there would not be any problems.

The Project should devise a separate strategy to share information with women. Women hear about the Project through "others", sometimes through their husbands and sometimes neighbours. The information on TANAP should include land acquisition and compensation information in



addition to health and safety related information. During the focus groups, women shared their concerns regarding possibility of explosions on the pipeline. Impact of potential gas leaks from the pipes on PAPs health and crops productivity; were also asked during the meetings. Even though most women claim they do not have the authority to comment on household matters, they have perceptions on land acquisition process. Livelihood restoration is the key item on women's agenda for restoring livelihoods, hence the Project's information policy should target the women with necessary information.

4.9 Public Consultations and Information Sharing

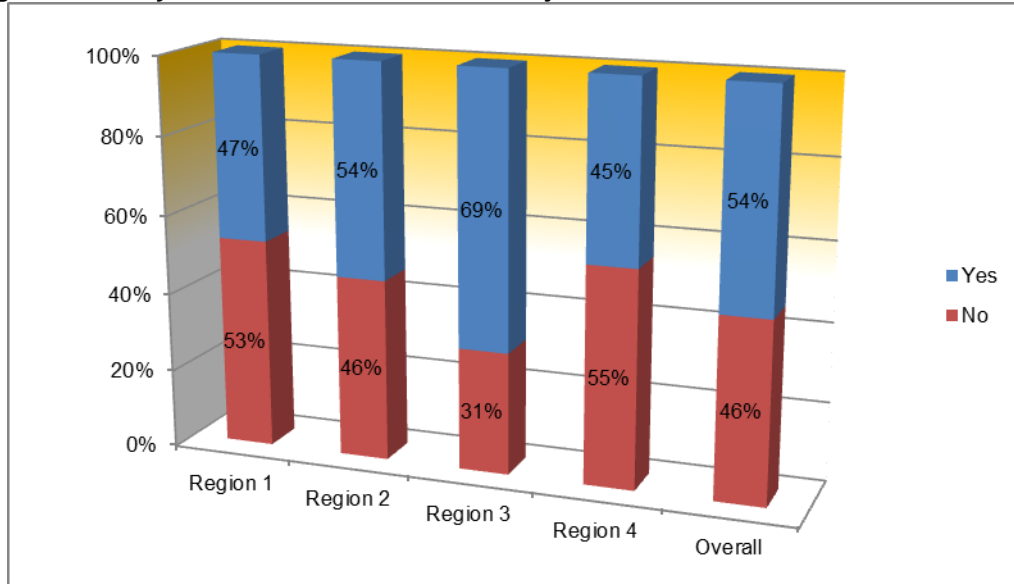
4.9.1 Public Consultation Meetings

Prior to the socio-economic surveys carried out by Golder for the RAP, TANAP had not initiated any public consultation meetings in the Project affected settlements about land acquisition. However, PAHs have already had information on the Project through consultation meetings held under the scope of ESIA studies. According to the results of the survey, 54 percent of the PAHs have heard about the TANAP Project prior to socio-economic surveys (Figure 29). More than two thirds of the PAHs in Western Anatolia (Region 3) declared that they had heard about the Project; whereas in Thrace (Region 4) and Eastern Anatolia (Region 1) knowledge about the Project drops to less than half of the PAHs.

After the socio-economic surveys were conducted, public consultation meetings have been initiated by the LRE branch offices established in several locations of the pipeline. Information regarding the Project and its land acquisition works is being provided through these branch offices throughout the Project's life cycle.



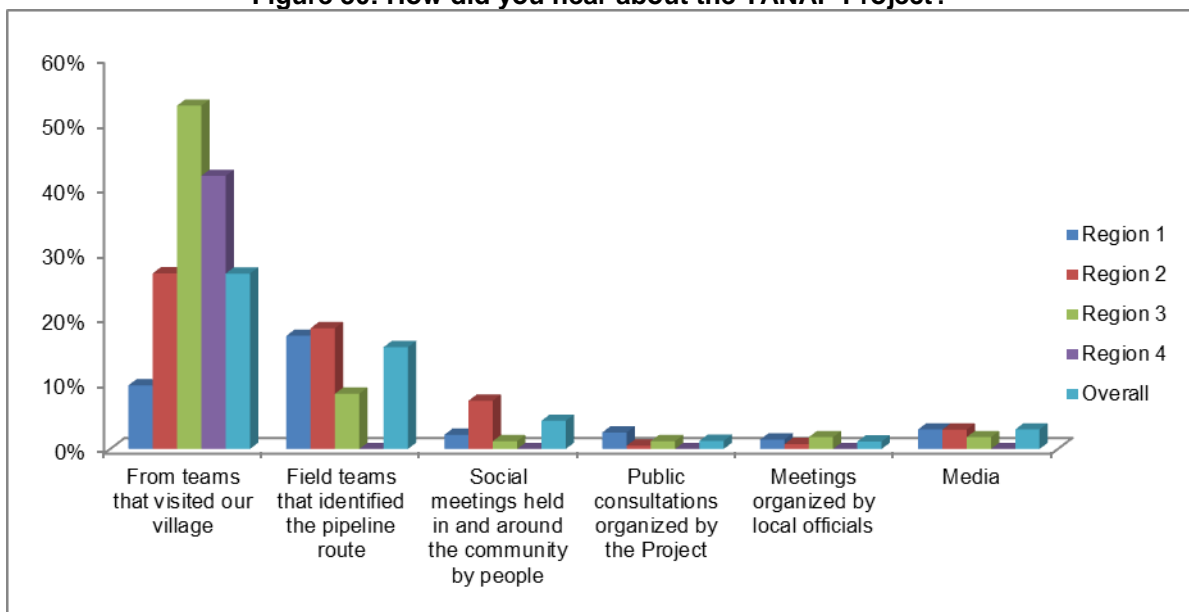
Figure 29: Did you hear about the TANAP Project before the socio-economic surveys?



Source: Golder's Socio-Economic Field Study for RAP - Household Survey, 2014

Major source of information is based on the teams that visited the villages (Figure 30). The results of the survey also confirm that that there have not been planned consultations held with the PAHs regarding land acquisition. Information about the Project depends on the project related teams that have paid visits previously. Information obtained from the media regarding TANAP Project is almost negligible. It is essential for TANAP to engage in consultation activities with respect to the Stakeholder Engagement Plan (SEP) prepared for the Project to ensure that PAHs have thorough information regarding the Project and its land acquisition process.

Figure 30: How did you hear about the TANAP Project?

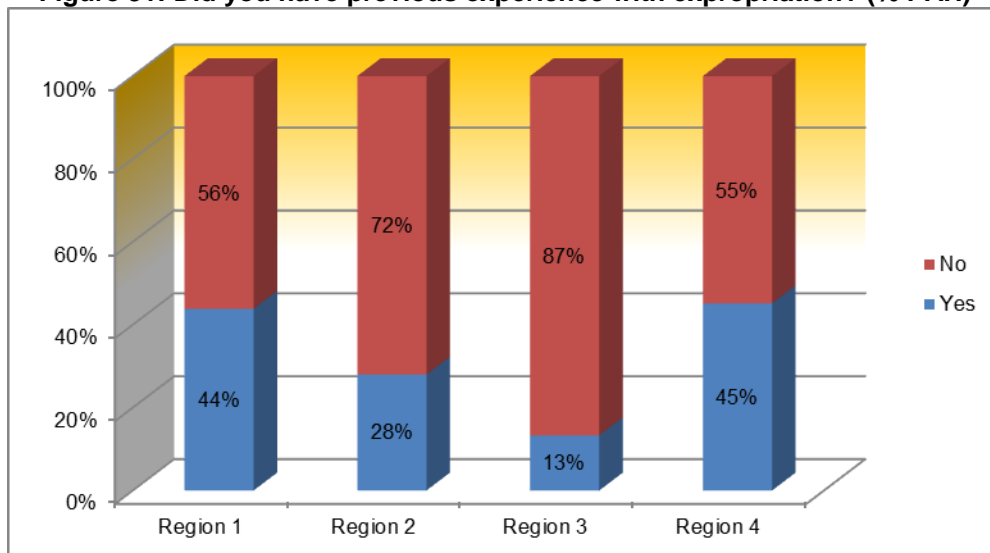


Source: Golder's Socio-Economic Field Study for RAP - Household Survey, 2014



Almost one-third of the PAHs had previous experience with expropriation. Especially in Eastern Anatolia (Region 1) and Thrace (Region 4), a little less than half of the PAHs had previous experience with expropriation (Figure 31). Depending on the nature of their previous experience, if the prior expropriation adversely impacted the PAHs, this may be reflected to TANAP team during land acquisition. Moreover, PAHs that do not have any previous experience may be misinformed about the land acquisition process by the community members whose experiences were not positive. Therefore, the Project team needs to have a transparent, clear, informative land acquisition strategy to share with PAHs. TANAP needs to be able to address any worries/concerns related to land acquisition and devise mechanisms to mitigate any potential adverse impacts.

Figure 31: Did you have previous experience with expropriation? (% PAH)

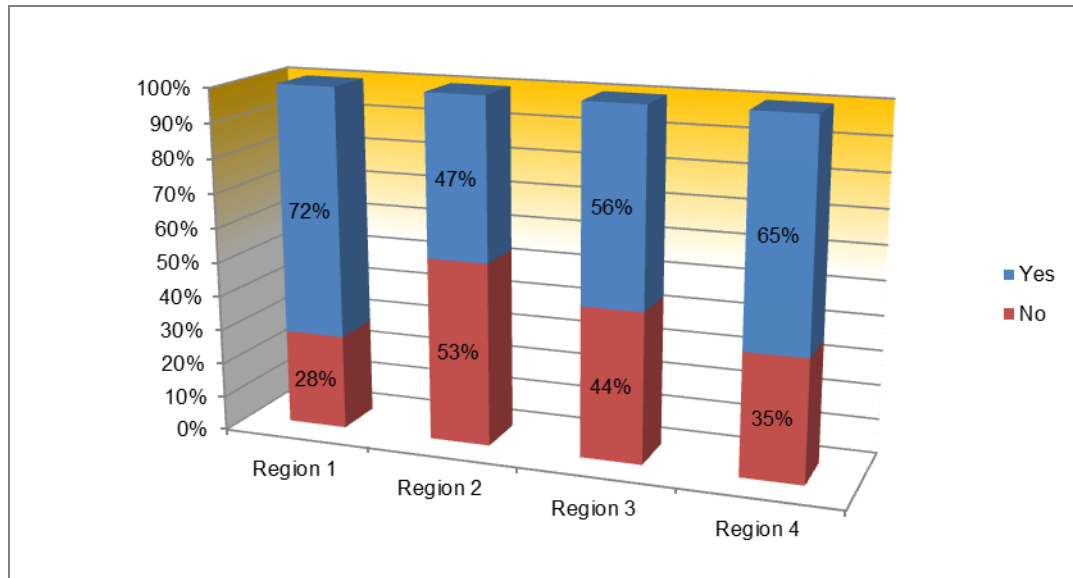


Source: Golder's Socio-Economic Field Study for RAP - Household Survey, 2014

Fifty-eight percent of the PAHs would like to receive more information on land acquisition strategy of TANAP Project. An interesting finding of the survey is that the regions that have had previous experience with expropriation Eastern Anatolia and Thrace (Regions 1 and 4) are more interested in learning about the process (Figure 32). Due to past experience, these PAHs have an insight into how the expropriation process takes place, and any potential adverse impacts they may face during this period. Central Anatolia has the lowest interest in receiving more information about land acquisition.



Figure 32: Would you like to learn more about land acquisition? (% PAH)



Source: Golder's Socio-Economic Field Study for RAP - Household Survey, 2014

According to the results of the surveys, the PAHs are less interested in the approach to land acquisition, and focus on land valuations and timeline for land acquisition (Figure 33). The PAHs would like to learn if they would be able to use their land once the Project is completed. It is essential to inform PAHs on the land acquisition impacts of the Project. The PAHs need to know that land acquisition process for the TANAP Project focuses predominantly on temporary land use; and PAHs will be able to re-use their land with some restrictions. The distinction between the size of land impacted directly by the Project (36 meter corridor), and expected impacts on the total parcel size should be shared with the PAHs. PAHs need to be informed about the exact area in their parcel that will be impacted by the Project. Guide to Land Acquisition and Compensation (GLAC) will be a vital source of information for the PAHs since it will provide information on how the land acquisition process will take place, timeline for land acquisition, land valuations and when the compensations will be received.

The PAHs also posed open-ended questions on information they would like to receive about the Project. The majority of the questions focused on the impact of the Project on the land quality. The PAHs would like to learn if the Project will leave the excavation material on the land, and if their land will lose quality as a result of construction damage. Land valuations were another area for questions, the strategy for land valuations, and assessment of fair values were brought up during open ended questions. The PAHs with previous experiences with expropriation stated that state led expropriations do not end in favourable terms for the PAHs, and land valuations are usually lower than their real values. Therefore, they would like to learn how land valuations will be done for TANAP. Moreover, the PAHs would like to learn if they would be able to use the trees on their property (sell the wood) once land acquisition is completed, and who would have the ownership of



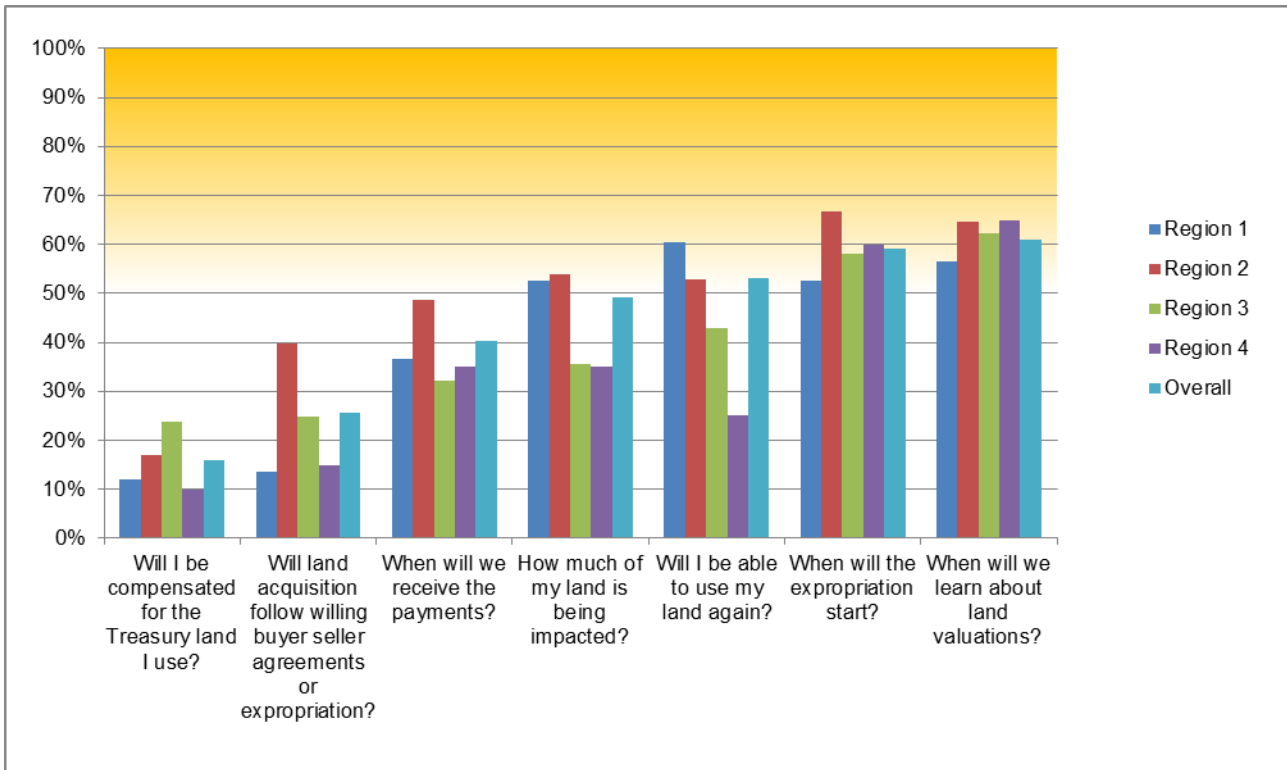
the trees. Questions on potential limitations to grazing, once the construction starts, was also voiced during the surveys. PAHs shared their concerns about potential adverse impacts to livestock production due to lack of access to land. They would also like to learn about the Project's environmental impacts.

The village headmen interviews also explored the questions the PAPs may have on the Project. The most inquired question was on damage to land. The PAPs were concerned about land use, potential damage the Project can do on their land, and if their land will be reinstated to the original condition upon Project completion. Some of the village headmen that had previous experiences with pipeline expropriations asked "Will it be the same as before? Our land was damaged, and we couldn't cultivate it afterwards". The route of the pipeline, and if it would damage grazing grounds were also enquired by the village headmen. Timing of land acquisition, the amount of compensations, and time schedule for receiving payments were also frequently voiced by the village headmen. The village headmen also requested employment opportunities for their residents that will be directly impacted by the Project.

The PAHs would also like to learn about the pipeline, how deep the pipeline will be, and if the Project will lead to natural gas connection to their villages once the Project is operational.

The PAHs are also interested in employment during the construction phase. They raised questions on how long the construction period will take place, and if the Project will hire locally for the workforce.

Figure 33: What would you like to learn regarding land acquisition?



Source: Golder's Socio-Economic Field Study for RAP - Household Survey, 2014

4.9.2 Perceptions of Project Impact

4.9.2.1 Positive impacts

The interviews with the village headmen illustrate that the most evident positive impact of the Project is employment. Employment by the Project is expected to boost the local economy and improve the livelihoods of the workers' households. Some PAHs have voiced their expectations for receiving natural gas upon Project completion as an outcome of the Project. Moreover, if the land compensation pricing is accomplished in a fair and equitable manner, the PAHs believe it may be able to mitigate their temporary loss of land use. However, most of the PAHs' first reply was that it would benefit the "Government/ Public" not us.

4.9.2.2 Potential Adverse Impacts

Most of the village headmen expressed their concerns on "damage to land quality". Previous experiences with pipeline projects that have damaged the land to such an extent, that it was deemed unusable upon project completion, trigger concerns regarding TANAP Project. One of the villages did not allow household surveys due to previous experience. Therefore, the construction teams must tend to land quality and reinstate the land in its original condition.

Village headmen also expressed that limited access to agricultural land, and division of agricultural land directly impacts agricultural production and reduces household livelihoods. Loss of crops, agricultural produce also impacts livestock income, especially in Eastern and Central Anatolia where cultivation supports livestock production. Moreover, pipelines under land are perceived as



decreasing the land value. Restrictions on building homes, and planting trees on acquired land were also regarded as reasons for decreasing land value.

Cutting off of fruits trees are viewed as a significant adverse impact of the Project since fruit trees are critical source of income and requires a longer investment period. Damages to other crops and livestock are also voiced by the village headmen as potential adverse impacts. Health and safety pertaining pipelines such as explosions, are prime concern for the village headmen. The village headmen in Thrace also mentioned loss of income due to lack of government subsidies for land that will be acquired by the Project. Hence, the loss from land is not limited to the produce but also to land-based supports given by the government. The Project’s potential environmental impacts such as damages to water supply, pollution of village drinking water were also conveyed by the village headmen.

Temporary construction related potential adverse impacts such as dust damage to existing produce, construction zone’s proximity to villages which may disturb village daily life, construction related accidents were also voiced by the village headmen.

4.9.3 Priorities for Investments

In order to understand the PAHs preferences for investment areas in agriculture, the survey included questions on choices for investments. The questions targeted land cultivation and livestock production as potential rural development areas. As these questions were open-ended, there were numerous answers that are categorized under 13 headings for land cultivation (Table - 29 and Table 30). The voiced alternatives range from purchasing additional land to investments in agriculture such as accessing higher yield seeds, fertilizers or high income generating products. The most voiced choice was irrigated farming amongst all regions. Especially in Region 2 (Central Anatolia), irrigated farming was the first choice of 42 percent of the PAHs, followed by purchasing land (23 percent of PAHs). For the second choice, investment in machinery and land were mentioned the most²⁷.

Table -29: First choice for land cultivation

First choice (% PAHs)	Region 1	Region 2	Region 3	Region 4	Total
Purchase land	22	23	20	39	23
Investments in land (seed, fertilizer, new products etc)	16	10	9	6	12
Do not know	8	3	9	13	6
Cattle production	3	1	1	0	1
Farming	3	1	1	3	2
Cooperatives	0	1	1	0	1

²⁷ 40 percent of the respondents replied "Don't know" for the second choice. If the "don't know" response is excluded, investment in machinery is the most responded choice.



RESETTLEMENT ACTION PLAN (RAP) FOR TANAP PROJECT

Fruit trees	0	1	3	0	1
Organic farming	0	0	0	3	0
Green houses	1	0	2	0	1
Irrigated farming	9	42	27	19	28
We would not invest in agriculture	13	2	11	0	7
Agriculture machinery (tractors etc)	22	14	15	16	17
Animal feed crops	3	1	3	0	2
Total	100	100	100	100	100

Source: Golder's Socio-Economic Field Study for RAP - Household Survey, 2014

Table 30: Second choice for land cultivation

Second choice	Region 1	Region 2	Region 3	Region 4	Total
Purchase land	5	7	9	10	7
Investments in land (seed, fertilizer, new products etc)	13	15	7	6	12
Do not know	46	32	53	16	40
Cattle production	2	0	0	3	1
Farming	1	0	2	0	1
Cooperatives	0	0	2	6	1
Fruit trees	0	4	3	6	3
Organic farming	0	0	0	0	0
Green houses	1	0	1	3	1
Irrigated farming	5	16	7	16	11
We would not invest in agriculture	8	0	2	6	3
Agriculture machinery (tractors etc)	18	24	15	26	20
Animal feed crops	1	1	0	0	1
Total	100	100	100	100	100

Source: Golder's Socio-Economic Field Study for RAP - Household Survey, 2014

Investment opportunities in livestock production have focused on purchase of new livestock (Tables 31 and 32). PAHs voiced their preference of purchasing improved livestock varieties that could enhance animal breeding, and productivity. Improvements to barns/sheep pens are also viewed as important investments that could increase livestock production. Dairy facilities were mentioned especially in Region 2 (Central Anatolia) as possible investment areas.

Table -31: First choice for Livestock Production

Livestock Production First Choice	Region 1	Region 2	Region 3	Region 4	Total
Improvements to barns/sheep pens	16	1	24	6	10
Land purchase	0	1	1	0	1
Beeking and poultry	0	0	0	0	0
Don't know	1	2	9	13	4



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Livestock Production	5	2	7	3	4
Purchase new livestock (cattle)	65	66	37	55	60
Would not invest in livestock production	7	1	8	10	4
Cooperatives	0	1	1	0	1
Equipment and machinery	1	0	0	0	0
Dairy facility	3	19	2	3	10
Pasture improvement	0	2	4	3	2
Irrigated farming	0	0	3	0	1
Feed crops, and animal feed	2	4	6	6	4

Source: Golder's Socio-Economic Field Study for RAP - Household Survey, 2014



Table -32: Second choice for livestock production

Second Choice	Region 1	Region 2	Region 3	Region 4	Total
Improvements to barns/sheep pens	12	1	13	10	7
Land purchase	1	0	1	0	0.3
Beeking and poultry	1	1	1	0	1
Don't know	56	45	48	40	49
Livestock Production	5	1	2	0	2
Purchase new livestock (cattle)	16	31	21	27	24
Would not invest in livestock production	0	0	1	0	0.2
Cooperatives	0.4	0.5	0.0	0.0	0.3
Equipment and machinery	0	1	1	0	1
Dairy facility	3	14	1	0	7
Pasture improvement	0	0	2	13	1
Irrigated farming	0	0	0	0	0
Feed crops, and animal feed	5	5	9	10	6
Total	100	100	100	100	100

Source: Golder's Socio-Economic Field Study for RAP - Household Survey, 2014

4.10 Project Impacts According to Socio-Economic Survey

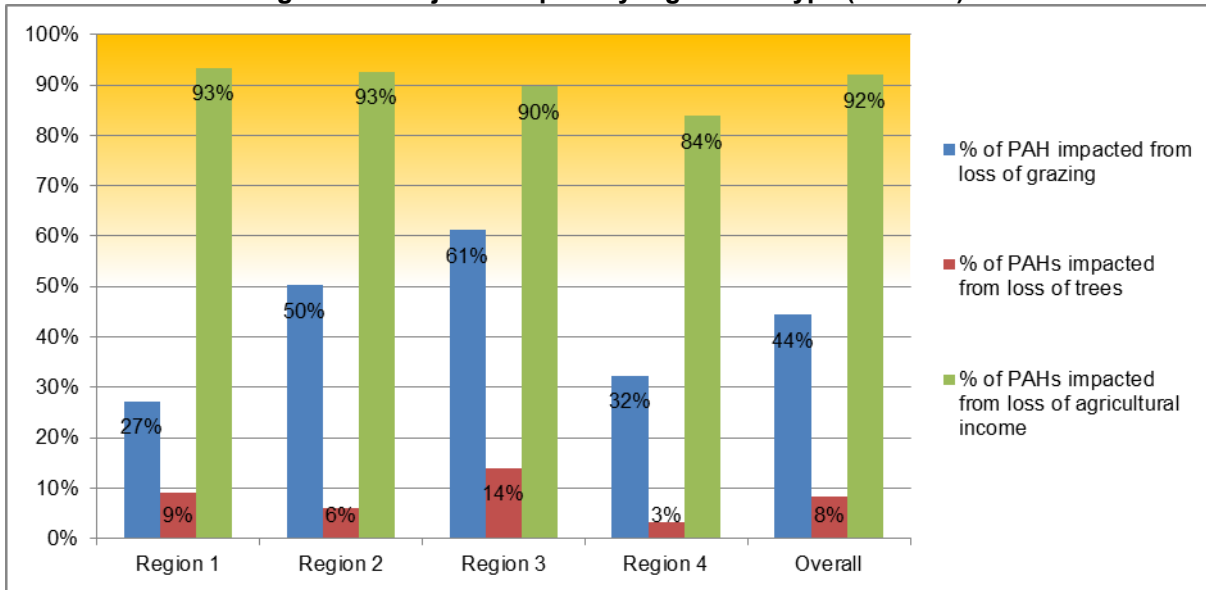
4.10.1 Economic Resettlement According to Socio-Economic Survey

In order to assess the Project impacts specific to loss of income as a result of land acquisition, the survey posed questions to understand how the parcel is currently used by the owners and income currently generated from the parcel to be acquired by the Project. PAHs use their land for multiple purposes. They grow crops, may use it for producing their own in-kind garden produce and they use it for their livestock once the harvest season ends. If they have trees on their parcel, they may lose their produce as a result of the Project. The parcel could also be used for animal grazing.

According to the result of the survey majority of the PAHs are impacted from loss of agricultural income (Figure 34). This is followed by loss of grazing grounds for the livestock. The number of the trees in the Project area is limited; therefore the number of PAHs impacted by loss of trees and loss of income derived from trees is also few.



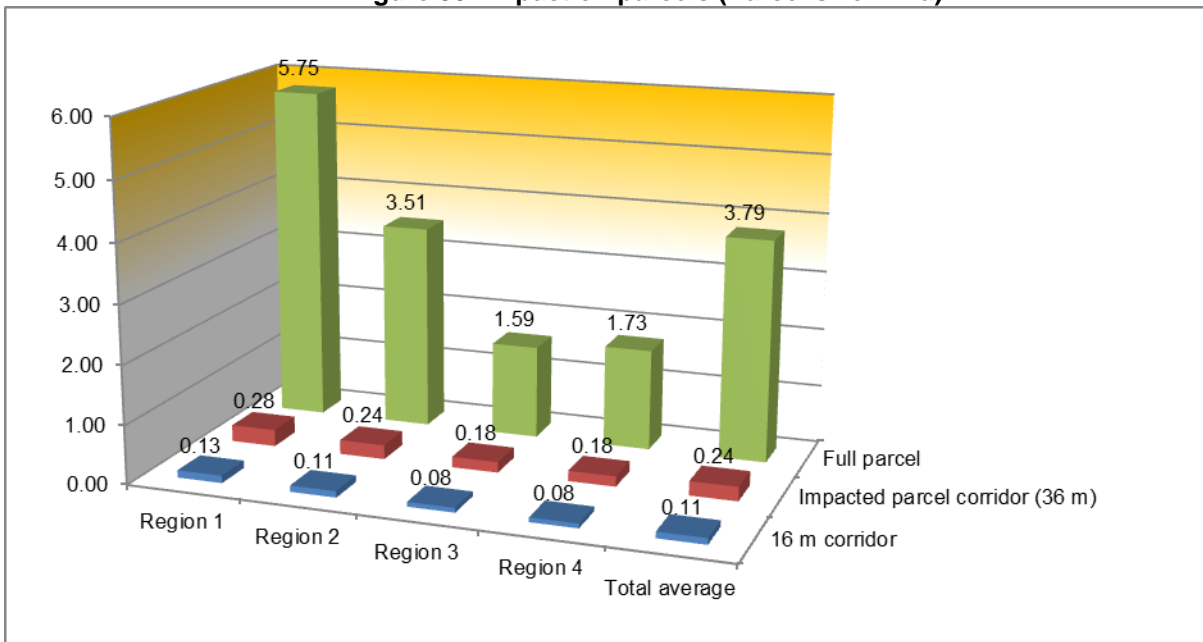
Figure 34: Project's impact by region and type (% PAHs)



Source: Golder's Socio-Economic Field Study for RAP - Household Survey, 2014

The land acquisition for the Project will be based on a 36 meter corridor. However, due to the pipeline centreline not being defined at the time this report was drafted, the data utilized is based on a 48 meter corridor, therefore, the impacts on land holdings are expected to be 25 percent smaller. According to 36 metre corridor data, on average PAH's loss of parcel corresponds to 6 percent of the parcel size covering an area of 0.24 ha (Figure 35).

Figure 35: Impact on parcels (Parcel size in ha)



Source: Golder's Socio-Economic Field Study for RAP - Household Survey, 2014



However, within the 36 meters, the Project’s land acquisition impact is temporary in the 20 metre area. The 20 meters of land will be returned to the owner once the construction is completed. For the remaining 16 meters, Project has an unrestricted and exclusive right of way. When 16 meter right of way is considered, on average impacted parcel size corresponds to 0.11 ha, comprising 3 percent of the total impacted parcel size. In regions where the parcel sizes are larger, the impact of land acquisition is minor. Acquisition of land for the pipeline is not permanent, as the Project will allow a right of usage to the PAH for the 16 meter corridor once the land has been reinstated. However, during the construction period, the impact of the Project may exceed beyond the expropriation zone and impact the whole parcel. Access to construction site may adversely impact the rest of parcel, and annual cultivation may be damaged as a result of the construction. TANAP will compensate these damages by use of the RAP Fund.

The Project’s compensation scheme allows the PAHs to return to their old cultivation patterns after the land has been reinstated. In the 16 meter corridor, where right of way is granted, the PAH will have the right to use the land with some restrictions such as limitation on planting trees, or building structures. Hence, any potential adverse impact of the Project is significant during the three year period when the PAHs parcel will not be able to cultivate their parcel or use their parcel for grazing their livestock. In order to assess the PAHs loss of income, the analysis is based on income generated per metre square per region. The PAHs were asked a question on net income earned from annual yields of irrigated land after all expenditures are paid for. The regional average for the net income from irrigated field is used as the basis of the analysis. In order to calculate a price for rain-fed land, the irrigated price is divided by three. The survey included a question on irrigated and rain-fed land, the percentages of irrigated land to rain-fed land is reflected to the land size of the parcels in order to calculate unit price productivity value per region (Table 33). In order to compensate for the temporary lack of access to land for three years, unit price of productivity should be multiplied by three. On average the PAHs are expected to lose 1.92 TL per m² /parcel they own for the three year construction period (Table 34).

Table -33: Income loss calculation (per annum)

	Unit income price per ha TL	Total parcel size (ha)	Income earned from the total parcel/year TL	Impacted parcel 36 m corridor (ha)	Income earned from 36 m TL	Impacted parcel size 16 m (ha)	Income loss from 16 m (TL)
Region 1	7,767	5.75	44,626	0.28	2,207	0.13	981
Region 2	5,452	3.51	19,138	0.24	1,329	0.11	591
Region 3	5,094	1.59	8,110	0.18	921	0.08	410
Region 4	15,897	1.73	27,522	0.18	2,804	0.08	1,246
Total average	6,414	3.79	24,297	0.24	1,554	0.11	691

Source: Golder’s Socio-Economic Field Study for RAP - Household Survey, 2014



Table -34: 3 Year loss according to Regions²⁸

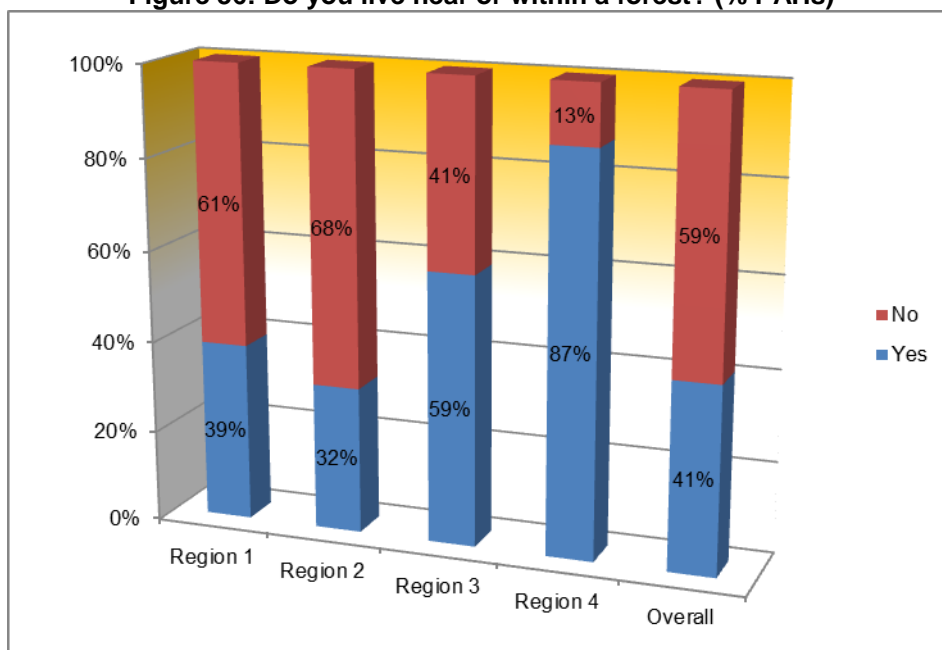
	3 year loss per m ² (TL)
Region 1	2.33
Region 2	1.64
Region 3	1.53
Region 4	4.77
Total average	1.92

Source: Golder's Socio-Economic Field Study for RAP - Household Survey, 2014

4.10.2 Impact on Forest Lands According to Socio-Economic Survey

The Project area bypasses through forest lands and some of the villages, crossed by the pipeline, are Forest villages. Less than half of the PAHs stated that their village is a forest village or a nearby forest village (41 percent). Overall, almost a quarter of the PAHs believe that they could be impacted by loss of nearby forest land (Figure 36). Amongst the Project regions, Region 4 (Thrace) has the highest percentage of PAHs living in a nearby forest or within forest village.

Figure 36: Do you live near or within a forest? (% PAHs)

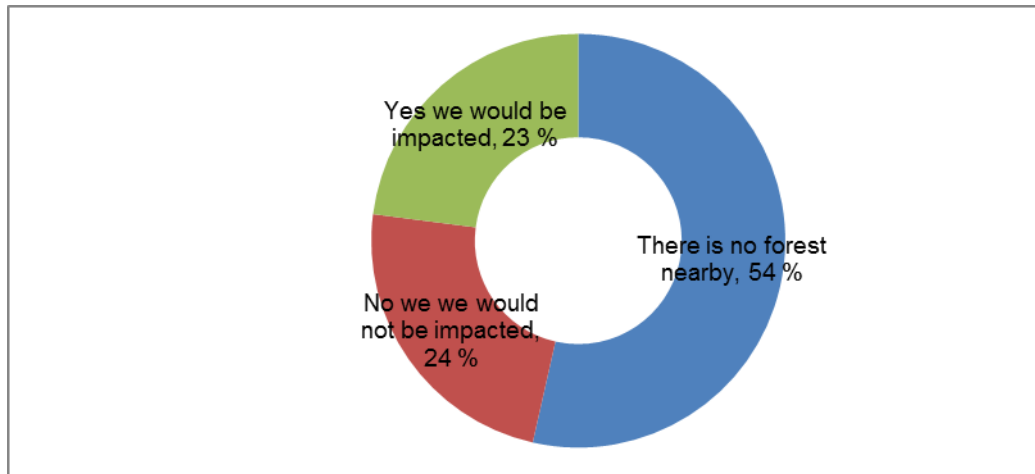


Source: Golder's Socio-Economic Field Study for RAP - Household Survey, 2014

When the PAHs were asked how they would be impacted by loss of forestry land, 23 percent responded that they would be adversely impacted by loss of a section of the forest (Figure 37). The impact of the loss of forest land depends on how the PAHs use the forest.

Figure 37: Would you be impacted by the loss of a small corridor of nearby forest land?

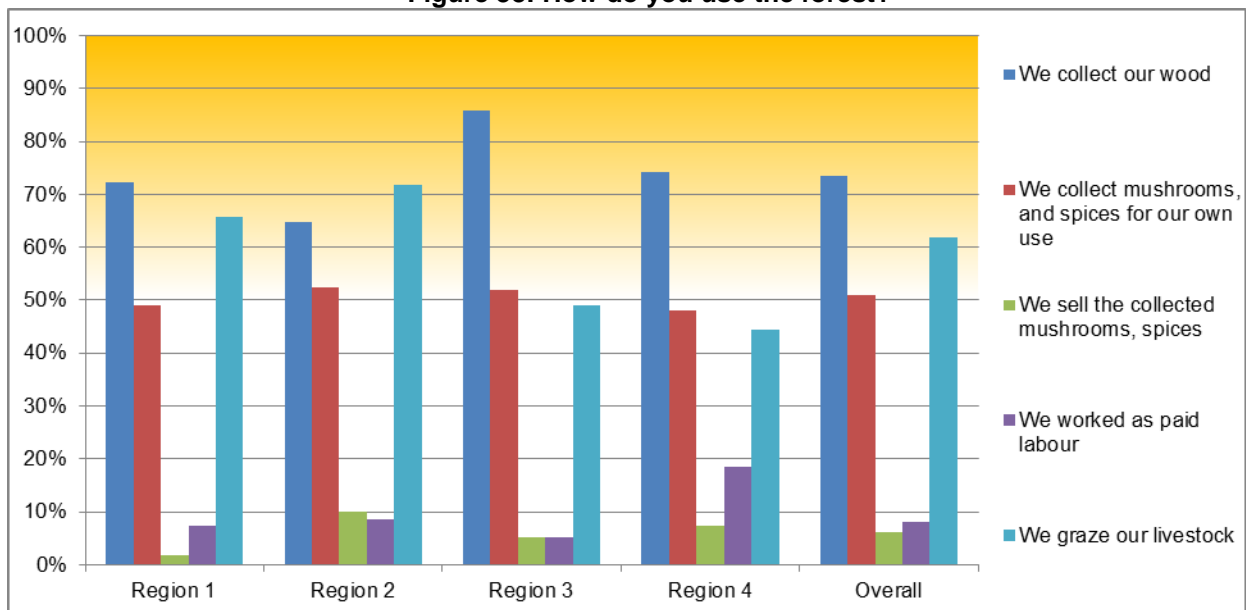
²⁸ The calculations are done according to exact figures. Rounded off figures are not used for this calculation.



Source: Golder's Socio-Economic Field Study for RAP - Household Survey, 2014

PAHs utilize the forests mostly by taking wood for heating in winter months. PAHs graze their livestock on the forest land, and collect mushrooms, herbs, and spices. Forest provides for PAHs in-kind income as they use the forest resources for heating, food and animal feed. Even though cash income generated from the forests is limited, forests provide ample resources for PAHs in-kind income (Figure 38).

Figure 38: How do you use the forest?



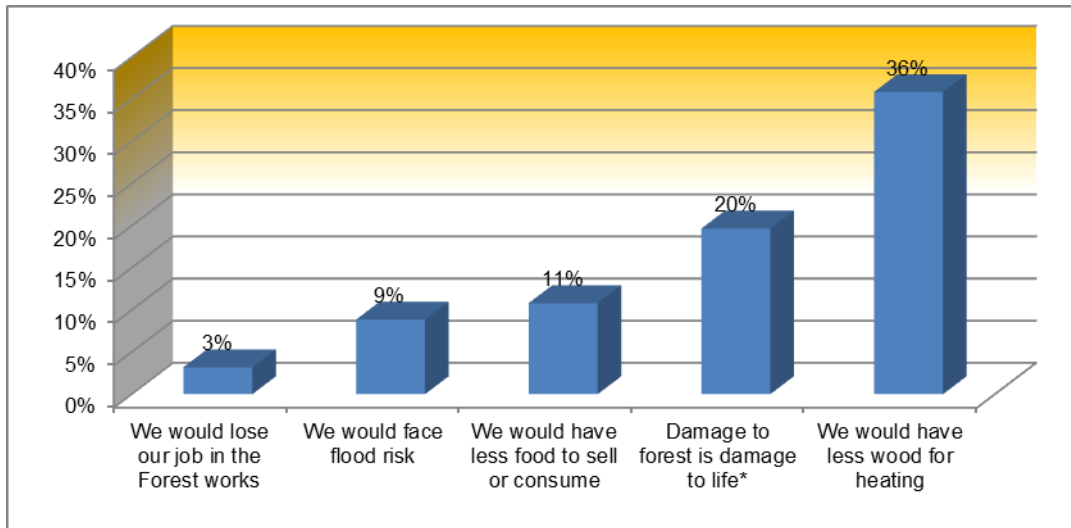
Source: Golder's Socio-Economic Field Study for RAP - Household Survey, 2014

When households were asked what kind of impact forest loss would have on them, having less wood for heating was the most repeated answer with 36 percent of PAHs (Figure 39). "Damage the forest is damage to life" was voiced under as the second most repeated answer.

Figure 39: How would decrease in forest size impact you?



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Source: Golder's Socio-Economic Field Study for RAP - Household Survey, 2014



5.0 LAND ACQUISITION PROCESS

5.1 Overview

This chapter describes the procedures for the acquisition, valuation and compensation for immovable assets affected by the Project.

TANAP's land acquisition process is guided by Intergovernmental and Host Government Agreements signed between the Government of the Republic of Turkey and the Government of the Republic of Azerbaijan on 26th of June 2012 and published in the Official Gazette on the 19th of March 2013. These agreements have become effective as Law No. 6375 of the Republic of Turkey. The Project's land acquisition activities will be performed in compliance with these agreements, with the Turkish Expropriation Law, and IFC's land acquisition and resettlement policies as detailed in Chapter 3. Laws of the Republic of Turkey and international safeguard policies will guide the Project's land acquisition and livelihood restoration activities.

The public interest decision for this project was decided on February 7, 2014. This authorizes the BOTAŞ (LRE) to initiate and execute an expropriation process on behalf of TANAP.

TANAP has defined a general strategy regarding land acquisition (Annex 5.1). This strategy contains information on roles and responsibilities in land acquisition, on the detailed land acquisition process as well as implementation considerations.

The land acquisition process involves numerous steps. The simplified process includes the following steps:

- Identification of project route and AGI locations;
- Other preparatory works for land acquisition;
- Acquisition, transfer and entry of registered private land;
- Acquisition, transfer and entry of land registered to the treasury and other state authorities and official entities,;
- Acquisition, transfer and entry of land designated as forest land;
- Land acquisition, transfer and entry during construction;
- Land acquisition after construction;
- Land exit and;
- Transfer of rights to land from the LRE to TANAP.

The key steps for land acquisition are also provided in Annex 5.2.



5.2 Roles and Responsibilities for Land Acquisition

Roles and responsibilities assigned to various entities with regard to land acquisition are shown in Table 35 below. The following sections describe the roles and responsibilities in more detail.

Table -35: Institutional Responsibilities for Land Acquisition

Entity	Roles and Responsibilities
TANAP Management Team (TMT)	The entity performs overall project management tasks, reviews and approves reports and documents. Defines and determines the roles and responsibilities of all relevant parties involved in land acquisition activities. Closely monitors land acquisition activities and ensures that land acquisition activities are executed in line with relevant national legislation, project agreements and international policies.
Engineering Contractor (EC)	Provides support during the process of final corridor route and identifies the centerline and final RoW boundaries; determines the location of Above Ground Installations (AGI). It also provides inputs to Change Management Procedures.
Engineering Procurement and Construction (EPC)	Executes pipeline construction in accordance with the international best practice/standards and ensures that construction activities take place within the expropriation boundaries. EPC uses best endeavor to minimize complaints/grievances throughout the construction process. EPC is also responsible for damages that occur outside the expropriation boundaries.
Land Rights Entity (LRE)	Manages and executes all land acquisition activities in conformity with the relevant national legislation, project agreements and international policies.
RAP Fund Management (FUND)	A special fund will be created in order to cover the issues not considered in the RAP’s land acquisition budget. This Fund will be managed by TANAP through a specialized Social Research Team.
Authority Liaison, Mapping, Land Acquisition and Ground Investigation Services Contractor (LASC)	Prepares documentation for all affected parcels required for land acquisition, including identification of resident and absentee owners and their addresses and ensures that data submitted to Lands Right Entity accords with the Project schedule. Ensures that the documentation prepared complies with national legislation, international policies and lender requirements.
Lenders	Monitors the land acquisition process’s conformity with international policies and commitments incorporated in the Resettlement Action Plan (RAP).
Ministry of Energy and National Resources (MENR)	Provides support to the project as the Designated State Authority (DSA) as defined in Article 5 of the Host Government Agreement.

The administrative structure of land acquisition is designed to produce outcomes in compliance with both by national and international policies; as such it differs from the practices followed by other organizations in Turkey.



5.2.1 TANAP Management Team (TMT)

On behalf of TANAP Project Entity, TANAP Management Team responsible in guiding and monitoring land acquisition activities; these entities also ensure that these activities comply with the national and international legal framework. TMT:

- Oversee the preparation of the Resettlement Action Plan (RAP) and are responsible for the disclosure of the plan. They also supervise RAP implementation and prepare RAP Completion Audit. These entities ensure that land acquisition has been completed in compliance with national and international policies and best practice standards;
- Ensure compliance with project agreements, local rules and regulations as well as with international best practice; thus the Project RAP has been designed on the basis of institutional arrangements specified in the Host Government Agreement and in accordance with the Turkish legal framework as well as with the applicable international policies. This RAP describes the policies that will guide the land acquisition process and details the mechanisms through which livelihoods of affected populations will be restored;
- Organize the incorporation of land acquisition information, after rigorous quality control procedures are completed, into TANAP Central Database and GIS system;
- Holds meetings with the lenders and all relevant units entities and departments;
- Provides quality assurance for data/information submitted by EC, LASC, EPC and LRE and communicates outcomes to relevant parties;
- Ensures that a transparent monitoring and evaluation process is established and the RAP is implemented as planned and/or with appropriate modifications following feedback from affected groups;
- Help coordinate land delivery to Construction Companies in accordance with the RAP;
- Make sure that land valuation has been carried out in a fair and reasonable manner;
- Contribute to the process whereby Route changes are managed in accordance with Changes Management Procedures;
- Control the application of grievances procedures so that records of are kept and followed-up and appropriate corrective actions are taken with satisfactory outcomes;
- Complaints related with Land Acquisition are managed in accordance with the Grievance Management Procedure;
- Coordinate with EPC to organize land exit in accordance with RAP;
- Ensure the transfer of Land Rights in accordance with RAP;
- Help support the flow of information on affected communities and RAP implementation to the Land Acquisition Team, EC, LASC, EPC and LRE;
- Prepare quarterly progress and compliance reports for TANAP Management and the Expert Monitoring Panel.



5.2.2 Land Rights Entity (LRE)

The LRE is responsible from the execution of land acquisition activities in line with Host Government Agreement (Article 16), the Law on Transit Transport of Petroleum through Petroleum Pipelines (Transit Law: 4586), other relevant national legislation and international standards (IFC). The land rights obtained by the LRE will be transferred to TANAP Project Entity. The process will be managed in accordance with the protocol signed between TANAP Project Entity and the LRE. The LRE will:

- Carry out its activities in compliance with existing agreements, national and international rules and regulations;
- Assign experienced personnel of adequate number and have equipment/materials to perform their responsibility;
- Ensure that a standard methodology and format is used by their subcontractor;
- Ensure that land acquisition files prepared by the Authority Liaison and LASC are properly formatted and their content is complete so as to avoid delays during the Construction Phase;
- Manage the land acquisition process in accordance with the laws and regulations of The Republic of Turkey and International Financial Institutions(IFI).
- Keep the satisfaction of landowners at maximum during the land acquisition process;
- Ensure that provisional rights are secured on title deed records;
- Define and implement the necessary risk mitigation measures;
- Assume responsibility for certain aspects of internal monitoring, including expropriation schedule tracking and progress with respect to compensation payments and other financial arrangements as well as following up on pending court cases.

5.2.3 Engineering Contractor

EC is responsible in identifying the Right of Way (RoW), locations of AGIs, access roads, energy supply lines, pipe stocks, and camp areas. It will:

- Carry out its functions in compliance with existing agreements and procedures;
- Avoid delays in the work schedule and take all risk mitigation measures;
- Support LASC by participating in the process of route narrowing from 500 to 36 meters;
- Help finalize centerline (centerline with horizontal and vertical curve and bend elements) identification in the field;
- Prepare final detailed design of the RoW's external boundaries;
- Ensure that Change Management Procedures are followed.



5.2.4 Authority Liaison, Mapping, Land Acquisition and Ground Investigation Services Contractor (LASC)

LASC is responsible from the preparation of land acquisition files both for the RoW identified by EC and for the locations where route changes take place. LASC will:

- Calculate the coordinates for the intersection points (IP);
- Plan, set and calculate the triangulation points in accordance with the national coordinate system along the route. benchmarks near the centerline but outside the construction strip;
- Compute the triangulation points and get approval from General Directorate of Cadastre;
- Stake the IPs and 36 meter corridor in the field and tie the IP's to the benchmarks;
- Produce the digital maps and the orthophotos from aerial photos for the entire route in line with the methodology defined by TANAP
- Procure the cadastral maps and relevant title deed record with inheritance data for the pipeline corridor and for AGIs, access roads, overhead lines and any other components that may be required during construction that will be subject to land acquisition; and
- Produce land acquisition files and obtain approval from local cadastral offices after reviewed by LRE for the following:
 - RoW land acquisition maps showing the immovable assets subject to land acquisition together with the cadastral boundaries within the route corridor and associated elements .
 - Lists of PAPs (landowners/shareholders) with addresses and/or communication details in appropriate format together with the records of the title deeds for the immovable assets of the impacted PAPs together
 - List of assets subject to damage by construction activities.
 - Land valuation for affected parcels for each PAP.

5.2.5 Lenders

Lenders may closely monitor land acquisition activities to ensure conformity with international standards and the present Resettlement Action Plan. For this purpose, social and/or resettlement specialists of the international lender group may undertake periodic monitoring of RAP implementation based on agreements contained in the relevant finance documents. Lenders may also monitor grievances pertaining to land acquisition activities and observe whether they are accurately recorded and responded. Lenders have the right to request from LRE and TMT to take corrective actions, as needed.

5.2.6 Independent Third Party Monitor

TANAP Management Team (TMT) may also assign an Independent Third Third-Party Monitor (preferably a national NGO) to monitor the grievance management procedures and the land acquisition process. Such an Independent Third-Party Monitor would directly share their findings



with TMT. The Independent Third-Party Monitor may propose preventive/corrective actions and mitigation/compensation measures, as needed.

5.2.7 RAP Fund Management

The specialized Social Research Team will identify persons and/or communities that are impacted by the Project but cannot be compensated under the local laws as well as those that emerge in the process of Project construction activities. This unit will design community based responses and will implement them by out-sourcing if necessary. The Fund has a Monitoring unit responsible from processing grievances pertaining to Fund activities and the implementation of community based programs.

Moreover, the authorized staff in all field offices will have access to the fund so that any unexpected payments can be made for land affected and/or assets damaged without delay and people entitled for payments as users, without legal ownership, can be paid in a timely manner.

5.3 Preparatory Land Acquisition Works

Prior to starting any land acquisition activity some preparatory work needs to be carried out. The following list presents the main activities that need to be realized by the Engineering Contractor (EC) or by the Authority Liaison, Mapping, Land Acquisition and Ground Investigation Services Contractor (LASC).

Preparatory Land Acquisition Activities:

- Identify the preferred route corridor (2 km wide)
- Identify the specified route corridor (500 m wide)
- Procure cadaster records in a 500 m corridor
- Collect title deed records in a 500 m corridor
- Identify land status (ownership types/disputed parcels/land under land consolidation process)
- Perform supplementary owner investigation (assets and PAPs inventory)
- Determine cut-off date(s)
- Select final route and station location (pipeline, pipeline stations, main stations, ancillary installations, temporary installations)
- Establish and calculate the triangulation network
- Produce the digital map and the ortophoto maps of the route
- Stake out pipeline centerline and other acquisition areas
- Investigate customary ownership cases (if any)
- Perform land and asset evaluation
- Prepare expropriation files (asset inventory) for all acquisition areas
- Prepare the Resettlement Action Plan (RAP)



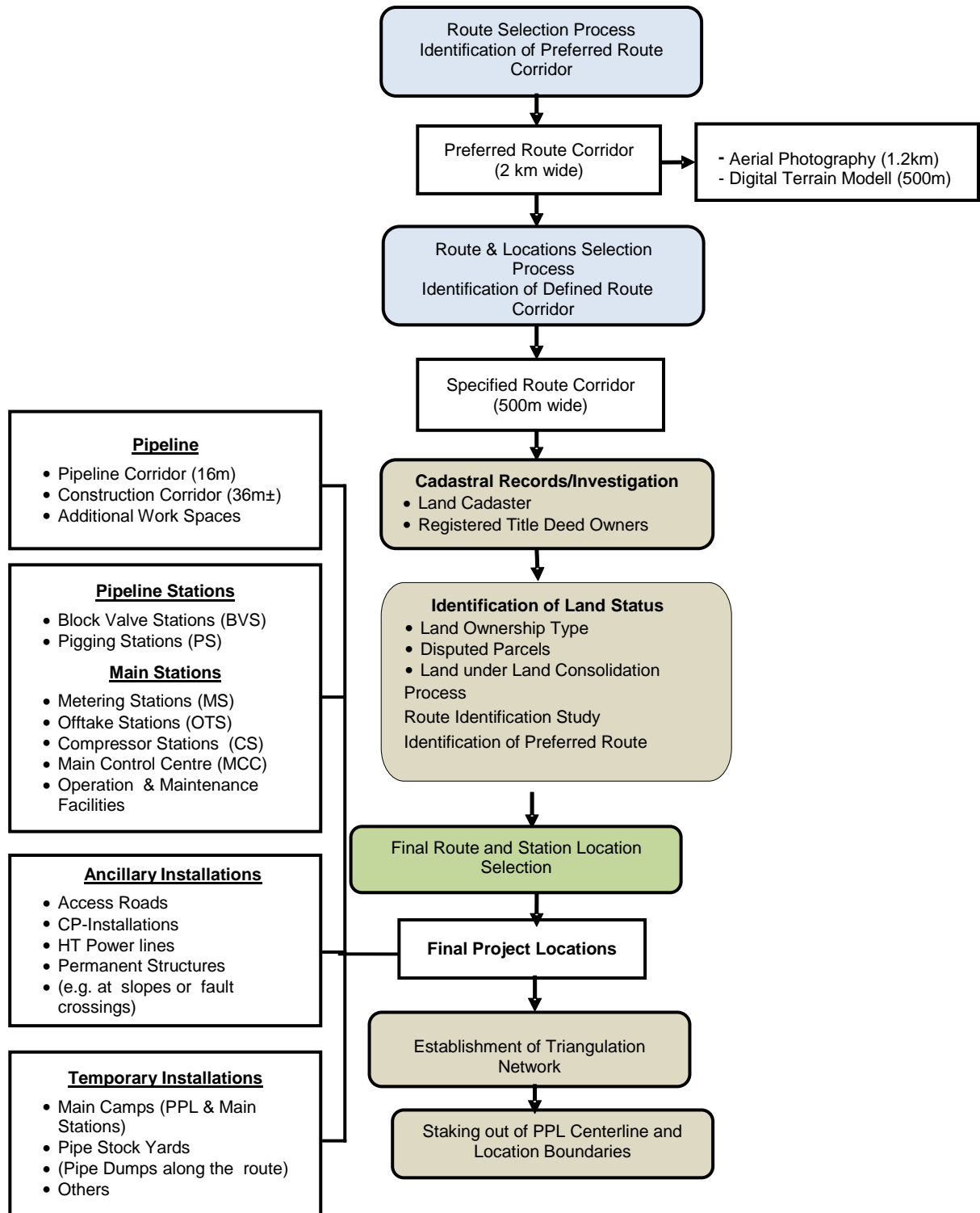
- Disclose the RAP and cut-off date

The following figure presents these activities in a logical sequence.

Figure 40: Preparatory Land Acquisition Activities



RESETTLEMENT ACTION PLAN (RAP) FOR TANAP PROJECT





5.3.1 Identification of PAPs

One of the important preparatory activities is the identification of Project Affected Persons (PAPs) within the Project's footprint. Knowing the types of PAPs will enable a better identification of compensation measures.

5.3.1.1 Types of PAPs

There are two categories of PAPs. The first category consists of those who have legal title to their land. This group may have other assets such as vineyards, trees, barns, and other immovable structures on their land. In accordance with Article 3 of the Expropriation Law (No. 2942), the legal owners are entitled to full payment for their land and whatever immovable assets and crops they may have on it.

The second category consists of PAPs that cultivate land but have no legal title on it. This group consists of two different categories: a) users or tenants; b) owners without title deed.

The users, whether formal tenants or not, that cultivate public or private land that does not belong to them are entitled to compensation for standing crops, trees, vineyards, and buildings both by local laws and IFC policies.

Until recently, land ownership without titles was widespread, especially in areas without land registration and much of agricultural land was held without a formal title; however, the cadastral works forming the basis for the land registration systems are now being completed throughout the country. All affected parcels for the TANAP Project have been registered in the cadastral system. Recent changes in the legal system facilitate the identification of addresses of owners/users and make the registration of the rights of the heirs easy.

Another recent change in the Turkish legal system also facilitates the identification of the heirs whose rights are not reflected in the title deed of an asset to be acquired for a Project. The Notary Law (No. 1512) has been amended in 2011 and Articles 71A, 71B, and 71C has allowed the notary publics to submit documentation on inheritance. This change allows heirs to seek their inheritance rights without recourse to courts which may involve longer and lengthier procedures.

5.3.1.2 Identification of Owners with Title Deed

Once the expropriation files are prepared, the owners along with their addresses are identified by using title deeds and the Address Based Population Registration System (ABPRS). Currently TANAP has information on affected owners/users.

5.3.1.3 Identification of Owners without Title Deed

According to Article 19 of Expropriation Law and the Cadastral Law (No. 3402, Article 16), assets that are not registered in the property title system are investigated by the administration to



establish whether the said asset is owned through the traditional system (zilyet). If a positive determination is made, (by a team consisting of the headmen, two members of the Council of Elders and two witnesses) required measurements are done and records are prepared to determine the users. These records are then submitted to the Court and the valuation of the asset is made. The traditional ownership status (zilyet) of the asset is shared with the relevant local administration offices and is disclosed at least once in a newspaper locally published and in one that is available nation-wide. This disclosure specifies the location and other details of the asset, the person(s) with established traditional rights on it, the bank to which the deposit for its acquisition value will be made and the information concerning the valuation of the asset. The disclosure also informs the readers that objections can be made within a month; otherwise, the compensation for the said asset will be deposited in full and in cash.

5.3.1.4 Identification of Users and Other Beneficiary

The availability of the residential registry as well as the changes made to the Article 19 of the Expropriation Law of 2942 also makes it possible to compensate the users of land. During the assets inventory studies conducted in 2013-2014 by LASC, both documented and non-documented users have been identified. The assets (fixed structures, trees, wells, fences etc.) utilized by both groups have also been defined during the process.

On the other hand, squatters (illegal users) mostly utilizing public land such as forest, treasury and pasture land will be defined through the investigations that will be realized by LRE (2014-2015). LRE will also identify the standing crops of documented and non-documented users already defined by LASC. Both studies will be completed 1 month before land delivery is made to the Contractor.

5.3.2 Types of Land Rights to be Acquired

Four different types of land rights will be established for the Project:

- Ownership rights (permanent land acquisition);
- Unrestricted and exclusive rights;
- Temporary easement rights;
- Usage rights through rental agreements.

5.3.2.1 Ownership Right (Permanent Land Acquisition)

Ownership rights refer to permanent acquisition of land and are established by the Land Rights Entity (LRE) on privately owned lands, where permanent AGIs will be installed onto the land surface. This includes all AGIs such as block valve stations, pigging stations, compressor stations, metering stations, operation and maintenance facilities and others as specified in the Project design. This also includes areas for the construction of permanent access roads, power poles for electricity transmission lines, anode trenches and other permanent installations, i.e. for surface



erosion protection, at fault crossings and others. If the land permanently required is publically owned, unrestricted and exclusive rights will be established.

5.3.2.2 *Unrestricted and Exclusive Right*

The unrestricted and exclusive right will apply to:

- 16 meters of the pipeline construction corridor (8 meters on each side of the center line, including the Health Protection Strip);
- Overhead power lines and cathodic protection connection lines;
- Areas for facility or utility installations (water, waste water, discharge lines, etc.).

After the completion of the construction activities (including the full reinstatement of the land surface) the areas for which unrestricted and exclusive rights have been established will be handed back to the initial owners. The re-use of the land will be permitted with limitations on agriculture practices (i.e. depth of ploughing), the planting of trees and shrubs, the building of houses and other structures, the performance of excavations, pile driving, the passage of heavy vehicles and others as specified by TANAP.

5.3.2.3 *Temporary Easement Right*

The temporary easement right applies to:

- The remaining 20 meters of the pipeline construction corridor (starting after the 8 meters on each side of the center line);
- Additional work areas such as river crossings, road crossings and geo hazard areas etc.;
- Temporary camp sites or pipe stock yards.

Temporary easement rights are established by the LRE for areas of the construction corridor and other workspaces and areas required for the performance of the construction works. Temporary easement rights can also be established by the LRE for additional areas that are temporarily needed for the performance of the construction activities and may include camp sites, pipe stock yards and additional workspaces.

Temporary easement rights are typically obtained for a period of 3 years. However, this easement will not be registered in the title of the affected properties since past experience shows that the title registration offices fail to move the restrictions after three years. Therefore, a lease payment for three years will be made for the 20 meter corridor but TANAP's easement rights will not be legally registered. Once the pipes are buried in the entire 36 meter corridor, the construction area will be reinstated to its original condition and handed back to the initial owner(s) with limitations.

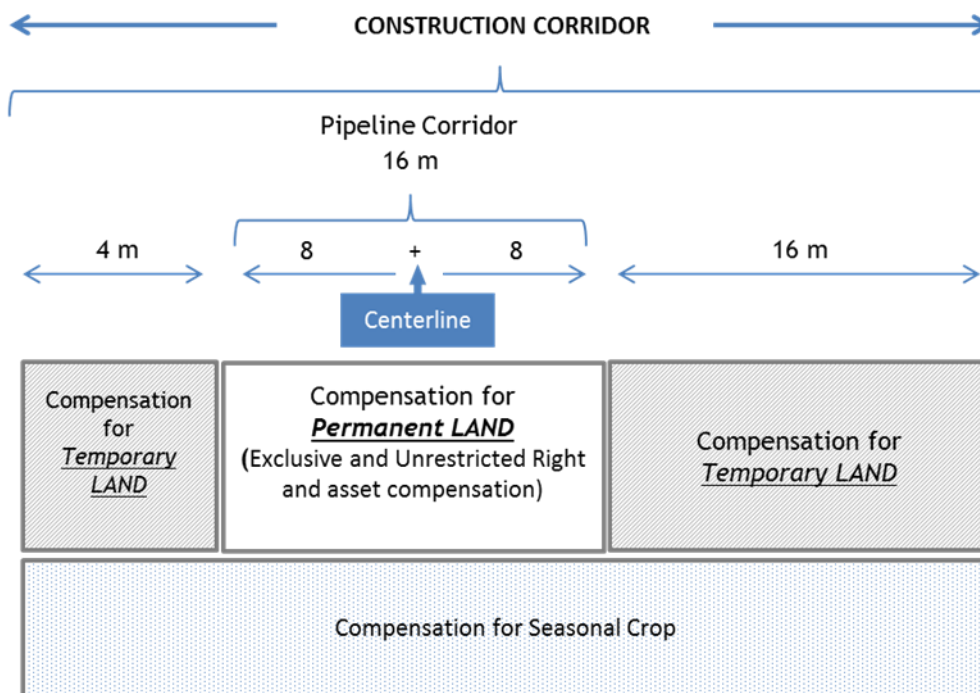


5.3.2.4 Rental Agreements

Rental agreements are concluded between the Contractors or sub-contractors and individual landowners for the temporary use of areas required for construction activities. Rental agreements may be concluded for any duration and are typically established for intermediate camp sites, storage areas, additional work spaces and others.

After the termination of the rental agreements the land will be fully re-instated and handed back to the land owner(s). Rental agreements are subject to Project specific requirements with regard to the site selection, i.e. engineering and geo-hazard assessment, environmental assessment, as well as with regard to the implementation of rules, regulations and policies for land compensation and interaction with third parties and Project.

Figure 41: Type of land rights to be established along the pipeline corridor



5.3.3 Cut-off Date

Under the current WB/IFC policy, people who settle in the project area after a designated cut-off date are ineligible for any compensation or assistance. The cut-off date should be established through “an effective public dissemination of information on the area delineated, and systematic and continuous dissemination subsequent to the delineation to prevent further population influx”. The rationale behind this exclusion from entitlements is to discourage “encroachers” and rent-seeking behavior and, as such, has practical merit.

Generally, the cut-off date corresponds to the date at which the PAP and asset inventory is completed. In this case, since the Project is of linear nature, a single cut-off date is not



recommended. For practical reasons, LRE will establish a cut-off date for each of the 20 provinces that will be crossed by the pipeline. This will facilitate the spatial understanding of the project since each cut-off-date will correspond to existing and known territorial limits. At the end of the asset and PAP inventory, the project will therefore have one cut-off-date for each of the 20 provinces.

Information regarding the cut-off dates will be well documented and disseminated throughout the Project area through use of LRE branch offices and written communications with headmen (or mayors) of affected communities.

Given that the Project will be implemented over a relatively long period of time, years can pass between the cut-off dates and actual land acquisition activities; while awaiting Project implementation and not knowing exactly where the corridor would be and how exactly it would cross the affected parcels, people might lease their land to new tenants, establish vineyards and plant trees, etc. In the absence of legal requirements, TANAP will apply the policy of fair practice in view of the extensive period of project construction.

5.3.4 Preparation of Expropriation Files

As per Article 7 of the Expropriation Law, "Any administration intending to expropriate land shall draw up or arrange for the preparation of a scaled plan showing the boundaries, area, and type rights in rem or immovable land which will be expropriated or on which easement will be established through expropriation." The Authority Liaison, Mapping, Land Acquisition and Ground Investigation Services Contractor (LASC) is the entity in charge of preparing the expropriation files.

Expropriation files are the main factor underlying expropriation and acquisition of land. They also constitute a basis for expropriation decisions. They will be drawn up for each village and include many details such as the route centerline, expropriation boundaries, boundaries of the construction corridor, drawings of areas to be expropriated, the boundaries and numbers of city blocks and parcels, names and boundaries of villages, boundaries of cadastral map sections, etc.

The content of the expropriation files is as follows:

- Decision on public interest
- Expropriation map
- Land survey record
- Technical Documentation (Drawings Calculations, Reports)
- Registration Records
- Title Deed or Ownership Record
- Expropriation Inventory
- Asset Inventory
- Address records
- Birth registration as per inheritance certificate for deceased owners



- The identification number of the absentee owners together with the official records proving the absenteeism as defined by the Law.
-

5.3.5 Valuation of Affected Assets

The pipeline and associated facilities will impact publicly and privately owned assets such as land, trees, vineyards, fences, irrigation infrastructure and other immovable assets (i.e. barns, stables and possibly residential houses).

The valuation of these assets is the most important concern of the PAPs. In order to facilitate the successful acquisition of affected assets through negotiations, an independent body carries out the valuation to ensure transparency and objectivity. Indeed, this type of valuation is required by the Law and is an essential requirement for land acquisition whether through negotiations or expropriation.

5.3.6 Valuation Procedure and Methodology

In acquiring affected immovable assets TANAP will devote maximum effort to negotiate willing/buyer arrangements. TANAP has established a valuation procedure that is compliant with both the Court's valuation methodology (legal requirements) and with international standards. By considering these two methodologies and standards, TANAP ensures that the valuation results will comply with local procedures and international standards. Through applying this enhanced valuation methodology, it is further aimed to prevent the gaps that may occur from the valuation methodology stated in Article 8 and 11 of the Expropriation Law. During valuations, paying the loss of productivity due to construction activities in addition to the land value will also be considered. TANAP's detailed valuation procedure is presented in Annex 5.3

During the negotiations, if the value is not agreed upon by parties; LRE will apply Article 27 of the Law which will then be followed by Article 10 process. The valuation methodology that will be followed through national legislation is presented below.

According to Article 27 and 10 of the Expropriation Law, once the court is informed of LRE's request for expropriation, the court, together with members of the valuation Commission will visit the relevant site. According to Article 15 – (Amended: 24/4/2001 - 4650/Article 8), the professional chambers affiliated to the Association of Chambers of Engineers and Architects of Turkey select experts by taking into account the residence areas of their members. The qualifications and working principles of those to act as experts are determined in a regulation to be drafted jointly by the Ministry of Finance and Ministry of Public Works and Settlement by receiving the opinion of the Association of Chambers of Engineers and Architects of Turkey. The names of the experts selected by the chambers from the lists approved by the governorate are communicated to the courts of first instance in the city centers and the ones selected by the administration boards are communicated to the courts of first instance in the location where they were selected.



The board of experts consists of five persons with three people selected from the list of chambers and two selected from the list of administration board depending on the type and quality of the place that is subject to expropriation. Taking the superior quality of the expropriated immovable asset into account, three of the experts may be selected from the same branch of specialization.

The board of experts identifies and appreciates the value of the immovable asset according to the provisions of Articles 11 and 12 and submits the reasoned report to the court within fifteen days.

The criteria considered for valuation of immovable assets include the following:

- The type and kind of the immovable asset;
- The size of the immovable asset;
- Characteristics and elements that could affect the value of the land or building, including the separate value of those elements;
- Any taxes declared on the land or building, if available;
- The valuation prepared by official authorities at the time of expropriation;
- The net income that could be obtained from the asset and/or resource depending on the location, condition and if used as it is;
- For buildings, official unit prices (of Ministry of Public Works and Settlement) at expropriation date, estimates of the cost of rebuilding and depreciation²⁹;
- Any other objective factors (criteria) that could affect the value of the immovable asset that would benefit of the property owner.

The legal framework protects the affected people in particular by ensuring that:

- No land will be used until compensation is paid;
- Compensation is paid to a national bank account, or a trust account to be paid in three monthly periods in the event of disputed ownership to be paid to the person proved the ownership;
- Market-based interest rates are charged for the value of the compensation if for any reason payment of compensation is deferred;
- All ownership is recognized, including customary and traditional ownership;
- Costs of due process are borne by TANAP, not by the affected people.

The Law requires that potential income that can be generated from the affected immovable assets is taken into consideration in the valuation process; however, the concept of “replacement cost” is not reflected and depreciation is taken into account³⁰. Therefore, TANAP will explicitly allow for full replacement cost for buildings and will ensure that lost income is fully restored through the

²⁹ The consideration of depreciation in asset valuation is not allowed by the relevant IFC policies.

³⁰ The consideration of depreciation in asset valuation is not allowed by the relevant IFC policies.



compensation process. For those vulnerable and with meager assets, additional income restoration measures may be designed, including provision of employment in construction works.

In the valuation of buildings, infrastructure and housing, public agencies use the cost approach method. This type of assessment is based on the premise that an informed purchaser will judge the value of a property by market price and rents of similar properties, and also considers the cost of buying land with similar characteristics and constructing a new building. The direct comparison method is also used, again reflecting market values. The availability of a dynamic property market is assumed, but the need of the affected people to replace their homes by having to build a new one is disregarded. In evaluating the value of affected structures official unit costs of buildings and building materials are considered. While families with mud houses thus receive low levels of compensation, their obligation to use modern building materials, especially if they were to decide to move to cities in search of work, is disregarded.

The agricultural land is valued by using the net income approach. The net income is the income that the land would bring in if it continued to be used without any change, taking into account the location and conditions of the land and resources at the expropriation date. The valuation commission will first find out the yearly average net income from the agricultural lands in the area through consultations and market research. The market prices of land are determined through market research and investigation of the title deeds. The ratio of annual average net income to the average market price will yield the capitalization rate. Since the capitalization rate is calculated based on the actual market prices in the expropriation area, this rate will give the full replacement cost of land to be expropriated.

The formula used during valuation of the agricultural lands is $K=R/f$, where;

K =Value (expropriation compensation);

R =Net income (gross income-production costs); and

f = the capitalization rate (risk related to the capital invested in agricultural land).

The Valuation Commissions established for valuation (or in the case of willing buyer/seller arrangements the valuation carried out by the independent private firm to carry out the work) undertake field surveys and identify the relevant characteristics of the land that could affect the expropriation value, such as the soil structure, patterns of use, topography, climate, distance to the settlements, roads, irrigation schemes, easement of access, location, and crops rotation systems of the region. The Commission members also obtain the opinions of local organizations (e.g., local chamber of agriculture, provincial/district directorate of agriculture). For the calculation of net annual income, the productivity of the crops (in the rotation system of the expropriation site) is



multiplied with the annual price to establish gross production value. Then by subtracting all the expenditures from the gross production value, the net income is established³¹.

The income approach is also used for the valuation of fruit orchards and vineyards. When the land in question is an orchard, the income from produce and expenditures are compared for the remaining life time of the orchards (or vineyards), taking interest rates into consideration. The present value of the expected produce is calculated and added to the value of the bare land. The total land value is determined either by using the past value approach or the future value approach. If the fruit orchard is in the nursery stage, the cost approach is preferred³².

Should the acquisition of a segment of a parcel result in uneconomic returns to the use of the remaining portion considerations are made to purchase the entire parcel.

5.4 Land Acquisition Works

This section describes the various land acquisition works that can start once the preparatory works mentioned in section 5.3 have been accomplished. Land acquisition works include the acquisition and payment of public or private immovable assets (i.e. land, trees, vineyards, fences, irrigation infrastructure, and other immovable assets such as barns, stables and possibly residential houses) as well as procedures regarding expropriation.

5.4.1 Acquisition of Public Land

Public land may belong to the Treasury or other state authorities and/or administrative entities. Some of the land affected is owned by the Village Legal Entities.

- **Forest land** acquisition involves long term rental (for 49 years), agreed upon by the forest authority and subsequent transfer of exclusive and unrestricted usage rights to LRE
- **Treasury Land** acquisition involves the payment for such land and subsequent transfer of land rights to LRE.
- **Pasture Land** acquisition involves a change of status from pasture land to treasury land. Therefore these lands will be treated as Treasury land.
- **Village Common Land** acquisition involves compensation payments to the village authority with subsequent transfer of land rights to LRE.
- **Other State Authority Land** acquisition involves payment to the relevant state authority with subsequent transfer of land rights to LRE.

³¹ This valuation method is also used for grazing lands that are the common properties of a village. The value of a grazing land is paid to the village legal entity to be used for the village. If the village legal entity is to be abolished, its money is transferred to the district governorate.

³² The bare land value of a timber plantation is found by capitalizing the income stream. For this purpose, number of trees, daily wages of workers, fertilizer and pesticide prices, the balance sheet of the land is analyzed. By using the real interest rate, the expenditures are estimated to the end of the operation period. The gross production values calculated by multiplying the unit value of wood with yield. The total expenditures (at the end of the operation period) are deducted from the gross production value to determine the net income. This net income is capitalized to establish the barrel and value.



The procedures of land acquisition for State Authority Land, Pasture Land and Forest Lands are summarized in Table 1 and 2 of Annex 5.4 respectively.

In the case of the acquisition of land registered in the name of a Village Legal Entity, after having conducted a valuation study, LRE will propose a value for the affected property to the village board (Village Committee of the Elderly). Once an agreement is reached, the payment will be made in the account of the Legal Entity and the land will be registered in the name of LRE. However, as of February 2014, the administrative structure in some of the affected provinces has been changed by the Municipal Law No. 5393. As of April 2014, according to the newly amended Municipality Law, common village resources of Village Entities have been connected mostly to District Municipalities with the exception of some common resources³³. Among the 20 provinces the pipeline passes, 6 are metropolitan cities (Erzurum, Ankara, Eskişehir, Bursa, Balıkesir and Tekirdağ) that will be subject to the above mentioned amendment of the Municipal Law.

If on the other hand, the affected property belongs to other State Authorities such as the General Directorate of State Hydraulic Works, or the General Directorate of Highways Authority, the requirements of article 30 of Expropriation Law are followed.. Agreement is also reached on road and similar crossings and a relevant protocol is signed.

5.4.2 Acquisition of Private Land

This process basically defines the acquisition steps to follow for private land acquisition starting from the identification of the owners up to the transfer of legal rights to LRE. Figure 42 presents this process in a logical sequence.

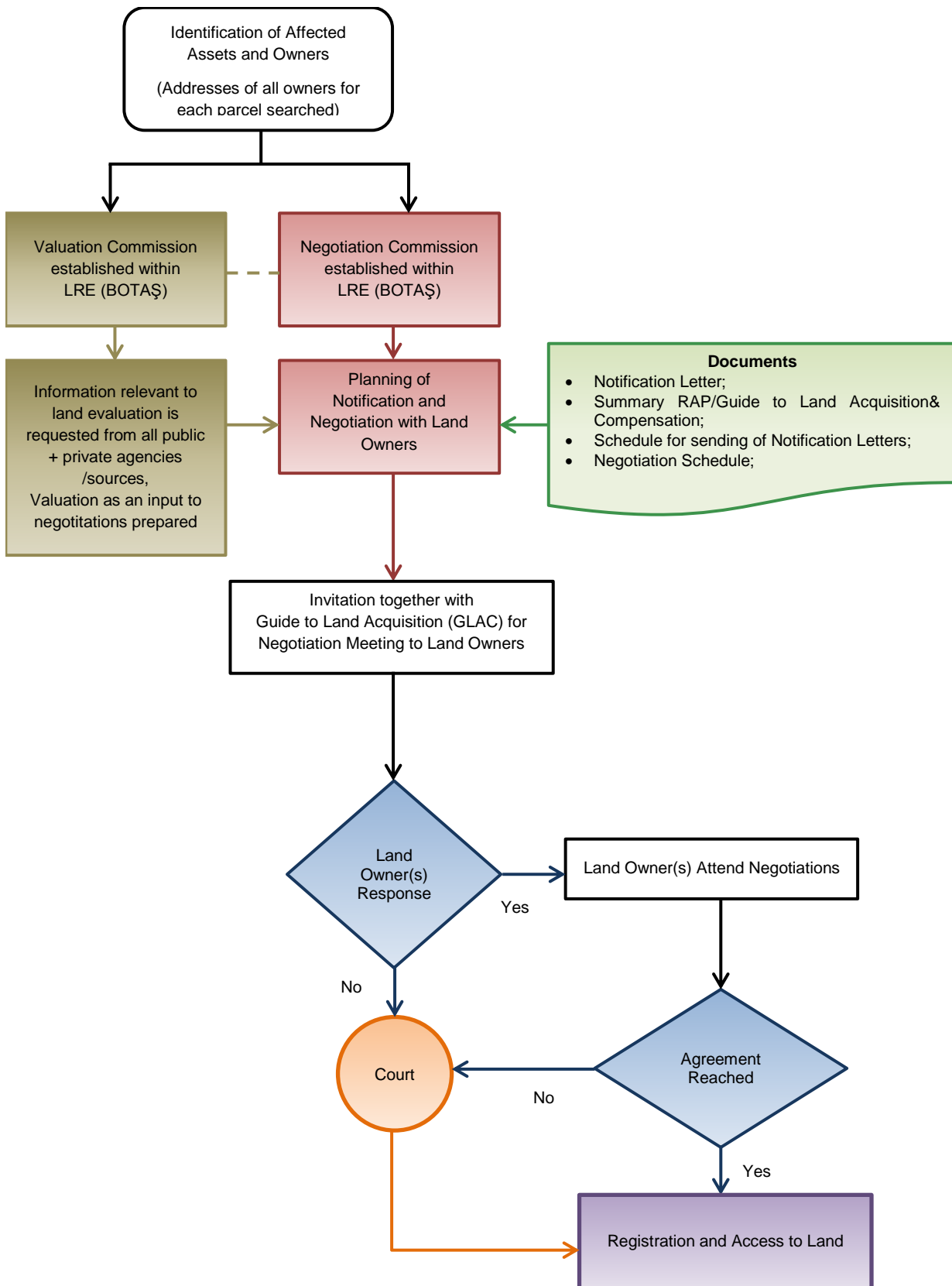
³³ Some of the common resources are cemeteries which are connected to Metropolitan Municipalities or sewerage systems which are connected to sewerage system administrations of that specific province.



Figure 42: Private Land Acquisition Process



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The process will consist of the following steps:

- Identification of the addresses of owners;
- Sending invitations and information to notify the owners of the decision of land acquisition;
- Planning negotiations based on extensive efforts of the valuation commission established within LRE;
- Holding negotiations with landowners in different points of the pipeline route simultaneously;
- Signing agreement protocols with landowners willing to sell/lease their land;
- Applying court process where negotiations fail to succeed;
- Completing registration requirements at Title Deed Offices administratively connected to the locations negotiations were held;
- Registering land/asset titles in the name of LRE;
- Making cash payments in full to consenting owners' bank accounts; and
- Obtaining the legal right to use the land.

Until recently, the privately owned land was either formally owned or regulated through the customary system (zilyet). With the recently completed cadastral set up and cadastral renewals, all immovable assets along the route that will be subject to expropriation were calculated and has been formally registered and integrated within the cadastral system after registration. Nevertheless, if there should be claims on ownership, the relevant land right can be acquired by LRE on behalf of the project following the processes described in Article 19 of Expropriation .³⁴

For the private lands that are already registered, LRE will notify and invite landowners/shareholders to negotiation meetings.

During the negotiation meeting the landowner is presented with the offer price for land and/or assets. In cases of where agreement is reached, a protocol is prepared and signed between LRE and the landowner. Land titles are transferred to LRE at the Title Deed Office if agreement is reached and full compensation is paid. In the event of disagreement, LRE applies to the Court by submitting the existing information and documentation in relation to the immovable asset subject to expropriation together with the evaluation reports and asking for re-valuation of the concerned asset by the Court appointed expert commission .

5.4.3 Payments for Land and Other Immovable Assets

This section presents the various types of payments for loss of land and other immovable assets (structures, standing crops, trees, etc.) on the land. The entitlement matrix, presented in Section

³⁴Although unregistered or customary land was not observed yet along the pipeline for which a complete inventory of affected assets is being prepared, an overview of the procedures to be used in the acquisition of such land is nevertheless provided in Annex 5.5.



6.9, illustrates these various types of compensations and states TANAP's compensation commitments.

The payments for private property can be made following the willing buyer/seller arrangements or subsequent to expropriation. The Turkish law allows payments to be made to legally recognized owners; users cannot be paid unless they own the immovable asset (land, structures, standing crops, fruit trees, vineyards, barns, stables, etc.). The payments theoretically correspond to the income generated by land and/or its market value. In order to comply with WB/IFC policies, TANAP will compensate the owners for their land (owners only) and immovable assets and income losses (standing crops) and the users, only for income losses (standing crops).

Under the Turkish law, buildings are compensated by calculating their original construction costs less amortization. By international standards, the replacement value is paid and amortization is not allowed. TANAP will compensate these types of losses without considering amortization in order to comply with WB/IFC policies.

Any private structures, immovable assets or standing crops present on these lands will be compensated to the owners which may be land users (non-documented users) or beneficiaries (unauthorized producers or croppers and tolerated collectors and grazers). See entitlement matrix (section 6.9) for further details.

Payments for trees, vineyards, etc. are made based on a calculation of the expected income from these for the rest of their lives; with the recent changes, the Turkish law allows the payments to be made to both to the owners and users except in forest areas. As per international policies and the recent private sector practice in Turkey, people who have encroached to public and/or private land and planted trees and crops (or built immovable assets) are compensated for these assets (but not for the land).

The rental or easement payments are considered to compensate for the inability of affected people to plant for the duration of the lease period. When permission is obtained to enter land, either through willing buyer/seller arrangements or through the court process, there may be standing crops on land. Standing crops may also be damaged from construction activity on land which was not included in the land acquisition process. Compensation is paid in both cases and the process involves the following:

- Crop identification study is prepared;
- Inquiry is made of crop market prices from district agricultural offices and markets;
- Compensation is calculated for each individual crop type ; and
- Crop compensation payment is made to landowners or land users³⁵

³⁵Crops may have been cultivated by the owner or one of the several joint owners. They may also have been planted by a tenant, encrocher or informal user. In principle, compensation for crops will be paid to the user. There will be disputes among owners and owners/users. Tenancy and sharecropping arrangements are highly variable by region; these will also complicate the issuance of payments.



- Land Delivery Process (Annex 5.6) between LRE (BOTAS) and EPC Contractor
- Land Entry Process (Annex 5.7) between EPC Contractor and Landowner/Land user
- Access to site by contractor
- Staking out of the construction corridor (to avoid reseeding by landowners/land users)

5.4.3.1 Unanticipated payments and the RAP Fund

As previously mentioned a number of impacts will be identified during Project construction and decommissioning. There may be new plots demanded by the EPC Contractor and minor route modifications (procedures concerning deviations are discussed in Annex 5.8) may be required. Such changes will sometimes require unanticipated payments to be made.

Direct damage to structures (i.e roads, bridges, channels etc.) that can be caused by the use of heavy machinery on rural roads may necessitate compensation for temporarily affected owners. These damages will be covered by the Contractor based on their contract with TANAP.

Payment for the loss of assets not considered in the land acquisition budget of the Resettlement Action Plan and in the EPC Contractor's agreement will be paid from a fund especially created to respond to individual and/or community based adverse impacts associated with land acquisition activities of the Project. This Fund (RAP Fund) will be accessible to authorized staff of TANAP in all field offices so that the unexpected payments can be made for land affected and/or assets damaged without delay and people entitled for payments as users, without legal ownership, can be paid in a timely manner.

There may be instances where the affected portion of the land would be too large to allow the rest of the parcel to be used economically. These situations are more likely to arise when, for instance, the land is permanently acquired for AGIs; along the pipeline easement will be established along a 36 meter corridor and once the pipes are buried in a relatively short period of construction the land will be available for cultivation; thus the reduced economic value of the parcel not affected by the Project will not be an issue. However, should the affected persons be unable to make an economic use of their remaining lands on a few parcels affected by AGIs, LRE will expropriate the entirety of the parcel as per Article 12 of the Expropriation Law. In rare cases, owners of land may argue that a certain segment of the land would lose its economic value once the remaining is taken by the Project; these claims will be considered and appropriate compensation will be paid from the RAP Fund. Should there be difficulties in using irrigation water, re-seeding and re-planning on any affected segment of a plot, these will be assessed by the LRE and compensated through mutual agreement.

Furthermore, forest and pasture losses may be greater than estimated at certain points along the pipeline and may require support to communities which will again be covered through the RAP Fund. There may also be bee keepers who utilize lands outside the RoW and may suffer from a loss of productivity due to dust caused by construction activities or some PAPs may have difficulties in mobilizing their animals to other fields. Such cases will all be compensated via the RAP Fund.



Those entitled to benefit from the RAP Fund would include:

- Land owners and land users for costs not recognized by the local laws but required by international policies;
- Beneficiaries and squatters, without legal title but recognized traditional claim;
- Communities/Village Entities for community wide livelihood losses (permanent or temporary) caused by reduced access to pastures, forest and forest products, fisheries in the course of water crossings; and community wide adverse impacts of construction activity;
- Owners/users of assets affected by the construction and/or decommissioning activity.

All transaction costs associated with purchase, expropriation, easement or rental of assets will be paid by the Project thus will be estimated and included in the budget of the RAP. Transaction costs associated with unanticipated expenses associated with physical and/or economic dislocation caused by the Project will be paid out of the RAP Fund.

The RAP Fund is designed to respond to individual and/or community based economic displacement associated with the Project; it is not designed to be used for broader support to communities to establish support for the Project. It will respond to entire communities or individuals, such as fishermen or farmers that may lose their means of income as a result of the Project.

The GIS data identifies communities that will suffer relatively greater due to restricted access to forest and pasture lands. Once the centerline is established and the 48 meter study corridor is reduced to 36 meters the communities that would be affected by the acquisition of forest and/or pasture lands will be better known³⁶. At the same time, once the engineering studies of water crossings, including the Marmara Sea, are completed communities that may be potentially affected will be identified. Once this is done and communities that are likely to be affected through impacts on community resources will be contacted by the Social Research Team of the RAP Fund to assess the magnitude of impacts. When community level risks are high, Fund financed investments will be identified through community participation. Special consultations will be held with those communities where immovable assets and crops are likely to be impacted by intensive construction activity.

The Project also affects several categories of PAPs who are not eligible for compensation under Expropriation Law. For instance, the case of illegal users will be compensated as per international

³⁶ Forests are an important source of fire wood and timber for those living in forest areas. In villages where access to forest is hindered by construction, it is imperative to provide alternative sources of fire wood and timber for residents. In addition, production and sales of forest products comprise a small but important source of income for some villages in these areas.



standards to address the livelihood losses (standing crops, structures and other immovable assets) through the RAP Fund.

5.4.3.2 *Protection of Compensation Payments Against Inflation*

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. Thus, the Project Affected People are protected against potential losses due to inflation as per Article 3 of the Expropriation Law (no. 2942). This Article allows the PAPs to receive fair compensation in full and in cash in a timely manner. 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 installments. When public agencies invest in large scale projects there may be a need to budget expropriation payments over a number of years. However, as per Article 3 of the Law, the compensation payments are required to be made over a maximum of 5 years. When this happens, interest is applied to installments. In addition, payments for owners of small farms are made in full and in cash; thus the small farmers are protected.

Another aspect of the recent legal changes also protects the PAPs by requiring interest payments to be made should legal response to court process are not completed within 4 months (Article 10, amendment of April 2013).

5.4.4 **Expropriation**

When immovable assets, including land, trees, vineyards, structures, etc., need to be purchased, affected people may disagree with the valuation during the willing buyer/seller arrangements and decide to terminate negotiations. Although TANAP will try to avoid expropriation process as much as possible, in case of disagreement, procedures required for the expropriation of land based on Article 27 of the Expropriation Law, will be initiated.

The immediate expropriation process (Article 27) is summarized in the following steps (See App5.16):

- LRE initiates Article 27 of Expropriation Law through the court process;
- LRE prepares court files for each of the affected parcels;
- Application is made to District Courts for expropriation;
- Court appoints a Valuation Commission;
- Valuation Commission determines the value of affected immovable assets within seven days;



- The payment of court ordered amount is made to the Court Trust Account (Another attempt for negotiations can be made once court valuation is completed. The relevant process is outlined in Annex 5.9);
- Court decides in favor of LRE and allow immediate access to land; and
- Access to land is given to LRE.

Article 27 gives LRE access to land.. After the access to land has been granted, LRE shall appeal to the Court of First Instance according to Article 10. This process is detailed as follows.

After LRE files a suit to the civil Court of First Instance and provides detailed documentation including the expropriation valuation, the Court assigns a day for a hearing within 30 days after this appeal and calls the parties for conciliation on a value at the court day. As soon as the PAP receives the notification from the Court, s/he has 30 days to appeal to the expropriation decision. In cases where the owner is not reached, the Court sends a public notification through a local and a national newspaper. Additionally, the Court also announces the summary of the expropriation through a local and national newspaper. Again, the PAP will have 30 days after this public notification to oppose to the expropriation decision.

After the notification, invitation or communication is made by the Court, the owner of the immovable asset is forbidden to transfer, convey or assign the asset to another party as per the Article 31/ b of the Law (No. 2942).

On the day of the first hearing, if the parties cannot settle on a value, the judge assigns a day for an inspection survey (within 10 days after the court day) and a new hearing date (within 30 days)³⁷.

The inspection survey will be conducted by the commission defined by the Expropriation Law (Article 15), with the participation of all parties and the village headman.

In total, there can be two inspection surveys and three hearing dates after which the court renders a decision on the expropriation fee and the registry of land. The Court will decide on the expropriation fee in case of absence of the parties and the expropriation fee is deposited in a bank account by LRE on the name of the parties. In the event that the owner comes forward after this deposit, s/he will only have the right to appeal the expropriation value.

Joint owners of affected assets have the right to appeal to the courts separately or jointly. The Courts are required to respond to these appeals within 30 days. The appeals do not affect decisions with regard to the remaining owners.

Figure 43 illustrates the complete Court process.

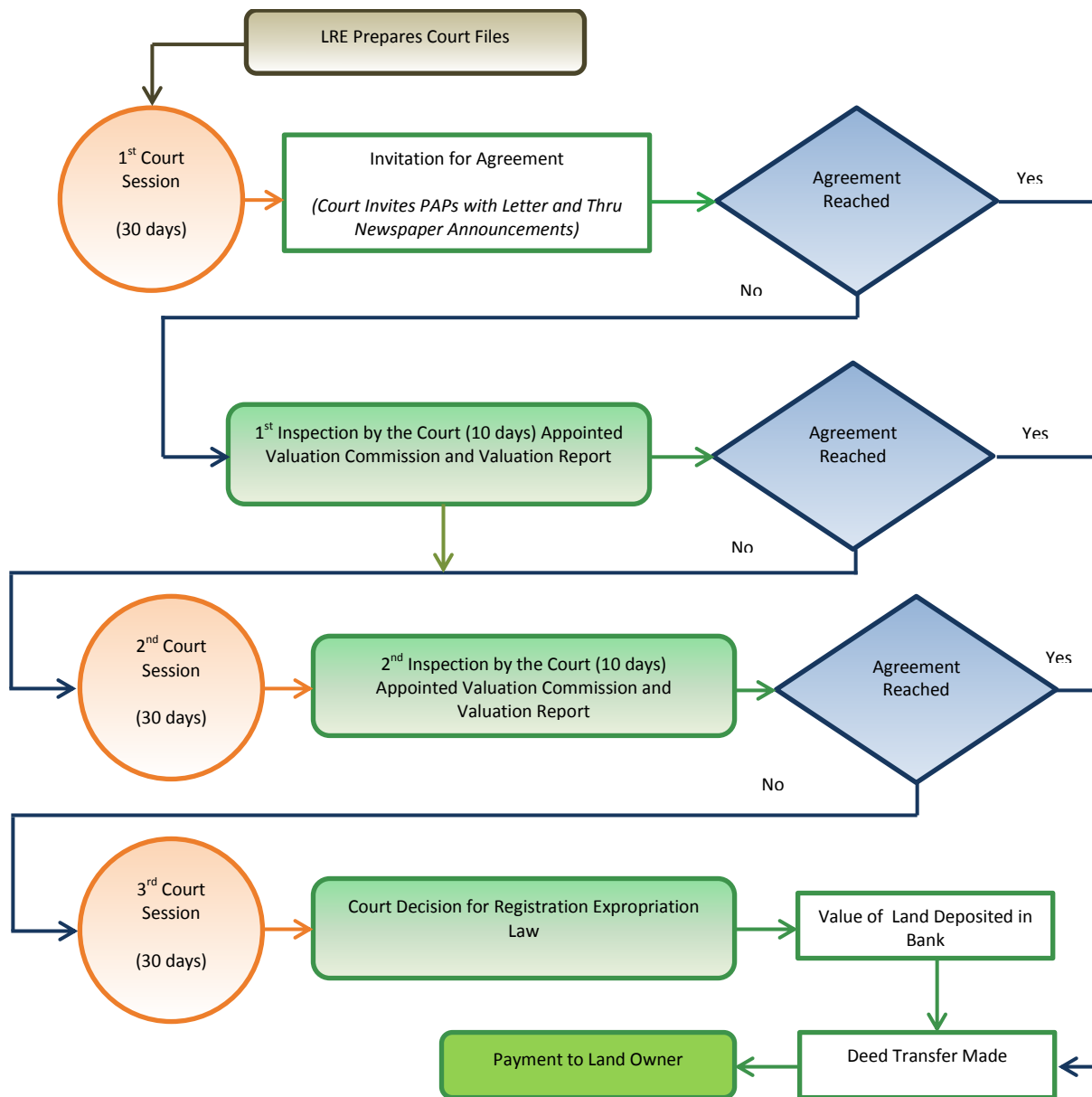
³⁷These deadlines were introduced to the Law in order to expedite the process of land acquisition. In the past, the long delays in land acquisition had made it difficult to carry out development investments in a timely manner. However, the local constraints that courts face continues to make it difficult to complete the expropriation process within the above mentioned dates. Indeed, in most cases expropriation process continues well beyond the limits set forth by the Expropriation Law.



RESETTLEMENT ACTION PLAN (RAP) FOR TANAP PROJECT



Figure 43: Court Process



When LRE establishes easement on the land, the land can be sold or bought and can be used for any purpose provided that the restrictions for use are respected. The owners of such land can also mortgage this land, for instance to obtain credit or use it to guarantee loans.

For the acquisition of an asset or resource owned by a public legal entity or a governmental organization, LRE shall file a written petition to the owner entity/organization stating the payable value. If agreement is reached the valuation amount is deposited in a bank account. In case the owner entity does not consent on alienation or respond within 60 days to the petition, LRE shall



approach the Council of State of Appeals (“Danıştay”) to resolve the issue within 60 days (Expropriation Law, Article 30). The relevant public land owner may accept the transfer of right but may object to the land value. In this case, Article 10 court process will be applied.

5.4.5 Partial Expropriation

Most of the land affected by TANAP consists of small portions of larger parcels. As per Article 12 of the Expropriation Law, in places where permanent land acquisition is realized, TANAP will consider expropriating the remaining portion of the parcel shall the owner state that the remaining portion is insufficient for use. In order for them to be assessed, TANAP shall develop criteria for the acquisition of such remaining portions.

However, throughout the pipeline corridor no parcel will be divided as such since TANAP will establish unrestricted and exclusive rights throughout the corridor and will allow the land to be used (with certain restrictions) once the pipeline is in place. This implies that the legal issues pertaining to the ‘remaining portion of affected land’ will not be relevant for the corridor.

There may be a few situations relevant to this issue on land permanently affected by AGIs. Should this be the case and if the owner believes that it would be uneconomic to cultivate the remaining portion of the land, he/she should first apply to the LRE. In case LRE responds negatively, he/she can apply to the courts to have the remaining land to be purchased.

Article 12 of the Expropriation Law focuses on partial expropriation of land. It states that any decrease in the value of the remaining land after a portion is expropriated would be considered in the valuation. The Law also considers the possibility of value appreciation for the remaining land, but such situations apply to cases where, for example, a new airport is built that would enhance land values in its vicinity, and not to investments in pipelines.

5.4.6 Difficulties Related to Private Land Acquisition

There are many situations where difficulties may be encountered during land acquisition activities. The main issues can be summarized as follows:

- Some privately owned lands might not be registered;
- The title registry may be outdated;
- 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;
- The local courts may have limited capacity to respond to expropriation applications made simultaneously by several institutions;



- Land plots might have multiple owners. Some cannot be reached or some might not share similar views. (The land acquisition process to be followed in cases of joint ownership is given in Annex 5.10);
- 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;
- Some title deeds might be in the name of a deceased person (details are provided in Annex 5.11);
- The individual rights of the heirs might not be registered;
- Families delay title deed changes for shares inherited.
- The liable owners avoid paying inheritance taxes since title registry is not legally required to register though determination of inheritance is a legal requirement;
- In identifying land owners and land users, owners are more easily identified than tenant farmers and other non-owners;
- Information about the Project and invitations for negotiations may not reach shareholders who may be away for seasonal work;
- The necessity to find the addresses of a large number of absentee owners might require some efforts;
- The absentee shareholders 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;
- There may be existing law suits on affected assets which might delay the land acquisition process;
- There may be lien against some of the immovable assets in the Project's footprint;
- There may be consolidation programs underway in the Project's footprint.

These difficulties may rise from many underlying reasons such as:

- High levels of joint ownership couples with lower compensation expectations for each owner reduce their motivation to attend negotiations meetings.
- Often only one or the joint owners cultivates the land, often without sharing the profits. When land is taken for the Project all owners share the compensation; this results in difficulties in meeting the income restoration principles established by international policies.
- Registration of changes in ownership is complicated when arrangements need to fit the schedule of each owner in case of willing buyer/willing seller arrangements.
- Low levels of expectation for compensation, discourages absentee owners to respond to invitations to negotiations meetings.
- Absentee owners are 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 paying their travel expenses.
- Even when promises made to reimburse owners for their travel costs, or for such transaction costs as the fees for the power of attorneys, arrangements are difficult to make and the monetary motivation is far too small for co-owners to spend time and energy travelling to attend negotiation meetings.
- Not all heirs can be reached.
- Heirs are not motivated to register their inheritance claims when their compensation expectations are low³⁸.
- Heirs lack connection to the land they inherited.
- At each generation, the share of heirs get smaller (and land is further fragmented) and the motivation to return to communities of ancestral land is likewise low.
- Heirs that live away from the land inherited and who do not cultivate it are reluctant to register their inheritance claims in order to avoid taxes.
- There is reluctance in recognizing and registering the shares of women. The Civil Code provides equal share to women and men in the process of inheritance but once they are married women often live outside their communities where the family holdings are; thus it is difficult to locate them.
- During the past 5 decades outmigration from rural areas to Europe has also grown, reaching several million people. Some of these are owners or co-owners of land but can neither be located nor be motivated to get involved in selling a small portion of their land for projects such as TANAP.

The strategy to overcome some of the above listed challenges is not easy to formulate. Several actions will help reduce the burden created by these challenges:

- Preparation of a careful land acquisition plan that moves well ahead of construction with valuation of individual immovable assets;
- Additional program for owner identification, notification/invitation, and negotiations following the regular first phase;
- 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;
- As also announced in the Guide to Land Acquisition and Compensation (GLAC), LRE will cover all transaction costs of land acquisition and test the practicality of compensating absentee land owners for their travel costs to encourage their attendance to negotiation meetings.

³⁸This is so because the amount of land needed for the Project at any point along the pipeline is small.



5.4.6.1 Disagreement on Price among Willing Buyer/Sellers

Before negotiations start, TANAP will carry out the valuation process to form an objective basis for discussions among willing buyers/sellers. TANAP has asked a private company to carry out the parcel based valuation reports. The company visits each of the affected parcels, prepares a full list of affected assets in each parcel (such as trees, wells, etc.) and makes an assessment of the affected immovable assets forming the basis for the LRE commission decisions..

As per Article 8, negotiations will be held. In case there is disagreement, Article 27 will be applied and the valuation made by the relevant committee cannot be challenged. A second set of negotiations will be made based on the valuation prepared in the context of Article 27 and the procedures outlined in Article 10 will be followed.

In a Project of the size of TANAP, this process alone takes several years; as this Chapter is being written expropriation files have been prepared for 481 km out of the 1,805 km of the pipeline. Once the entire pipeline route is covered, TANAP will be able to establish an inventory of affected assets; based on their initial valuation and it will also be able to prepare a tentative budget.

Once the individual folders are ready, LRE will contact the owners of affected assets and invite them to negotiate. Despite the repeated efforts this may be difficult for a number of reasons including lack of interest among owners to make an effort when only a small segment of their land is affected. Whether owners may be reached or not, the cost of each immovable asset has to be calculated.

LRE will be required to make a payment in the name of the asset owner to his/her bank account based on the valuation of Court appointed valuation committee and per Article 11 and 15 of the Law. Since the Council of Ministers will have already approved of LRE's right to apply Article 27 (based on the Host Government Agreement), the affected plot will be ready for use once the full amount of court determined price is deposited to the account of the affected person by the LRE; thereafter the Project can resume construction activity on the affected land.

Despite the concerns expressed in PS5 of IFC, the process of expropriation by a public agency does not necessarily result in lower compensation for the people; often the reverse can be true. Based on past experience, this may be the case, regardless of whether the need for expropriation emerges from a legal obligation or from the inability of the buyer/seller(s) to reach an agreement on the price of the immovable assets.

5.4.6.2 Cases of Land Consolidation

If the land to be acquired is included in a land consolidation program of the government, LRE would need to approach the authority conducting the land consolidation. After the council of ministers' decision regarding the areas to be consolidated is published in the official gazette and until the consolidation process finalized, transfer, disposition, sales operations of the ownership



and possession of land subject to consolidation is dependent on the permission of the relevant authority undertaking the consolidation activity. The acquisition of land can only be realized after LRE is granted the permission. Additional information on land consolidation in Turkey is provided in Annex 5.12.

In order to avoid complications with the acquisition process, LRE will inform the authority of the pipeline's exact location.. If the consolidation process is not yet completed by the time land acquisition activities have started, the authority would have the opportunity to redistribute land while considering the Project's RoW. One solution would be for LRE to suggest the authority to include the pipeline's RoW inside the 10% surface that is generally reserved for services since this would avoid LRE having to deal with changing PAPs during the land acquisition process.

5.4.6.3 Cases of Lien on Land to be Acquired

Along the TANAP pipeline route, there are parcels that have lien against them. LRE will obtain the easement rights to the land with lien and pay the value to its owner(s). With the expropriation, all rights will be devolved to LRE. In return of the easement obtained, LRE will be responsible of paying the expropriation fee to the owner of land. However, if there is lien against the property, it will still apply to the expropriation fee. Therefore, LRE will need to get the permission of the creditors and reach an agreement.

5.5 Land Delivery and Land Entry

5.5.1 Land Delivery Process

Through which ever mean it might be (negotiated or through expropriation), after its acquisition by LRE, the land is transferred to the EPC Contractor. Land delivery shall be regulated by a Land Delivery Protocol that will be signed by the representatives of LRE, TANAP and the Contractor.

The Land Delivery Protocol shall clearly identify each land parcel on the RoW and/or any other sites that shall be transferred to the Contractor. The Land Delivery Protocol shall contain the following attachments:

- Land acquisition drawings identifying the exact location of the pipeline centerline, the boundaries of the acquired RoW or station sites and any other areas that have been acquired by LRE and are subject to transfer, the identification of plot boundaries and land parcel numbers for all land affected land parcels;
- List of coordinates to allow the setting out of the RoW, station site boundaries or other areas that have been acquired by LRE and are subject to transfer, in the field;
- List of landowners and land users or tenants for all transferred land parcels.



In cases that land acquisition activities have not yet been completed for individual land parcels within a section of the RoW 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. The Contractor shall under no circumstances enter into land that has not been delivered through a Land Delivery Protocol or for which he has established rights through a rental agreement with the relevant land owner.

In agricultural areas, LRE has disbursed crop compensation payment for the actually seeded crop type shortly prior to land delivery to the Contractor. 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.

5.5.2 Land Entry Process

Following the possession of site by the Contractor through the Land Delivery protocol, 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 on the RoW or any site.

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 TANAP and/or LRE and the village headman.

Once the Land Entry Protocol has been signed, the Contractor will stake out the construction site (RoW) and prepare construction plans and procedures to be submitted to TANAP. After LRE has approved the stake out and TANAP has agreed on the construction plans, the Contractor will be able to commence the construction works. Details to the Land Entry Process have been provided in Annex 5.7.

5.6 Land Acquisition during Construction

Land must be acquired and made available for the Project before construction begins. No construction can take place unless:

- Title deed is obtained through mutual agreements;
- Certified attempts are made to negotiate the transfer of ownership or use rights from private owners;
- The valuation is completed;
- Article 27 land access court decision is available;
- Full payment in cash is made to the bank account of the owners.

Land acquisition activities will have to be performed during the construction phase in order to cover potential pipeline re-routings as well as the requests of the EPC Contractors for the provision of



additional work spaces required to accommodate adverse ground conditions, the use of specific construction techniques and others. TANAP will pay for the acquisition of the land requested as per design/route changes.

The relevant land acquisition activities will require the consideration of all relevant work items as specified in the previous sections (Table 36).

Table -36: Procedures Followed for Land Acquisition during Construction

Land Acquisition for Re-routings and Extra Workspaces
Identification of required work spaces including site survey and staking out and mapping of required areas
Environmental and Social screening of additional acquisition areas
Sanctioning of additional areas by TANAP construction supervision
Performance of preparatory land acquisition works
Performance of Land Acquisition works in accordance with relevant landownership type
Land Delivery and Access to Site by EPC Contractor in accordance with relevant landownership type requirements

The pipeline will pass through more than 22,000 parcels of land and affect more than 60,000 private owners. It is likely that additional parcels will be temporarily affected in order to reach the areas under which the pipeline will be buried. These impacts will only be observed as the construction and decommissioning activities are carried out. Thus, it is not possible to prepare a complete inventory of all affected assets at this stage. The inventory of the additional assets impacted through construction and decommissioning phases will be prepared through an intensive monitoring³⁹ and evaluation process that will be launched parallel to the construction activity.

Construction materials will be transported both through existing main and secondary roads; new access roads may also be needed. The construction activity may impact additional land, standing crops, other immovable assets including trees and structures. Debris from the area in which the pipeline is placed will be moved and areas for the safe deposit of the debris will be identified.

5.7 Land Exit

The land exit is a critical activity and is pertinent to the livelihood restoration capabilities of owners and users that participate in temporary or permanent easement of land. The proper levelling of land and the removal of debris significantly improves the ability of the land owners and users to use their land (with restrictions).

³⁹Procedures for quality control in TANAP operations are presented in Annex 5.13.



Land exit is important for land leased for 3 years, or for which unrestricted and exclusive rights have been established. The land exit process is provided in Annex 5.14.

All areas for which temporary easement rights (rental) or exclusive and unrestricted rights have been established for the Project, will be fully reinstated and handed back to the original owner (holder of the land title). Land for which permanent unrestricted and exclusive rights have been established will be fully reinstated and handed back to the original owner with the imposition of certain re-use conditions. The relevant land re-use conditions will be communicated as attachment to the land exit protocol. Land re-use conditions (section 5.8) and special pre-cautions in the vicinity of the Project installations will also be shared with the public through publications and awareness campaigns.

Land on which AGIs and other permanent surface installations have been installed will not be handed back to the initial owners, as ownership rights will be acquired by the LRE. Subject lands will be handed over to TANAP during the Project completion and the relevant areas will be included in the transfer of rights protocol from the LRE to TANAP (Annex 5.14).

The protocol will confirm that relevant action has been completed and the land is reinstated. The signing of the protocol will avoid future complaints regarding land exit.

5.8 Reuse Conditions on the 16 m Corridor

Provided that the below stated limitations are taken into consideration, agricultural activities will be permitted on the 16 meter corridor of the pipeline where the unrestricted and exclusive rights will be obtained.

The activities that are planned to be restricted or limited are:

- All activities that will adversely affect; pipeline operation requirements, established facilities like metering stations etc., and structures that ensure erosion control;
- All activities that will adversely affect; the pipeline facilities or prevent the safe operation of equipment belonging to the Contractor;
- All activities, other than standard agricultural practices that are listed below, but not limited to:
 - Ploughing more than 30 cm into land and planting crops/plants that may grow roots deeper than this height;
 - Planting of trees or shrubs;
 - Construction of a dam or pond or any kind of activity that will lead to the inundation of the pipeline;
 - Usage of corrosive or harmful substances;



- Stubble burning or lighting a fire of any kind;
- Fence in or wall up the land.

- All construction activities that are listed below but are not limited to:
 - Construction of buildings, facilities or other permanent/temporary structures;
 - Construction of service areas and parks for equipment and machinery;
 - Construction of passageway, access roads and other roads (except for roads approved and constructed under the supervision of the Contractor);
 - Construction of irrigation channels or ditches deeper than 30 cm;
 - All kinds of excavation (drainage channels etc.);
 - Changing of surface profile (taking or adding soil);
 - Executing exploration studies, taking soil samples and drilling wells.

- Except for the road transit points determined by the Project, crossings made with equipment and machinery that have more than 6,8 tons total weight and surface bearing weight exceeding 0,544 kg/cm² or single axle weight higher than 3,4 tons;

- Since the health protection strip remains within the expropriation boundaries there will be no further limitations for the land use conditions of third parties.

Additionally, legal restraints stated in the HGA are listed below:

- The right of the TANAP Project Entity to require that it will be unlawful for any Person without prior written consent of the TANAP Project Entity:
 - to use explosives within an area of 500 (five hundred) meters either side of the Facilities;
 - to undertake any pile-driving within fifty (50) meters either side of the Facilities;
 - to encroach on the Construction Corridor or other areas where land has been granted to the TANAP Project Entity to conduct Project Activities.
 - to cross or otherwise interfere with the TANAP Project Entity's Land Rights with any road, railway, power line, utility, pipeline or other public project ("Crossing Project") and the TANAP Project Entity will in no event be required to consider a request for consent to such Crossing Project unless and until the State Authorities have approved the proposed Crossing Project and the party proposing the Crossing Project has provided to the TANAP Project Entity:
 - 1) details of the proposed Crossing Project sufficient, in the sole opinion of the TANAP Project Entity, to enable the TANAP Project Entity to assess in its sole discretion the practicability of conducting the Crossing Project safely, efficiently, and without unreasonably interfering with Project Activities and



- 2) a guarantee of compensation to the TANAP Project Entity for any costs incurred by the TANAP Project Entity to accommodate the Crossing Project.

The TANAP Project Entity agrees that for the purposes of paragraph (d), where a Crossing Project has been approved by the State Authorities and subject to the conditions set out in (1) and (2) above, the TANAP Project Entity will not unreasonably withhold its consent and the assessment of such Crossing Project shall be given priority without causing unreasonable delay.



6.0 RESETTLEMENT RELATED POTENTIAL IMPACTS OF THE PROJECT

6.1 General

The TANAP pipeline will acquire public and private lands and other immovable assets over 1,805 km; along the pipeline the land acquired at each point is small and the estimated livelihood impacts are minor. The land requirements of auxiliary facilities are also modest.

The social risks of land acquisition associated with large scale projects generally include:

- Homelessness;
- Landlessness;
- Joblessness;
- Marginalization;
- Impoverishment, food security and loss of income;
- Community disarticulation, social disruption and social conflict;
- Loss of community resources.

TANAP has made a commitment to avoid and/or significantly reduce these risks:

- Homelessness is significantly reduced as residential areas and homes will be avoided as much as possible through careful engineering design.
- Landlessness is avoided as none of the affected parcels along the pipeline are acquired in their entirety the small amounts of land taken from a large number of landowners imply that impoverishment and food insecurity is not caused by the Project; rather the generous payments made for the easement of land that is returned to the original owners with restrictions that do not hinder its use for cultivation and/or grazing may enhance incomes especially when the construction activity is completed expeditiously after proper leveling.
- Joblessness is avoided; rather the Project creates work opportunities over its three year construction period.
- Since TANAP plans to avoid any physical displacement marginalization, community disarticulation and social disruption is eliminated.

The loss of community resources (forests and pasture lands) is negligible at each point of the pipeline and the decline in household incomes as a result of reduced access to these lands is minimal.

The key impacts of the Project's pipeline component consist of:

- Loss of land used for agricultural (horticultural) activities;
- Loss of privately owned land used for grazing;



- Loss of man-made structures, including wells, barns, pergola, etc.;
- Loss or reduced access to common resources such as pastures and forests;
- Loss of dwellings;
- Loss of standing crops;
- Loss of trees, orchards and vineyards;
- Loss of feedstock on pasturelands

Other losses typically observed in similar investments but will most probably be avoided in the Project include:

- Loss of buildings and facilities used for business;
- Loss of community assets such as cemeteries, mosques, etc.; and
- Loss of infrastructure such as irrigation canals.

Animal husbandry is a significant source of income along the pipeline and communities in Eastern and Central Anatolia would be at greater risk. The construction of the pipeline may potentially cause injury to livestock due to livestock falling into trenches, being injured by vehicles or eating dangerous wastes. This impact will be significant if households that are dependent on livestock are no longer able to secure a standard of living equal to that held before losing livestock. The relevant damages will be assessed and compensated by field officers of the RAP Fund who will be empowered to make the relevant decisions and issue timely compensation payments.

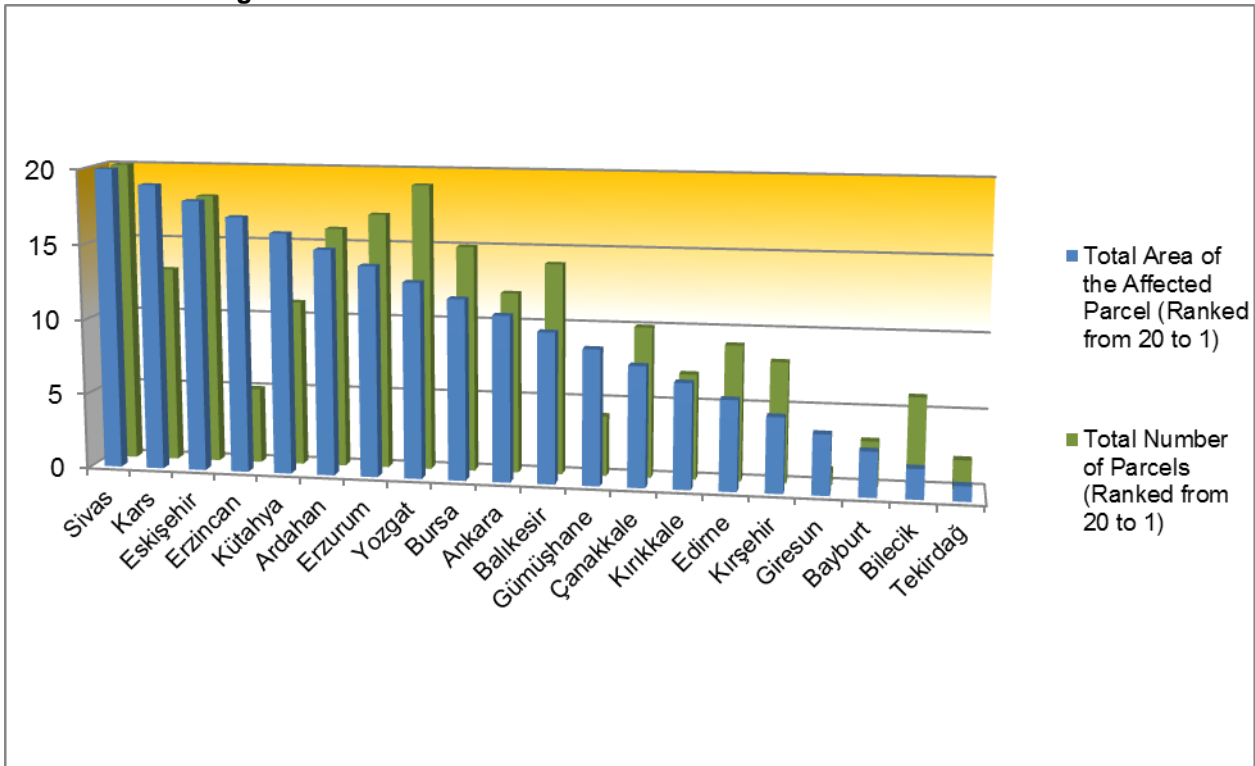
Damage to crops and other disturbances to cultivation will also be assessed by the Fund field staff and compensated. The assessment will involve representatives of PAPs and communities without requiring lengthy procedures and delays in compensation payments. Similarly, beekeeping is an important economic activity in some central and southern provinces through which the pipeline passes including Sivas. The Project may physically disturb bees within 250 m to 300 m of the pipeline due to sensitivity to dust, noise and vibration. Bees with hives within 5 km of the pipeline corridor will be affected by loss of vegetation. Mitigation for this is addressed in the ESIA for the Project.

6.2 Overview of Lands Affected by the Pipeline

A total of 22,080 parcels and 60,041 private owners are affected along the corridor which passes through 20 of the 81 provinces of Turkey (Figure 44). Out of these parcels, 18,013 of them are privately owned. The other 4,067 parcels are principally treasury owned, pasture land and forest land.



Figure 44: Rank Distribution of Number and Area of Affected Parcels



Source: GIS Database for 500 m parcel and owner data, TANAP

Measured in terms of the entire area (ha) of the affected parcels Sivas, Kars, Eskişehir and Erzincan have the largest amount of land. Considering that construction activities will have some adverse impacts on the entirety of the parcels in addition to the impacts specific to the land under the construction corridor, the overall livelihoods impacts in these three provinces are likely to be higher. Tekirdağ, Bilecik, and Bayburt lose small amount of land with low potential overall livelihood impacts.

Measured in terms of the number of parcels affected Sivas, Yozgat, and Eskişehir have the highest number of affected parcels (Table 37). Of the total number of affected parcels over 41 percent concentrates in these 3 provinces. Within each province, the affected parcels concentrate in a select number of districts (Annex 6.1Table 1). This situation would facilitate land acquisition administration and, enhance stakeholder consultations and RAP disclosure.



Table -37: Area and Number of Parcels Affected by Province

Province	Total Area of Parcels crossed by RoW (ha)	Total Number of Parcels crossed by RoW	Area in ha within 48 m study corridor	Percentage of area within 48 m study corridor to the entire affected parcel Area (%)	Area in ha within 36 m (RoW)	Percentage of area within 36 m RoW to the entire affected parcel Area (%)
Sivas	22,131	3,321	1,150	0,05	863	0,04
Kars	15,559	1,045	491	0,03	368	0,02
Eskişehir	14,044	2,447	918	0,07	688	0,05
Erzincan	13,301	486	509	0,04	382	0,03
Kütahya	13,290	887	227	0,02	170	0,01
Ardahan	9,543	1,759	492	0,05	369	0,04
Erzurum	9,149	1,808	789	0,09	592	0,06
Yozgat	7,649	2,640	761	0,10	571	0,07
Bursa	7,389	1,712	548	0,07	411	0,06
Ankara	5,746	1,025	568	0,10	426	0,07
Balıkesir	5,247	1,134	379	0,07	284	0,05
Gümüşhane	5,186	461	311	0,06	233	0,04
Çanakkale	4,731	730	309	0,07	231	0,05
Kırıkkale	2,940	580	291	0,10	218	0,07
Edirne	2,628	719	258	0,10	194	0,07
Kırşehir	2,023	606	191	0,09	143	0,07
Giresun	1,414	26	11	0,01	8	0,01
Bayburt	855	111	57	0,07	42	0,05
Bilecik	623	544	110	0,18	82	0,13
Tekirdağ	421	39	33	0,08	25	0,06
Total	143,869	22,080	8,401		6,301	

Source: GIS Database for 500 m parcel and owner data, TANAP

The distribution of the parcels across the provinces is highly variable. There are no patterns that determine the relative impacts on provinces; neither the total population of the province nor the area (in ha) of the province correlate with the distribution of affected parcels (Annex 6.1 Table 1).

The pipeline requires the acquisition of varying but small portions of the affected lands. The other Project components are also expected to require small amounts of land; however, in most cases these affected parcels would be required in their entirety. Other Project components will require small segments of larger parcels. A number of access roads will be needed and will be planned prior to the start of construction; additional roads and/or road widening will create the need for the acquisition of additional land. Road related land acquisition will also impact small fractions of large number of parcels.

Within the 48 meter study corridor a total of 22,080 parcels totaling 8,401 hectares are affected. In other words, an average of 420 hectares of land is affected in each province; however, there are



significant differences between provinces in this regard. For instance, in Sivas a total of 1,150 hectares are affected in the 48 m study corridor and only 11 ha are affected in the province of Giresun (Table 37). This province also ranks highest in terms of the number of parcels (3,321) from which a portion will be lost to the Project.

Interestingly, the correlation between the total number of parcels affected and the total size of these is not strong (Figure 44 above). For instance, Erzincan ranks 17 (20 being the highest and 1 the lowest) with respect to the total size of affected parcels but ranks only 5 in terms of the number of parcels. There are no regional or provincial patterns (Annex 6.1 Table 2). However, LRE will bear the greatest burden in provinces where larger number of parcels will have to be acquired as highlighted previously in Table 10.

The total number of affected parcels is a good indication of the effort TANAP will have to expand for its land acquisition activities. The construction is estimated to continue for approximately 3 years; land acquisition will start prior to construction and will continue for several years but ahead of construction in each point of the pipeline so that land is made available to the Project once all legal procedures are completed and a full payment is made. Both the construction and land acquisition will commence simultaneously in several points along the corridor; the higher the number of parcels that need to be temporarily or permanently acquired, the greater is the number of staff that would be needed. Given the large number of parcels affected along the corridor and the large number of additional parcels that will be needed for AGIs as well as for access roads, consequently, TANAP will have an enormous challenge to meet.

The Project's pipeline will acquire, primarily through easement, only a small portion of each parcel. The average size of a parcel affected by the 48 meter study corridor is little over half a hectare (0.6) and the size of the portion affected by the 36 meter corridor is 0.04 hectares.

When the study corridor of 48 meters is used, the pipeline requires less than 6 percent (0.058) of the affected parcels. In reality, the actual impacts will be confined to 3-year easement on 20 meters and the long term impact corridor of 16 meters on which the Project will establish unrestricted and exclusive rights; thus the proportion of the affected parcels used for the Project will be negligible (Table 38). As will be shown, these impacts will be larger on privately owned land as the average size of the publicly held parcels is significantly larger than those privately owned.



Table -38: Impacts of the entire RoW and 16 meters of the RoW

Province	Affected area within the entire parcel subject to easement within 36 m RoW(%)	Area subject to permanent easement within 16 m of the RoW (ha)	Affected are within the entire parcel subject to easement within 16 m of the RoW(%)
Sivas	0,04	380	0,02
Kars	0,02	162	0,01
Eskişehir	0,05	303	0,02
Erzincan	0,03	168	0,01
Kütahya	0,01	75	0,01
Ardahan	0,04	162	0,02
Erzurum	0,06	260	0,03
Yozgat	0,07	251	0,03
Bursa	0,06	181	0,02
Ankara	0,07	187	0,03
Balıkesir	0,05	125	0,02
Gümüşhane	0,04	103	0,02
Çanakkale	0,05	102	0,02
Kırıkkale	0,07	96	0,03
Edirne	0,07	85	0,03
Kırşehir	0,07	63	0,03
Giresun	0,01	4	0,00
Bayburt	0,05	19	0,02
Bilecik	0,13	36	0,06
Tekirdağ	0,06	11	0,03
Total		2,773	

Source: GIS Database for 500 m parcel and owner data, TANAP

The relative impacts measured in terms of the portion of the affected parcels needed for the Project are highly variable among provinces (Figure above). In 4 provinces less than 4 percent of affected parcels will be acquired; there are 6 provinces where this percentage is over 9 percent as shown in bold (Table 39). Only in Bilecik where a total of 544 parcels, consisting of a total of 623 hectares are affected, 110 hectares fall within the 48 meter study corridor.

Table -39: Percentage of Affected Parcels Subject to Land Acquisition

Province	Total Area of all Parcels (ha)	Segment of the Affected Parcel subject to land acquisition (ha)	Percentage of the total size of the Parcel subject to land acquisition by 48 m
Giresun	1,414	11	0.78%
Kütahya	13,290	227	1.71%
Kars	15,559	491	3.16%
Erzincan	13,301	509	3.83%

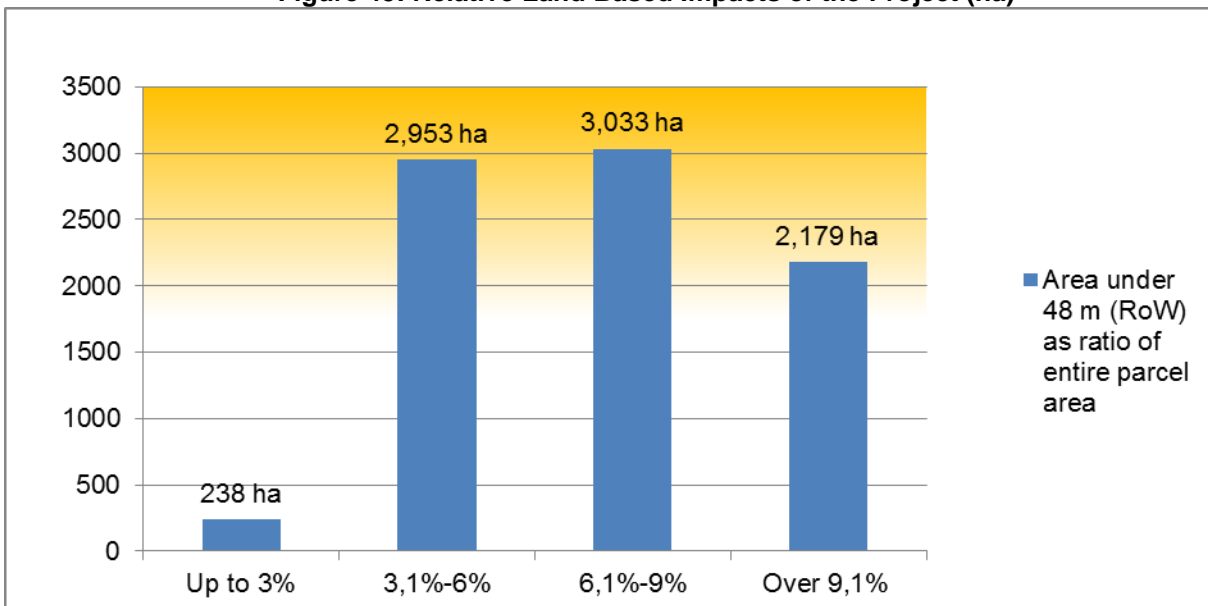


Province	Total Area of all Parcels (ha)	Segment of the Affected Parcel subject to land acquisition (ha)	Percentage of the total size of the Parcel subject to land acquisition by 48 m
Ardahan	9,543	492	5.16%
Sivas	22,131	1150	5.20%
Gümüşhane	5,186	311	6.00%
Çanakkale	4,731	309	6.53%
Eskişehir	14,044	918	6.54%
Bayburt	855	57	6.67%
Balıkesir	5,247	379	7.22%
Bursa	7,389	548	7.42%
Tekirdağ	421	33	7.84%
Erzurum	9,149	789	8.62%
Kırşehir	2,023	191	9.44%
Edirne	2,628	258	9.82%
Ankara	5,746	568	9.89%
Kırıkkale	2,940	291	9.90%
Yozgat	7,649	761	9.95%
Bilecik	623	110	17.66%

Source: GIS Database for 500 m parcel and owner data, TANAP

The pipeline requires less than 6 percent of the parcels affected; for 238 hectares less than 3 percent is affected and for 2,179 hectares over 9 percent are affected (Figure 45).

Figure 45: Relative Land Based Impacts of the Project (ha)



Source: GIS Database for 500 m parcel and owner data, TANAP



6.3 Land Use Patterns

The CORINE land cover data base of the Ministry of Forestry and Water Affairs revealed interesting information on the land use patterns within the 36 meter corridor (Table 40). The Level 3 data provides details on the land to be taken by the Project. On the whole, the data shows that the highest impacts of the pipeline will be on privately owned agricultural land with modest impacts on forests and no impacts on water bodies (Annex 6.1 Tables 22-26). A small segment showing the pipeline’s land use pattern is shown below in Figure 46.

Figure 46: Land Use Pattern along a Segment of the Pipeline



Source: Second study on CORINE 2006 Project of the Ministry of Forestry and Water Affairs, November 2009 and GIS database for 500 m parcel and owner data, TANAP

The largest area to be used for the 36 meter RoW of the Project consists of agricultural land. Most of the agricultural areas falling within the RoW are non-irrigated. Permanently irrigated land, rice fields, and land with trees, berry plantations, vineyards, and the land occupied by agriculture total almost as large as areas as non-irrigated land. A rather significant amount of land (5,430 ha) is used for grazing or as pasturelands.

The land classified as ‘forest and semi-natural areas’ in the CORINE database consists primarily of sparsely vegetated areas, natural grasslands and transitional woodlands. The grasslands may be used by the affected communities for grazing purposes. The areas covered by broad-leaved trees, coniferous forests and mixed forests are limited to 216 hectares within the 36 meter corridor and attests to the relatively modest adverse impacts of the pipeline on forest areas. There are no water bodies within the RoW and only 4 hectares of wetlands will be impacted (Table 40).

Table -40: Land Use Patterns within the 36 meter RoW

Definition Level 1	Definition Level 3	Number of Parcels	Area of Parcels (ha)	Affected Portion of Parcel 36m RoW (ha)
Agricultural areas (19,872 parcels)	Non-irrigated arable land	10,526	27,882	2,513
	Permanently irrigated land	4,518	10,462	971
	Rice fields	187	482	46



Definition Level 1	Definition Level 3	Number of Parcels	Area of Parcels (ha)	Affected Portion of Parcel 36m RoW (ha)
	Complex cultivation patterns	1,214	1,761	200
	Land principally occupied by agriculture	3,003	11,429	776
	Grazing lands/Pastures	389	5,630	173
	Fruit trees and berry plantations	13	3	1
	Vineyards	22	279	7
Forest and semi natural areas (2,195 parcels)	Broad-leaved forest	52	1,220	34
	Coniferous forest	46	13,010	107
	Mixed forest	25	2,298	75
	Bare rocks	9	470	9
	Beaches, dunes, sands	2	16	0
	Sparsely vegetated areas	442	18,981	376
	Natural grasslands	1,237	25,220	701
	Transitional woodland-shrub	382	24,646	306
Water bodies (6 parcels)	Water courses	6	40	0
Wetlands (7 parcels)	Inland marshes	7	39	4

Source: Second study on CORINE 2006 Project of the Ministry of Forestry and Water Affairs, November 2009 and GIS data base for 500 m parcel and owner data, TANAP

6.4 Ownership of Land

There are several types of ownership within the lands affected by the Project; private, treasury, forest, pasture and other (publicly owned). The largest number of affected parcels is privately owned and they constitute the largest area affected (Table 41). The forest parcels are few and constitute only one percent of the total number of parcels; however, they constitute 30 percent of the affected parcels. Each forest parcel is significantly larger than parcels privately owned and as a result these parcels lose only one percent of their entire area to the 36 meter RoW (Figure 47). In contrast, 82 percent of all parcels lost are privately lost; these parcels lose 12 percent of this average amount.



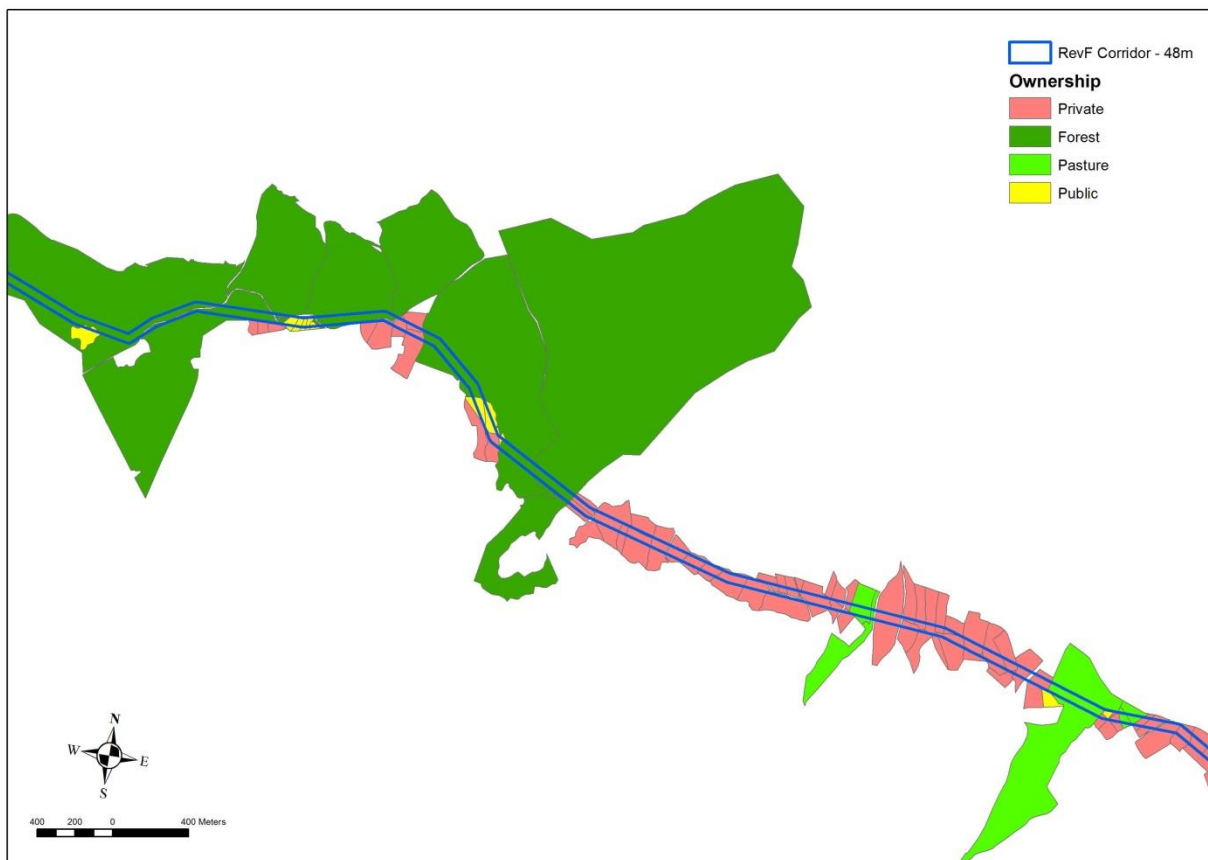
Table -41: Ownership Status of Project Affected Parcels

Ownership of affected land	Number of Parcels Affected	Percentage of parcels (%)	Total Area of Affected Parcels (ha)	Area within in 48 m study corridor(ha)	Area within 36 m RoW (ha)
Private	18,013	82	29,212	5,031	3,773
Treasury	2,381	11	21,387	1,015	761
Other	852	4	19,682	655	491
Pasture	554	3	29,071	931	698
Forest	280	1	44,516	769	577
Total	22,080	1.00	143,869	8,401	6,301

Source: GIS Database for 500 m parcel and owner data, TANAP

The Treasury lands constitute the largest number of parcels among the publicly owned land but they are smaller in total size⁴⁰. As can be seen in Figure 47, forest parcels (publicly owned) are very large but lose only a small segment to the pipeline corridor.

Figure 47: Section of Pipeline Illustrating Ownership Patterns



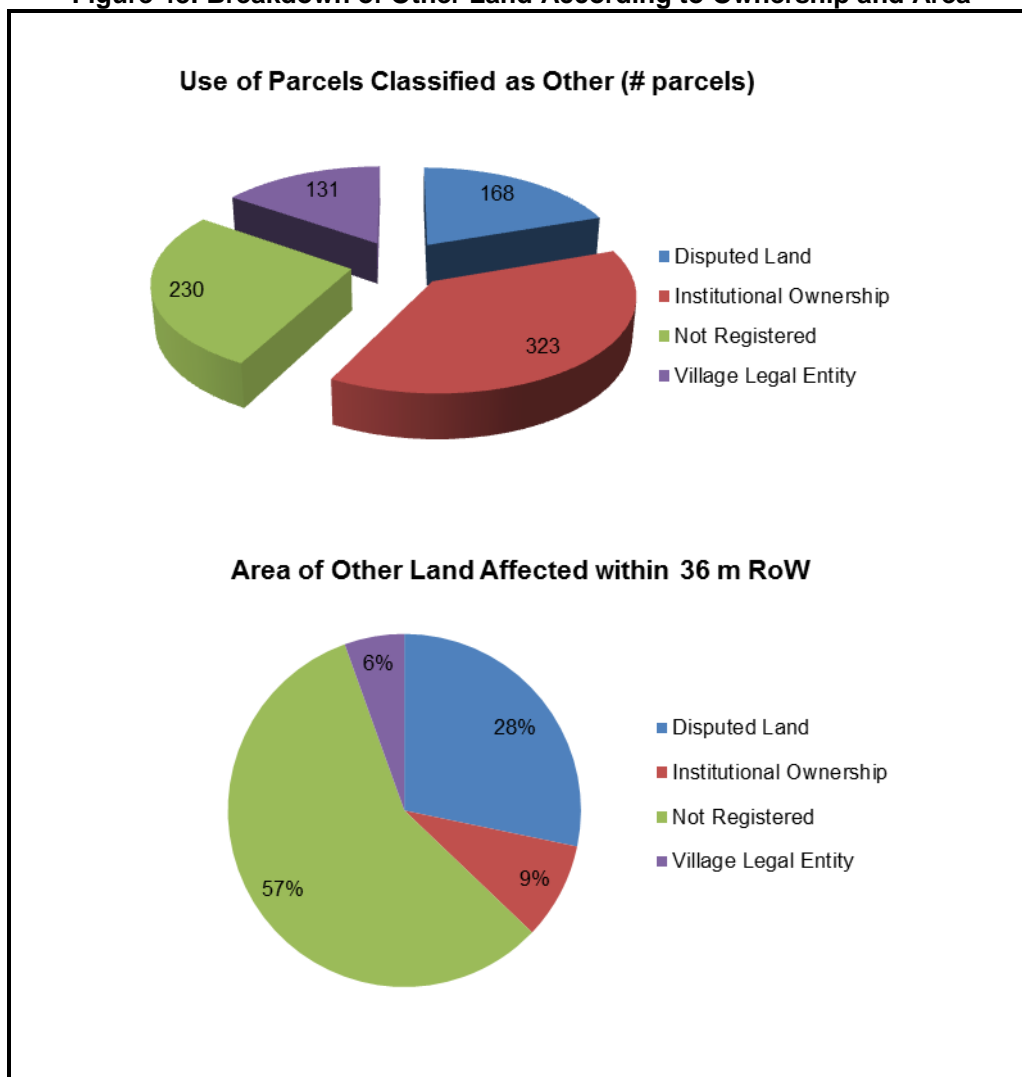
⁴⁰There are 262 parcels that belong to various institutions and 61 that are jointly owned by individuals and institutions; these are unlikely to present complications with respect to land acquisition.



Source: GIS Database for 500 m parcel and owner data, TANAP

The Treasury land incorporates a large number of use categories. A significant portion of the Treasury land consists of raw land, including rocky areas and meadows. There are irrigation canals, roads, railroads and other pipelines on some of the Treasury parcels. Other public lands consist of disputed parcels, land under institutional ownership, unregistered parcels, and land owned by the Village Legal Entity (Figure 48). There are a total of 852 parcels of ‘other public lands’ of which 491 hectares will be used by the 36 meter RoW (Annex 6.1, Table 3).

Figure 48: Breakdown of Other Land According to Ownership and Area



Source: GIS Database for 500 m parcel and owner data, TANAP

6.5 Geographical Patterns

The examination of the regional patterns of ownership shows that the impacts of privately owned land will be more visible in East Anatolia while West Anatolia has the largest area of forest land falling within the construction corridor (Table 42). There is a significant concentration of affected pasturelands in East Anatolia; as animal husbandry is a dominant economic activity in this region



there is need to pay special attention to expediting the construction process along the pipeline in this region and making sure that grazing activities are not adversely impacted. The Project should also be prepared to pay damages to livestock; these damages could be caused by dust or by the presence of ditches, etc. in areas where grazing is done. TANAP will compensate these damages by use of the RAP Fund.

Table -42: Total Area of Affected Parcels by Region (ha) 48 m study corridor

Type of Ownership	East Anatolia	Central Anatolia	West Anatolia	Thrace
Private	1,288	2,562	985	196
Forest	149	214	359	47
Pasture	581	269	68	12
Treasury	312	633	54	17
Other Public	330	201	105	19
Total	2,659	3,879	1,572	291

Source: GIS Database for 500 m parcel and owner data, TANAP

The average size of parcels by type of ownership and province is shown in Annex 6.1 Table 4. These data also re-iterates the burden private owners will face and shows that the burden will be much heavier in Eastern Anatolia and, especially Central Anatolia.

The challenge of land acquisition is not evenly distributed within each province (Table 43). Indeed, in two provinces (Ardahan and Eskişehir) LRE staff will be working with officials in many districts. In Ardahan, land will be acquired in 4 out of 6 districts; the respective numbers are 8 and 14 in Eskişehir. In Giresun, Tekirdag and Bilecik, on the other hand, affected lands fall within one district. In general, the fewer the number of districts the easier and possibly faster will be the land acquisition process. However, based on the assessment of potential impacts, the more the number of affected districts in each province, the more spread are the land acquisition impacts.

Table -43: Project Impacts on Districts

Province	Total Number of Districts in each Province	Number of Districts in each Province Affected by Land Acquisition	% of Affected Districts (Ranked from highest to lowest)
Ardahan	6	4	0.67
Eskişehir	14	8	0.57
Erzincan	9	4	0.44
Yozgat	14	6	0.43
Sivas	17	7	0.41
Kars	8	3	0.38
Bayburt	3	1	0.33
Gümüşhane	6	2	0.33
Kırıkkale	9	3	0.33
Erzurum	20	6	0.30



Province	Total Number of Districts in each Province	Number of Districts in each Province Affected by Land Acquisition	% of Affected Districts (Ranked from highest to lowest)
Kırşehir	7	2	0.29
Bursa	17	4	0.24
Edirne	9	2	0.22
Çanakkale	12	2	0.17
Ankara	25	4	0.16
Balıkesir	19	3	0.16
Kütahya	13	2	0.15
Bilecik	8	1	0.13
Tekirdağ	9	1	0.11
Giresun	16	1	0.06
Total	241	66	0.27

Source: GIS Database for 500 m parcel and owner data, TANAP

6.6 Type of Immovable Assets

The great majority of land affected by the pipeline consists of privately owned cultivable land with no structures, homes, out-buildings, irrigation canals, vineyards, and fruit trees. Further examination of the characteristics of the affected assets reveals a relatively neutral impact profile.

- Almost all of the land affected consists of rural land; there are only 180 parcels of urban land. All rural land will be compensated based on discounted net income or market value; an additional allowance will be made for the reduced marketability of the land. The valuation will reflect the quality of land. Transaction costs associated with the acquisition of land and other assets will be covered by the Project;
- All other assets (trees, vineyards, etc.) on land will be separately compensated. Some parcels have vineyards, horticulture areas, poplar, and hazelnut⁴¹. The age, number, productivity and potential revenue from these will be calculated. They will be compensated based on their discounted net income; an additional allowance will be made to compensate for the reduced marketability of land.
- Urban land belongs to various governmental and local institutions; the procedures for their acquisition are simple. They will be compensated based on the valuation of the institutions.
- There are a small number of rural and urban plots with homes on it; however the pipeline is unlikely to affect these homes. Two homes also appear to be on the larger parcels affected but may not fall within the 48 meter study corridor; even less likely is for these homes and infrastructure elements to fall within the 36 meter construction corridor. All

⁴¹The complete inventory of affected assets on the 22,080 parcels of land affected by the pipeline was not complete at the time of the preparation of this report. This information will be available and will establish the foundation of the valuation to be prepared by the LRE. Similarly, this information will also provide a critical input to the RAP budget.



structures and homes, regardless their ownership, will be compensated based on replacement values;

- Several parcels have ponds, irrigation canals, roads, cemeteries, quarries, reservoirs and pylons on them⁴². For example, there are 155 parcels on which there is a vineyard; these parcels total 53 hectares of which 11 fall within the 48 meter study corridor (and approximately 12 hectares within the 36 meter final corridor). Since vineyards are unlikely to cover the entire 53 hectares there may be very few hectares of vineyard that may be used for pipeline construction. Similarly, the 36 meter corridor may well avoid irrigation canals entirely. As for parcels with homes and/or other structures the Project aims to avoid them all so that the pipeline may pass from one part of the larger parcel while the homes may fall far from the corridor.

6.7 Project Impacts

6.7.1 Impacts on Private Lands

Privately owned land is affected more visibly compared to publicly owned land.

Impacts for the 48 meter study corridor:

- A total of 8,401 hectares are affected by the project
 - Average area affected by province is 420 ha;
 - Average area affected by district is 127 ha;
- Area of privately owns land within the **48 meters** is 5,031 ha (60% of 8,401 ha);
 - Average area by province is 252 ha;
 - Average area by district is 76 ha;
 - Average hectares lost to 48 meters by settlement is 9.3 ha;

Impacts for the 36 meter RoW:

- A total of 6,301 hectares are affected by the project
 - Average area affected by province is 315 ha;
 - Average area affected by district is 95 ha;
- Area of privately owned land within **36 meters** is 3,773 ha (60 % of 6,301 ha);
 - Average area per province is 189 ha;
 - Average area per district is 57 ha;
 - Average hectares lost to 36 meters by settlement is 6.6 ha;

Impacts for the 16 meters of the RoW:

- Total area of privately owned land within **16 meters** is 1,660 ha;
 - Average area of privately owned land per province is 83 ha;
 - Average area of privately owned land per district is 25 ha;
 - Average area of privately owned land per affected settlement is 2.9 ha.

⁴²There are over 150 parcels that appear to be owned by the military; several parcels are on protected areas. At the time of the preparation of this RAP the pipeline revisions were ongoing. These parcels are likely to be avoided in the final revisions.



Realistically, the entire 36 meters will be paid for but returned to their original owners with minor use restrictions which will not hinder the ability of users to cultivate and/or use the land for animal husbandry. Restrictions will apply primarily to building structures and planting large size trees. The community specific impacts for the 36 meter RoW appear small with an average settlement losing only 6.6 hectares to the Project, of which only 2.9 will consist of long term easement.

The impacts on publicly and privately owned parcels are significantly different; this result from the fact that the size of publicly owned parcels is much larger than those privately owned

The livelihood impacts of the Project's land acquisition activities will be short term (and limited to the 3-year easement period) and will derive primarily from disturbance caused by construction for cultivation and animal husbandry activities. Otherwise, returning the land to its original owners/users once the pipeline is buried will not merely restore but improve incomes. This is because the Project will have paid a generous price for the establishment of easement (perhaps as much as it would have paid for outright purchase of land) while at the same time allowing owners/users to continue productive activities after a short interval.

6.7.1.1 Project Affected Persons (PAPs)

At the time of the preparation of this report, the centerline of the corridor was not finalized and a study corridor of 48 meters was used for purposes of planning. As a result, the number of parcels affected, the total area of these parcels, and the number of affected populations (owners, users, and their household members) as shown in tables for RAP are significantly higher than they would be when the corridor is narrowed down to 36 meters. The numbers of affected assets provided for the 36 meter RoW are estimates as are the numbers corresponding to the 16 meter corridor of the RoW on which long term easement with use restrictions will be established.

6.7.1.2 Difficulties in Estimating PAPs

There are two types of Project impacts on the people; the first result from the acquisition of a small portion of the land they own/use and the second results from indirect effects of the acquisition of forest and pasture lands in the vicinity of communities.

The estimation of the total number of people affected by land acquisition activities of the Project is difficult for a number of reasons:

- There are a large number of owners (60,041) whose names are registered on the 22,080 parcels affected; additional numbers are likely to be large but impossible to estimate (Table 44);
- A large number of owners may have left, leaving their land unattended;



- An unknown number of people may be cultivating the affected lands as tenants or encroachers;
- Some parcels may have additional owners if the claims of the heirs were not registered at the time of the preparation of the asset inventory and the inventory of owners;
- The list of owners will substantially increase when parcels to be affected by land acquisition for the auxiliary facilities, access roads, and additional areas that the Contractor might need during the Project construction are considered;
- Additional number of owners/users will be affected by the construction activities (such as damage to crops) along the existing main and village roads;
- There will be people indirectly affected from reduced access to pastures and forests; and
- Each owner/user will have family members and these should be included in the number of population affected. However, some of the owners registered to the title of the property may already be family members; thus one could not simply multiply the total number of owners with an average figure representing household size to estimate the total number of Project affected persons.

Table -44: Owners of Parcels Affected by the Pipeline (48 m study corridor)

Province	Number of Owners within the study corridor	Number of Parcels within the study corridor	Population of Settlements crossed by the pipeline
Sivas	9,777	3,321	18,534
Kars	1,944	1,045	15,208
Eskişehir	3,758	2,447	12,936
Erzincan	2,231	486	4,312
Kütahya	1,000	887	8,030
Ardahan	4,009	1,759	12,615
Erzurum	7,459	1,808	39,597
Yozgat	7,675	2,640	23,248
Bursa	2,580	1,712	11,618
Ankara	6,546	1,025	13,238
Balıkesir	2,056	1,134	21,226
Gümüşhane	1,538	461	3,237
Çanakkale	1,424	730	16,005
Kırıkkale	3,142	580	7,525
Edirne	1,726	719	29,286
Kırşehir	1,819	606	6,187
Giresun	29	26	1,148
Bayburt	385	111	1,144
Bilecik	817	544	871
Tekirdağ	126	39	1,001
Total	60,041	22,080	246,966

Source: GIS Database for 500 m parcel and owner data, TANAP and ABPRS, TUIK 2012 and 2013



6.7.1.3 Female Owners

An examination of the data on parcels affected along the pipeline corridor indicates a low participation of women among the owners; the representative sample of parcels selected for the socio-economic survey showed that 20 percent of the parcels owned by one person were owned by women⁴³; their participation among multiple owners may be somewhat higher. This is despite the equal rights to land recognized under the civil law. Women are also entitled to equal share in marital property but in most regions women's participation in land/asset ownership continues to be low.

Participation of women in information meetings, in valuation negotiations, in grievance expressions, and in follow-up actions following urgent expropriation decisions is all low; this is particularly the case when small portions of the land they own/use are acquired for projects such as TANAP. Nevertheless, socio-economic survey team noted that women were particularly interested in knowing when the compensation payments were to be made; they also wanted assurance that the affected lands would be re-instated properly and construction damage would be avoided⁴⁴.

Women's participation in the labor force of the construction sector is also low; women are not expected to share the employment benefits of the Project.

There is little the Project can do to improve this situation that results from local traditions and culture. Nevertheless, it will try to ensure that women's inheritance rights are registered to the title deed when parcels that have not been updated subsequent to the death of a parent. It will not discriminate against female owners in valuation negotiations. Equally important, it will make a special effort for female non-owner users to receive their fair share in compensation and facilitate the process through which they will receive their compensation payments.

When community-wide impacts of the acquisition of pastures and forests are observed and determination is made to make community based development investments, a special effort will be made to ensure women's participation in the identification and formulation of these investments as well as in sharing their benefits.

6.7.1.4 Magnitude of Impacts on PAPs

Most of the land affected by the Project is rural. The average size of an affected parcel is only 1.6 hectares. The private land crossed by the pipeline has a total of 29,212 hectares; of this an average of 17 percent falls within the 48 meter corridor to sum up to 5,031 ha (Table 45). This percentage falls to 12.9percent when the realistic 36 meter RoW is considered. Of the 36 meter, 20

⁴³Only 7 percent of the interviews were held with women; when survey teams arrived in villages a large number of female owners were absent and many moved to other parts of the country; since their last names changed after marriage people were uninformed of the new names and the current residence.

⁴⁴The Project's socio-economic studies incorporated several Focus Group meetings to better understand women's constraints and expectations as reported in Chapter 4.



meters will be returned to their original owners within the first 3 years of the start of construction and unrestricted and exclusive rights will be established only on the 16 meters of the RoW. Thus, during the first three years livelihood impacts of the corridor will be confined to losses corresponding to 12.9 percent of the income to be generated from the entire parcel. Long term livelihood impacts will be confined to the 5.6 percent.

Table -45: Relative Impacts of Land Acquisition along the Pipeline

Private Land Affected	Eastern Anatolia	Central Anatolia	Western Anatolia	Thrace	Total
Total Privately Owned Land crossed by the pipeline(ha)	7,903	15,116	4,469	1,724	29,212
Area within 48 m study corridor in (ha)	1,288	2,562	985	196	5,031
Percentage of the land within 48 m study corridor to total area (%)	16.3	16.9	22	11.4	17.2
Percentage of the land within 36 m RoW to total area (%)	12.2	12.6	16.5	8.5	12.9
Percentage of the land within 16 m of the RoW to total area (%)	5.3	5.5	7.2	3.7	5.6

Source: GIS Database for 500 m parcel and owner data, TANAP

The privately owned land is used or usable for agriculture and/or animal husbandry and thus brings income to its owners/users'; the compensation will be based on discounted net income as detailed in Annex 6.2⁴⁵. The market value of agricultural land would normally reflect the discounted net income; to this amount compensation for the reduced marketability of land will be added. Urban land compensation is based on replacement value and would be reflected market values.

Land owners may have two different types of legal status: those with a title deed and those with traditional/customary land rights. Along the pipeline, there are no parcels without title deed. In case, these may emerge in the context of access roads or apply to parcels that the Contractor may request during the process of construction, procedures for the acquisition of customary land are described in Annex 5.5 of this report.

6.7.1.5 Joint Ownership

There are two major issues that complicate compensation decisions concerning the acquisition of private land; inadequate knowledge about owners and nearly no knowledge about users.

With respect to the situation of owners, several issues need to be noted. Many of the affected parcels have 2 or more owners. Their respective shares are usually registered on the title deed but this may be challenged. Many of the joint owners might have already left the Project area and of the remaining, only one may be using the affected land. The user would often not share the income from cultivation with other owners; thus when the land is taken the livelihood losses may be experienced only by the resident owner/user. Yet, when compensation is paid for the land, based

⁴⁵Pages 87-102 from Akay, Y., Çiçek, Y., 2012, "2942 sayılı Kamulaştırma Kanunu Son Değişiklikler ve Eklerine Göre Uygulamalı Kamulaştırma Tekniği". Ankara: Union of Chambers of Turkish Architects and Engineers.



on the discounted net income, it will be shared among all owners and thus will correspond only to a portion of livelihood restoration value.

As is shown in Table 46 joint ownership of land is more prevalent in Eastern and Central Anatolia. In Eastern and Central Anatolian regions, 42 and 41 percent of the affected parcels are owned by more than one person; these figures are 19 and 35, respectively for Western Anatolia and Thrace. More significantly, the percentage of affected parcels owned by 4 or more persons is as high as 27 and 29 percent, respectively for Eastern and Central Anatolia but is as low as 8 percent in Western Anatolia.

A rather dramatic situation is visible when focused on parcels with 10 or more owners; their share in the total is as high as 8.2 and 7.7 in Eastern and Central Anatolia respectively and as low as 1.5 percent in Western Anatolia. This indicates that the challenge to be faced by the LRE concentrates primarily in Eastern and Central segments of the pipeline. With respect to willing buyer/seller arrangements Western Anatolia, in particular, promises higher potential for success.

Table -46: Joint Ownership of Affected Parcels by Region

Number of Owners	Eastern Anatolia	Central Anatolia	Western Anatolia	Thrace
1	2,759	4,799	3,664	428
2	467	730	333	62
3	233	407	141	38
4+	1,254	2,189	378	131
Total	4,713	8,125	4516	659
10+	387	622	69	25
%	8.2	7.7	1.5	3.8

Source: GIS Database for 500 m parcel and owner data, TANAP

6.7.1.6 Owners Whose Parcels are Subject to Land Consolidation

Chapter 5 provides background on land consolidation. There are 2,766 affected parcels that are subject to land consolidation; there is lien against 624 of these (Annex 6.1 Table 5). Although only 12.5 percent of the parcels along the 1,805 km of the pipeline fall within this category there is concentration in Central and Western Anatolia (Table 47). The provincial distribution of parcels subject to land consolidation is provided in Annex 6.1 Tables 6-9. The respective percentages are negligible in other regions.

However, the consolidation activity may be completed during the course of pipeline construction on some of these parcels and their ownership might shift back to private owners. Since the physical state of the immovable will change after the completion of consolidation process, it is also likely that the unrestricted and exclusive right obtained prior to the consolidation activity be transferred to



another immovable. Should this happen, it is possible that the right is obtained once more for another parcel and its compensation is paid to its right holder(s).

In order to avoid such cases two options can be considered; LRE will wait until the consolidation process is finalized and deposit the amount in a bank account (a trust fund) until the final owner of the land is determined or another alternative would be for the new owner of land to ask the former owner(s) for the compensation made prior to consolidation. However, this is a rather complicated process and does not have many applications to date. As stated earlier in Chapter 5, some of the losses can be compensated through the RAP Fund. Nevertheless, PAPs will be informed of this issue during the site visits of LRE prior to land acquisition.

Table -47: Regional Distribution of Parcels Subject to Consolidation

Parcel Information	Eastern Anatolia	Central Anatolia	Western Anatolia	Thrace	Total
Number of Private Parcels	4,713	8,125	4,516	659	18,013
Number of Parcels Subject to Consolidation	180	1,795	492	15	2,482
Percentage of Parcels Subject to Consolidation (%)	3.8	22.1	10.9	2.3	

Source: GIS Database for 500 m parcel and owner data, TANAP

The comparison of relative impacts on land subject to consolidation and the remaining private land shows the former to be larger in all regions (Table 48). Province based relative impacts are given in Annex 6.1 Tables 10-13.

Table -48: Comparison of Relative Impacts on Land Subject to Consolidation

Region	Average Area of Private Parcels(ha)	Average Area of Private Parcels Subject to Consolidation (ha)
Eastern Anatolia	16,769	21,323
Central Anatolia	18,604	18,177
Western Anatolia	9,897	12,638

Source: GIS Database for 500 m parcel and owner data, TANAP

There are several provinces in which parcels subject to land consolidation concentrate. For instance, in Sivas 34 percent of all parcels (948 out of 2,766) fall within the framework of land consolidation; the respective percentages are 13 and 10 in Eskişehir and Ankara. On the other hand, 5 out of 20 affected provinces do not participate in the land consolidation process.

6.7.1.7 Owners Whose Parcels Have Lien

There are 5,301 hectares of privately owned land within the 48 meter study corridor; of this 19 percent has lien against them (Table 49). The comparison of private lands with lien and other private lands by province is provided in Annex 6.1 Tables 14-17. The majority of land (in hectares) with lien is in Central Anatolia with 619 hectares. As in land consolidation, comparing Thrace with other regions may lead to distortion since the size of the relevant land is too small to lend itself to



statistical analyses. This category of land presents added burden to LRE with respect to procedures to be followed for its acquisition. It also presents a problem for its owners since the compensation to be paid for it may go to the institutions (e.g. banks) that hold the lien.

As stated previously in Chapter 5, in cases where land subject to expropriation has lien against it, LRE will pay the expropriation fee to the right holder. However, the lien will still apply to the expropriation fee. Consequently, LRE will not be able to make the payment to the land owner unless the creditors have given permission. In such cases, the expropriation fee can be entrusted to the creditor.

Table -49: Area of Private Lands with Lien Compared to Total Private Lands

Region	Private Parcels with Lien (ha)	Other private parcels (ha)	Total Private Land within 48 m (ha)
Eastern Anatolia	100.3	1,187.9	1,288,2
Central Anatolia	619.2	1,942.5	2,561,7
Western Anatolia	199.1	786.4	985,5
Thrace	57.6	138.5	196,1
Total	976.1	4,055.3	5,031,5

Source: GIS Database for 500 m parcel and owner data, TANAP

Parcels with lien are most numerous in Central Anatolia. However, of all 659 affected parcels in Thrace 197 (or 29 percent) have lien (Table 50). Thus, while the relative impacts are high in Thrace both with respect to procedural complications and the reduced ability of the PAPs to receive their full compensation the problem concentrates in Central Anatolia. The provincial distribution of parcels with lien is provided in Annex 6.1 Tables 18-21.

Table -50: Parcels with Lien by Region

Parcel Information	Eastern Anatolia	Central Anatolia	Western Anatolia	Thrace	Total
Total Number of Private Parcels	4,713	8,125	4,516	659	18,013
Number of Parcels with Lien	310	1,607	709	197	2,823
Percentage of Parcels with Lien (%)	6.6	19.8	15.7	29.9	15.7

Source: GIS Database for 500 m parcel and owner data, TANAP

6.7.1.8 Absentee Owners

The phenomenon of absentee ownership is widespread throughout Turkey and applies to rural and urban land as well as homes. The single most important cause of this is rural out-migration in search of economic opportunities in metropolitan areas. There are areas where land is left idle since the population left behind in communities consists primarily of the elderly and the disabled. The high levels of absentee ownership also constitute one of the most important factors contributing to the inability of the Project to acquire easement along the corridor through willing buyer/seller relationships.



The prevalence of absentee ownership has not yet been fully documented with respect to parcels affected by the Project. At the time of the preparation of this report, the asset inventory was completed only for a certain segment of the pipeline and the process of address identification for the owners was yet to be launched. Nevertheless, the prevalence of absentee ownership coupled with high levels of joint ownership will pose a significant challenge for the LRE in acquiring land for the Project.

The fact that compensation expectations are low given that only small portions of the affected land parcels are needed by the Project; each of the joint owners expect to receive a small amount of money and thus the resident owners may not have the motivation to inform those absentee. Absentee owners receive an unexpected sum of money for land they have abandoned and from which they receive no income; their ability to get paid for assets that they would not have been otherwise able to sell also fails to motivate them to attend negotiation meetings.

Usually, people are well informed of projects that involve land acquisition, as shown in Chapter 4. Despite this, only a few are interested in responding to letters and even fewer in travelling to locations where negotiation meetings are held. A mail socio-economic survey with absentee owners has proven to be unproductive based on other pipeline experiences in Turkey and elsewhere. The motivational issues described above also apply to their responsiveness to the mail survey.

Getting Power of Attorney in the name of people who can act on their behalf in such meetings is time consuming and expensive; especially in metropolitan cities notary public offices are overcrowded and the charges are substantial. Such expenses will be covered by the Project in order to encourage and motivate PAPs to participate in negotiations.

Compensation paid to absentee owners and the resident owners is based on the same principles of discounted net income plus an allowance for the reduced marketability of the entire land parcel. However, the difficulties in identifying the addresses of absentee owners and motivating them to attend negotiations result in expropriation decisions based on Article 27.. The motivational factors summarized above also imply that absentee owners do not challenge the level of compensation they receive. Thus, enhancing absentee owners' participation in the negotiation process and to disclose the RAP is challenging.

6.7.2 Impacts on Users

There are many different types of users of agricultural land in Turkey. The first and most frequent type is the owner who uses (cultivates) the land. The owner/users with sole ownership of their land have the least problems and cause the least number of challenges to the Project. The owner/users that share their title deed with one or more other users also fall into the 'uncomplicated' category when the 'others' are close family members (wife or children). The owner/users face increasing challenges in being able to sell their land through negotiations the higher the number of co-owners



and the higher the number of absentee owners among them. The owners/users share the compensation for their land with other title holders that are nit users will only capture a portion of the money that would have otherwise helped them restore the livelihood they have lost as a result of land acquisition.

The users of public lands may come forward with their claims (with the testimony of the village headman or others). There may be squatters on private land as well and these usually use the land left behind from absentee owners. Neither squatters nor sharecroppers/tenants are entitled for compensation for the land.

Non-owner users of private land also fall into many different categories. First, there are users who cultivate lands left behind absentee owners; these users do not pay, in kind or in cash, the owners and rarely share the produce. Secondly, there are sharecroppers who make different types of arrangements with the owners; these arrangements determine the responsibilities and benefits of the owner and user with respect to inputs and outputs. In some cases, the owner provides a substantial portion of inputs (seed, fertilizer, machinery, etc.) and in others the owner contributes the land and receives a portion (usually one-third) of the produce.

The formal and informal users of land and the squatters on public and private property are more likely to be identified shortly prior to the start of construction in different segments of the pipeline. As the land acquisition process is launched and the identification of landowners' addresses is being finalized parcels used by non-owners will emerge. In a project where the construction lasts over 5 years new users may emerge on a yearly basis. Some of the non-user owners may stop cultivating certain parcels once they are informed of the pipeline; others, especially squatters, may intensify their efforts to plant trees and build information structures with the expectation to receive compensation. Thus, a list of users for the affected parcels would be difficult to prepare at the planning stages of land acquisition (and prior to the completion of the RAP). However, the users will be compensated for standing crops and for the assets they create on the land even when the land belongs to other parties.

6.7.3 Impacts on Parcels Already Affected by a Pipeline

There are 1,414 parcels affected by the TANAP pipeline that already have a pipeline on it; these parcels consist of 2,954 hectares (Table 51). About 13 percent (377 hectares) of this area falls within the 48 meter study corridor; an estimated 282 hectares will fall within the 36 meters. According to Revision F of the RoW, several parcels (25) fall within protected areas and 158 parcels are associated with the military. In the course of the final revisions of the Project engineering design, necessary permits will be obtained from military authorities.

The socio-economic survey team reports particularly high sensitivity from communities and PAPs about the construction of a new pipeline. The people report that previous pipeline experience has been negative, with the exception of BTC and that land has not been properly reinstated after the



construction activity was completed. Needless to say, TANAP will pay special attention to owners/users of these lands and will ensure that these, as well as all others, are returned to their owners in good condition. TANAP will ensure that the land under the entire 36 meter corridor will be reinstated to its original condition regardless of the long term easement and use restrictions established on the 16 meters of the RoW.

Table -51: Parcels with Existing Pipeline and with other Characteristics

Type of land	Number of Affected Parcels	Total area of Affected Parcels	Area within the 48 meter study corridor (ha)
Protected areas	25	35	6
Existing pipeline and/or existing RoW registered in the name of BOTAS	1,414	2,954	377
Land subject to consolidation	2,766	5,250	835
Land under military ownership	158	205	30

Source: GIS Database for 500 m parcel and owner data, TANAP

The presence of another pipeline on privately owned land is of great concern to the PAPs. The socio-economic survey teams convey these concerns; they mention that the people repeatedly report their negative experience with reinstatement issues suffered in the context of other pipelines with the exception of BTC. TANAP will thus pay a special attention to construction activities on these parcels and ensure that no damage is caused to standing crops and assets. Equally important would be the minimization of construction related damage to land providing access to these parcels.



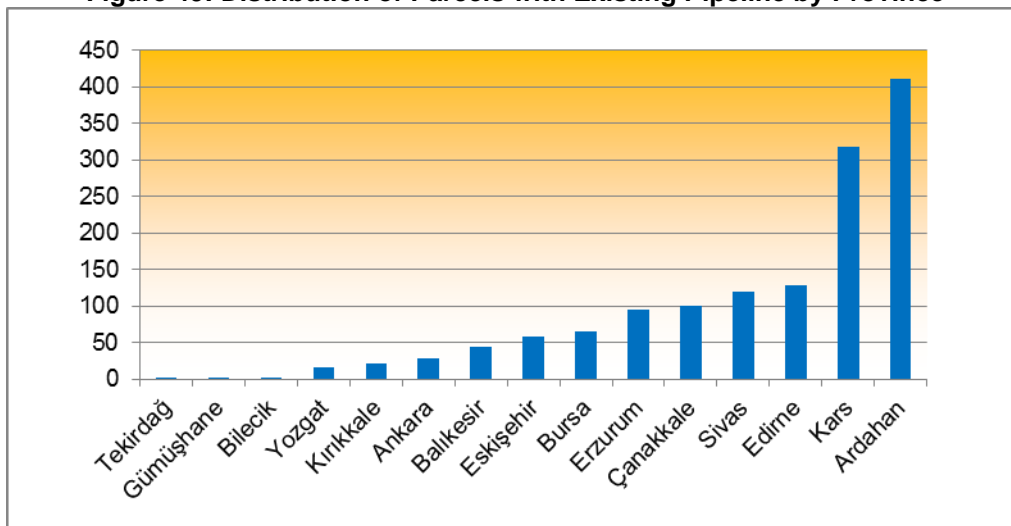
Table -52: Distribution of Parcels with Existing Pipeline

Province	Number of Parcels
Tekirdağ	1
Gümüşhane	2
Bilecik	3
Yozgat	16
Kırıkkale	22
Ankara	29
Balıkesir	45
Eskişehir	58
Bursa	66
Erzurum	95
Çanakkale	100
Sivas	120
Edirne	128
Kars	318
Ardahan	411
Total	1,414

Source: GIS Database for 500 m parcel and owner data, TANAP

Over two-thirds (69 percent) of parcels with existing pipelines on them concentrate in 4 provinces; Sivas, Edirne, Kars and Ardahan (Table 52and Figure 49).

Figure 49: Distribution of Parcels with Existing Pipeline by Province



Source: GIS Database for 500 m parcel and owner data, TANAP

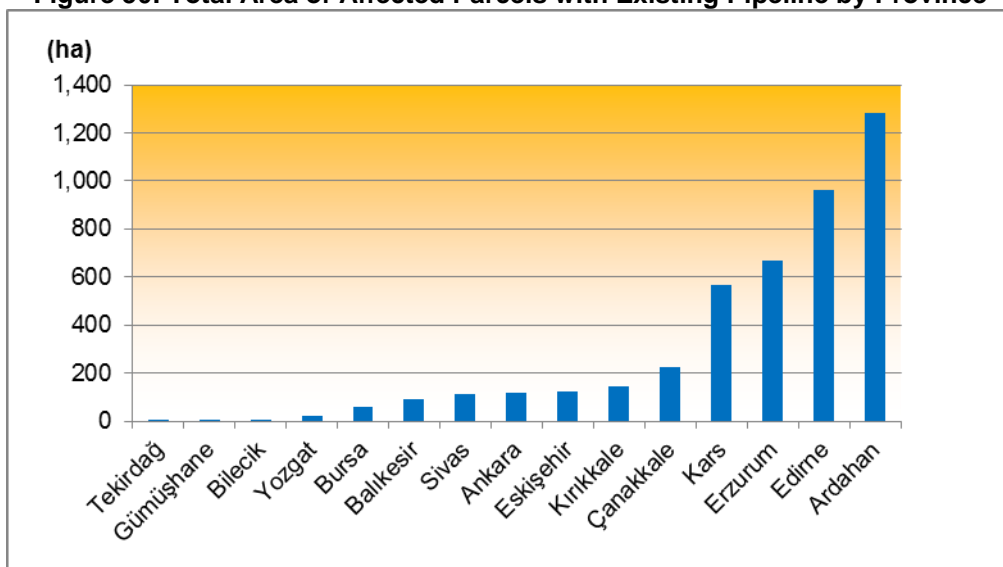
Indeed, over half of these parcels are in Kars and Ardahan alone. Thus, focusing attention to the land acquisition processes in these two provinces will help address the concerns of PAPs with regard to reinstatement issues. The concentration of the number of parcels with existing pipeline in



a few provinces is a good indicator of the magnitude of effort that will be devoted to listening to the concerns of PAPs and ensuring that they are addressed.

The relative impacts of land acquisition in land with existing pipelines will be felt more heavily when the Project requires a larger portion of the relevant parcels. Figure 50 shows that the province of Ardahan rooms almost one third of all the area already affected by pipelines.

Figure 50: Total Area of Affected Parcels with Existing Pipeline by Province



Source: GIS Database for 500 m parcel and owner data, TANAP

Edirne, Erzurum, and Kars room nearly one half of all the area affected by existing pipelines (Table 53).

Table -53: Total Area of Parcels with Existing Pipelines

Province	Parcel Area (ha)
Tekirdağ	1.65
Gümüşhane	2.63
Bilecik	5.96
Yozgat	21.70
Bursa	57.07
Balıkesir	89.05
Sivas	111.64
Ankara	117.30
Eskişehir	121.34
Kırıkkale	146.48
Çanakkale	223.92
Kars	567.73
Erzurum	665.65
Edirne	964.18



Province	Parcel Area (ha)
Ardahan	1,282.32
Total	4,378.61

The provinces with largest number of parcels with existing pipelines are disproportionately affected (Table 54).

Table -54: Area of Parcels with Existing Pipelines in 36 m RoW

Province	Area within 36 meters (ha)
Tekirdağ	0
Gümüşhane	1
Bilecik	1
Yozgat	5
Bursa	11
Kırıkkale	11
Balıkesir	12
Eskişehir	13
Ankara	13
Çanakkale	24
Sivas	24
Erzurum	38
Edirne	43
Kars	65
Ardahan	67
Total	328

In Ardahan and Edirne, over 67 percent of the entire parcel area affected fall within the 36 meter extended corridor. This will cause concern to owners/users of over 700 parcels of land. The land affected by multiple pipelines will significantly lose its attractiveness and will be extremely difficult to sell. Minimally, the compensation paid for the RoW within the entire 2,954 hectares of land will incorporate an additional element to account for the reduced marketability of the affected parcels.

6.7.4 Impacts on Community Resources

The Project impacts different types of public lands. The loss of forest and pasture lands will have indirect livelihood impacts on PAPs and these are detailed in the sections below. The pipeline affects parcels that incorporate key infrastructure. For instance, there are 155 parcels with irrigation canals, and 50 parcels with roads. The most significant damage to infrastructure will occur in the case of small irrigation canals. The mitigation for this will consist of prompt restoration of the water flow from the canal once the pipeline is laid-out.

The exact timing of the construction interruptions will be determined through collaboration with the relevant authorities and the PAPs so that cultivation activity is not adversely affected. In addition,



the potential exists for disruption to utility distribution, for example through damage to telecommunication and electricity cables. Moreover there may be deterioration of the road quality as a result of the increased road traffic.

There are 11 parcels that fall within the 48 meter study corridor that has cemeteries on them; these are likely to be avoided in the next phase of Project revision. There are also 131 parcels owned by the Village Legal Entity totaling 266 hectares; of this only 27 hectares fall within the 36 meter corridor. These land and the immovable assets contained in them will be compensated based on the valuation prepared by the Entity and will be paid direct to it.

6.7.4.1 *Impacts of Acquisition on Forest Land*

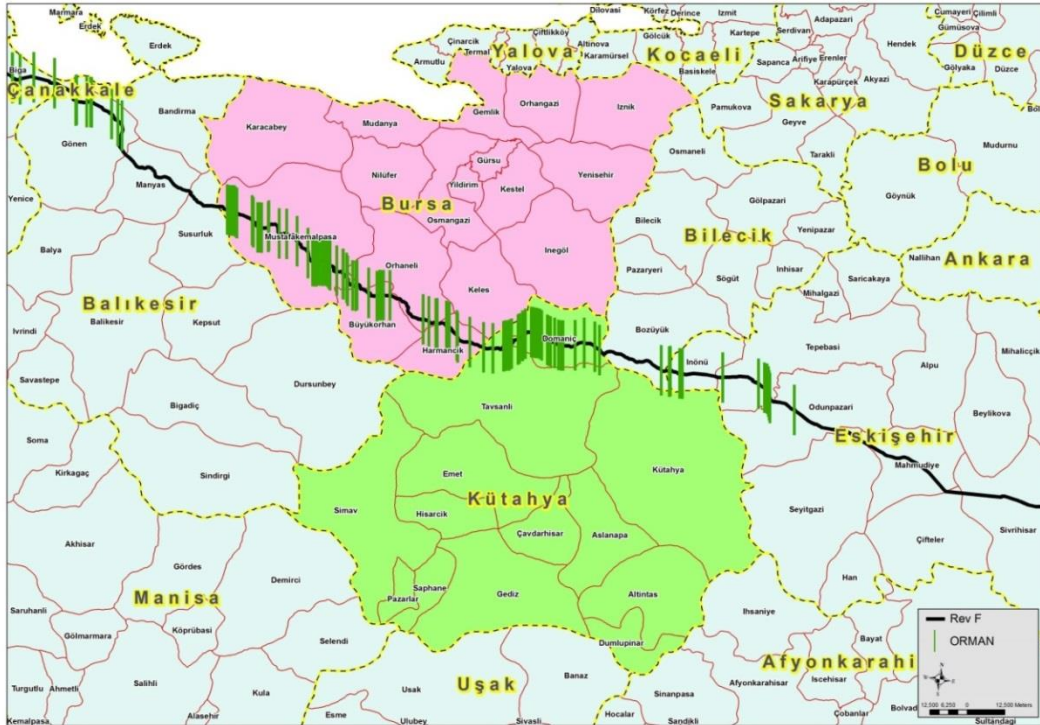
The **forest lands** affected within the 48 meter study corridor are as follows:

- 8,401 hectares of land is affected by the pipeline;
- Of this 769 hectares are **forest** land;
 - Average area affected by province is 38ha;
 - Average area affected by district is 12ha;
- Area of forest within **36 meters** is 577 ha;
 - Average forest area per province is 28,8 ha;
 - Average forest area per district is 8,7 ha;
 - Average hectares lost to 36 meters by settlement are 1 ha.

The affected forest lands concentrate in two segments of the pipeline: Bursa and Sivas as shown in Figures 51 and 52.

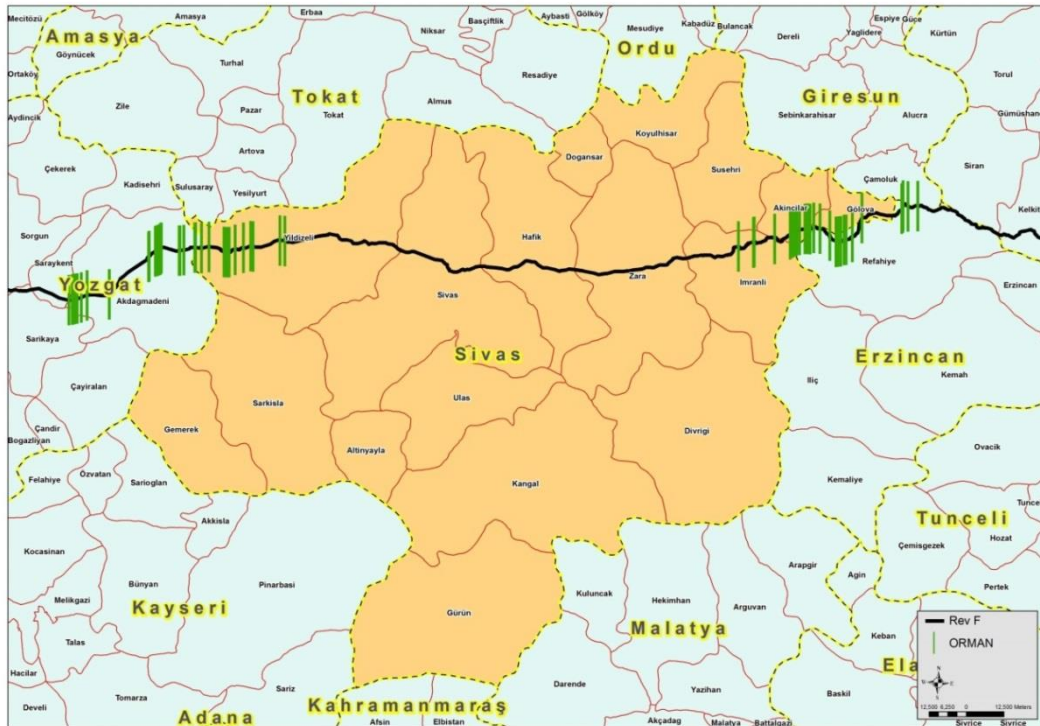


Figure 51: Area of Concentration for Forest Land -1 (Bursa and Kütahya)



Source: GIS Database for 500 m parcel and owner data, TANAP

Figure 52: Areas of Concentration for Forest Land -2 (Sivas)



Source: GIS Database for 500 m parcel and owner data, TANAP



The concentration of the forest lands in two segments of the pipeline augments the adverse impacts on PAPs living in these areas. At the same time, it facilitates the assessment of community based impacts and the identification of community based investments to help mitigate against the livelihood losses. Once the RAP Fund administration is established and headquarters/field staff is appointed the assessment and project identification processes will be launched with special emphasis on participatory mechanisms.

6.7.4.2 *Impacts of Acquisition on Common Pasture Land*

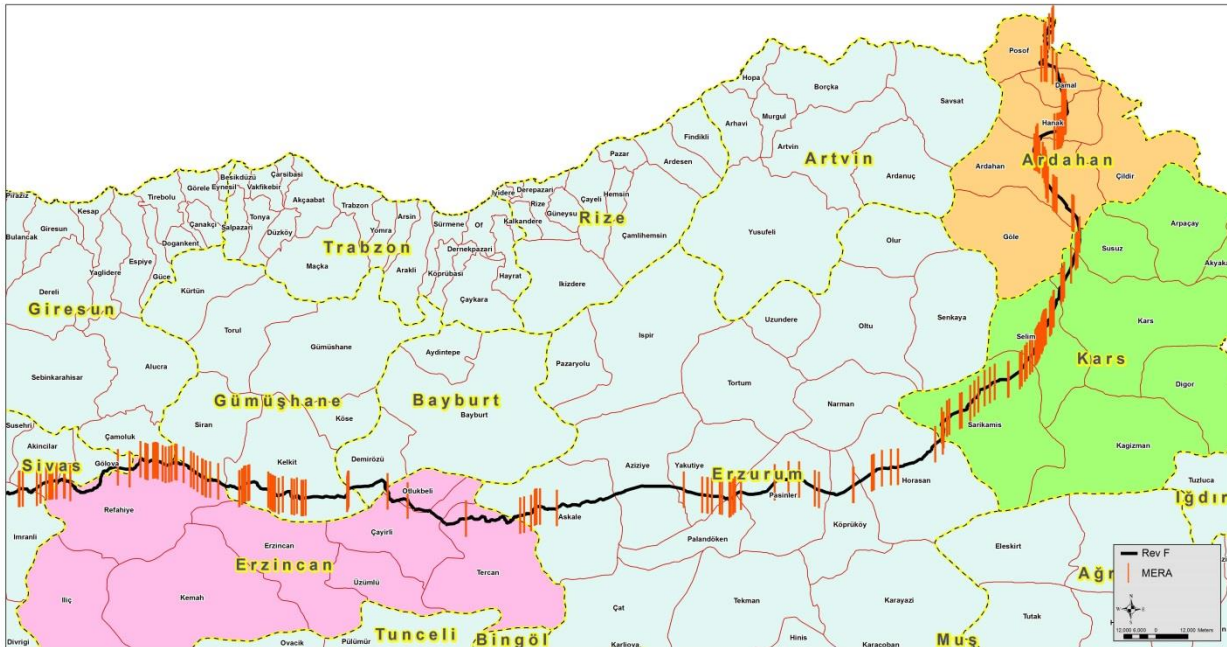
The pipeline affects large areas of pastures and the potential livestock impacts are relatively evenly distributed to regions where animal husbandry is an important source of family income. In general:

- A total of 8,401 hectares are affected by the pipeline;
- Of this 931 hectares is pasture land;
 - Average pasture area affected by province is 47ha;
 - Average pasture land affected by district is 14ha;
- Area of pasture land within **36 meters** is 698 ha;
 - Average area per province is 35 ha;
 - Average area per district is 11 ha;
 - Average hectares lost to 36 meters by settlement is 1.2 ha;
- Total area of pasture land within **16 meters** is 310ha;
 - Average area of affected pasture land per province is 15 ha;
 - Average area per district is 5 ha;
 - Average area of pasture lost to the pipeline per affected settlement is 0.5 ha.

Pastureland losses are relatively evenly distributed in Eastern Anatolia with high concentration in Erzincan (Figure 53). Ardahan and Kars also lose their common pastures disproportionately; these provinces rank high among the poorest in the country and rely heavily on animal husbandry for their livelihood. The construction activities will pay special attention to the minimization of losses to livestock. At the same time, once established, the RAP Fund will focus on communities that lose their access to pasturelands and prepare community based investments to mitigate relevant livelihood losses including cash contributions to the Village Legal Entity budgets. Additionally, a compensation plan has been prepared by Yildiz Technical University. The plan includes an evaluation for the loss of income for pasture lands. The payments that will be made to the Village Entity for pasture land will also consider this plan.



Figure 53: Areas of Concentration for Pasture Land (Ardahan, Kars and Erzincan)



Source: GIS Database for 500 m parcel and owner data, TANAP

6.8 Compensation Measures

The pipeline impacts private and public land; the private impacts are distributed along the pipeline and those pertaining to the loss of forests and pastures concentrate in certain segments.

All private losses will be compensated to restore lost livelihoods with payments to be made to PAPs prior to entry to the land. The compensation for public assets will be made directly to the relevant institutions prior to entry to the land. The status of pasture land will be changed to treasury and the payment of land will be realized according to Article 30 of the Expropriation Law. The payments for forest land continue for 49 years.

The compensation for private owners consists of cash payments and the development of community based programs. There is no longer customary ownership in much of the country since the cadastral systems have been established for the great majority of settlements. The land rights of some owners may not have been recorded after the death of parents; once TANAP provides assistance to the heirs for the registration of their shares, the land can be acquired through negotiations. In cases where negotiations fail, the land will be expropriated.

More specifically, private owners:

- Are compensated for;
 - permanent acquisition of land for AGIs,



- 3 year easement for (temporary acquisition of land) 20 meter within the RoW, and
- unrestricted and exclusive long term easement on 16 meters of the RoW,
- Receive replacement value of structures/dwellings;
- Receive market value of urban land;
- Get fair compensation paid based on net income capitalization plus a payment for reduced marketability for each individual rural plot;
- Are invited to negotiations in groups to ensure transparency and equal treatment of all;
- Are offered compensation based on valuation got prepared by TANAP and finalized after the evaluation of LRE commissions ;
- Paid for other assets in that once agreements are reached on the base value of different quality of land (irrigated, dry) allowance is made for other assets on land (e.g.: trees, vineyards, etc.);
- Receive payments made into their bank accounts in their name within 45 days of mutual agreement;
- Are assured that no land entry for construction will start before payments are deposited;
- Are awarded payments on the basis of the shares registered in their name if the land is jointly owned.,
- Are invited to a second round of negotiation discussions should they wish so.

If negotiations fail, decision for expropriation is performed in line with the court decisions . When this happens,

- Land will be paid based on the valuation of court appointed experts; and
- Court determined compensation is paid in full to a bank account prior to land entry.

In addition:

- Procedures for permanent and temporary acquisition of land are similar;
- Level of compensation for land on which unrestricted and exclusive rights are established and purchased is equal;
- Standing crops will be paid based on their market value;
- All construction damage to standing crops and immovable assets (homes, trees, vineyards) is compensated;
- Land within 20 meters of the RoW is reinstated within three years after the start of construction and is returned to the original owners; and
- Land within the remaining 16 meters is reinstated and returned to the owners with use restrictions.

Land users, encroachers on public and/or private land are paid for standing crops and for all immovable assets that they have on land, including the structures that they may have built and trees they planted.



6.9 Entitlement Matrix

The detailed compensation measures for the resettlement related impacts mentioned above are presented in the following matrices.



Table -55: Entitlement Matrix for Privately Owned Land

Land Ownership Type	Privately Owned Land																		
	With Land Title																		
Project Affected Person or Entity	Landowner						Landuser						Beneficiary (Squatter)						
	Agreeing Landowner(s)			Expropriated Landowner(s)			Documented User (with formal Agreement)			Non-Documented User (without formal Agreement)			Producer/Cropper (unauthorised)			Collector/Grazer (tolerated)			
Compensation	Principle	Assessor	Mechanism	Principle	Assessor	Mechanism	Principle	Assessor	Mechanism	Principle	Assessor	Mechanism	Principle	Assessor	Mechanism	Principle	Assessor	Mechanism	
Legal Requirement	Land (Title and/or Easement)	Discounted Net Income	LRE Commission	LRE	Discounted Net Income	Court Expert	LRE	Not applicable			Not applicable			Not applicable			Not applicable		
	Structures	Construction Cost	LRE Commission	LRE	Amortized Cost of Construction	Court Expert	LRE	Construction Cost	LRE Commission	LRE	Construction Cost	LRE Commission	LRE						
	Standing Crops/Fruits	Market Value	LRE Commission	LRE	Market Value	LRE Commission	LRE	Market Value	LRE Commission	LRE	Market Value	LRE Commission	LRE						
	Trees, Vineyards	Discounted Net Income	LRE Commission	LRE	Discounted Net Income	Court Expert	LRE	Discounted Net Income	LRE Commission	LRE	Discounted Net Income	LRE Commission	LRE						
	Transaction Costs	Not considered			Not considered			Not considered			Not considered								
IFC Requirement	Land (Title and/or Easement)*	Discounted Net Income	Independent Study	LRE	Discounted Net Income	TANAP	LRE	Not entitled			Not entitled			Not entitled			Not entitled		
	Structures	Replacem. Cost Without Amortization	Independent Study	LRE	Replacem. Cost Without Amortization	TANAP	LRE	Replacem. Cost Without Amortization	TANAP	LRE	Replacem. Cost Without Amortization	TANAP	LRE	Replacement cost of structures and discounted net income of trees and vineyards			Replacement cost of structures and discounted net income of trees and vineyards		
	Standing Crops/Fruits	Market Value	Independent Study	LRE	Market Value	TANAP	LRE	Market Value	TANAP	LRE	Market Value	TANAP	LRE	Market Value	Independent Study	-	Market Value	Independent Study	-
	Trees, Vineyards	Discounted Net Income	Independent Study	LRE	Discounted Net Income	TANAP	LRE	Discounted Net Income	TANAP	LRE	Discounted Net Income	TANAP	LRE	Discounted Net Income	TANAP	LRE	Discounted Net Income	TANAP	LRE
	Transaction Costs	Actual Cost	Receipt	LRE	Actual Cost	Receipt	LRE	Actual Cost	Receipt	LRE	Actual Cost	Receipt	LRE	Actual Cost	Receipt	LRE	Actual Cost	Receipt	LRE
	↓			↓			↓			↓			↓			↓			
Project Affected Person or Entity	Landowner						Landuser						Beneficiary (Squatter)						
	Agreeing Landowner(s)			Expropriated Landowner(s)			Documented User (with formal Agreement)			Non-Documented User (without formal Agreement)			Producer/Cropper (unauthorised)			Collector/Grazer (tolerated)			
Compensation	Principle	Assessor	Mechanism	Principle	Assessor	Mechanism	Principle	Assessor	Mechanism	Principle	Assessor	Mechanism	Principle	Assessor	Mechanism	Principle	Assessor	Mechanism	
TANAP Commitment	Land (Title and/or Easement)*	Discounted Net Income	LRE Commission	LRE	Discounted Net Income	Court Expert	LRE	Not Entitled			Not Entitled			Not entitled			Not entitled		
	Structures	Replacement Cost	LRE Commission	LRE	Historical Construction cost with Amortization	Court Expert	LRE	Replacem. Cost Without Amortization	TANAP	LRE - Direct	Replacem. Cost Without Amortization	TANAP	LRE	Replacement cost of structures and discounted net income of trees and vineyards			Replacement cost of structures and discounted net income of trees and vineyards		
	Standing Crops/Fruits	Market Value	LRE Commission	LRE	Market Value	LRE Commission	LRE	Market Value	LRE Commission	LRE - Direct	Market Value	LRE Commission	LRE	Market Value	Independent Study	-	Market Value	Independent Study	-
	Trees, Vineyards	Discounted Net Income	Independent Study	LRE	Discounted Net Income	Court Expert	LRE	Discounted Net Income	LRE Commission	LRE - Direct	Discounted Net Income	LRE Commission	LRE	Discounted Net Income	TANAP	LRE	Discounted Net Income	TANAP	LRE
	Transaction Costs	Actual Cost	Receipt	TANAP	Actual Cost	Receipt	TANAP	Actual Cost	Receipt	TANAP - Direct	Actual Cost	Receipt	TANAP	Actual Cost	Receipt	LRE	Actual Cost	Receipt	LRE

* Additional measures to cover community based losses associated with lost of forest and pastures shall be addressed in Community Based Programs financed by the RAP Fund



Table -56: Entitlement Matrix for Publicly Owned Land (Treasury and Pasture Land)

Land Ownership Type	Publicly Owned Land																	
	Treasury (Pasture land whose status has changed to Treasury)																	
Project Affected Person or Entity	Landowner			Landuser						Beneficiary (Squatter)						Community (Common Losses)		
	Treasury			Documented User (with formal Agreement)			Non-Documented User (without formal Agreement)			Producer/Cropper (unauthorised)			Collector/Grazer (tolerated)					
Compensation	Principle	Assessor	Mechanism	Principle	Assessor	Mechanism	Principle	Assessor	Mechanism	Principle	Assessor	Mechanism	Principle	Assessor	Mechanism	Principle	Assessor	Mechanism
Legal Requirement	Land (Title and/or Easement)	Value determined/agreed by Treasury		LRE	Not applicable			Not applicable			Not applicable			Not applicable				
	Assets	Value determined/agreed by Treasury		LRE				Entitlement newly recognized by law changes			Entitlement newly recognized by law changes			Entitlement newly recognized by law changes				
	Standing Crops/Fruits	Value determined/agreed by Treasury		LRE				Entitlement newly recognized by law changes			Entitlement newly recognized by law changes			Entitlement newly recognized by law changes				
	Transaction Costs	Not considered						Not considered			Not considered			Not considered				
IFC Requirement	Land (Title and/or Easement)*	Implicit that all land, public or private will be paid in full			Implicit in policies and entitled for compensation			Not entitled			Not entitled			Not entitled				
	Assets							Replacement cost of structures and discounted net income of trees and vineyards			Replacement cost of structures and discounted net income of trees and vineyards			Replacement cost of structures and discounted net income of trees and vineyards				
	Standing Crops/Fruits							Market Value	Independent Study	-	Market Value	Independent Study	-	Market Value	Independent Study	-		
	Transaction Costs							Actual Cost	Receipt	LRE	Actual Cost	Receipt	LRE	Actual Cost	Receipt	LRE		
Project Affected Person or Entity	Landowner			Landuser						Beneficiary (Squatter)						Community (Common Losses)		
	Treasury			Documented User (with formal Agreement)			Non-Documented User (without formal Agreement)			Producer/Cropper (unauthorised)			Collector/Grazer (tolerated)					
Compensation	Principle	Assessor	Mechanism	Principle	Assessor	Mechanism	Principle	Assessor	Mechanism	Principle	Assessor	Mechanism	Principle	Assessor	Mechanism	Principle	Assessor	Mechanism
TANAP Commitment	Land (Title and/or Easement)	Value determined/agreed by Treasury		LRE	Not applicable			Not entitled			Not entitled			Not entitled				
	Assets	Value determined/agreed by Treasury		LRE				Replacement cost of structures and discounted net income of trees and vineyards			Replacement cost of structures and discounted net income of trees and vineyards			Replacement cost of structures and discounted net income of trees and vineyards				
	Standing Crops/Fruits	Value determined/agreed by Treasury		LRE				Market Value	Independent Study	RAP Fund	Market Value	Independent Study	RAP Fund	Market Value	Independent Study	RAP Fund		
	Transaction Costs	LRE						TANAP			TANAP			TANAP				

* Additional measures to cover community based losses associated with lost of forest and pastures shall be addressed in Community Based Programs financed by the RAP Fund



Table -57: Entitlement Matrix for Publicly Owned Land (Other State Authorities)

Land Ownership Type	Publicly Owned Land																		
	Other State Authority and Communities																		
Project Affected Person or Entity	Landowner			Landuser						Beneficiary (Squatter)						Community (Common Losses)			
	State Authority or Community			Documented User (with formal Agreement)			Non-Documented User (without formal Agreement)			Producer/Cropper (unauthorised)			Collector/Grazer (tolerated)						
Compensation	Principle	Assessor	Mechanism	Principle	Assessor	Mechanism	Principle	Assessor	Mechanism	Principle	Assessor	Mechanism	Principle	Assessor	Mechanism	Principle	Assessor	Mechanism	
Legal Requirement	Land (Title and/or Easement)	Value determined/agreed by State Authority		LRE	Not applicable			Not applicable			Not applicable			Not applicable					
	Assets	Value determined/agreed by State Authority		LRE				Entitlement newly recognized by law changes			Entitlement newly recognized by law changes			Entitlement newly recognized by law changes			Entitlement newly recognized by law changes		
	Standing Crops/Fruits	Value determined/agreed by State Authority		LRE				Not considered			Not considered			Not considered			Not considered		
	Transaction Costs	Not considered						Not considered			Not considered			Not considered			Not considered		
IFC Requirement	Land (Title and/or Easement)*	Not considered			Implicit in policies and entitled for compensation			Implicit in policies and entitled for compensation			Not entitled			Not entitled			Not entitled		
	Assets										Replacement cost of structures and discounted net income of trees and vineyards			Replacement cost of structures and discounted net income of trees and vineyards			Replacement cost of structures and discounted net income of trees and vineyards		
	Standing Crops/Fruits										Market Value	Independent Study	-	Market Value	Independent Study	-	Market Value	Independent Study	-
	Transaction Costs										Actual Cost	Receipt	LRE	Actual Cost	Receipt	LRE	Actual Cost	Receipt	LRE
Project Affected Person or Entity	Landowner			Landuser						Beneficiary (Squatter)						Community (Common Losses)			
	Other State Authority or Community			Documented User (with formal Agreement)			Non-Documented User (without formal Agreement)			Producer/Cropper (unauthorised)			Collector/Grazer (tolerated)						
Compensation	Principle	Assessor	Mechanism	Principle	Assessor	Mechanism	Principle	Assessor	Mechanism	Principle	Assessor	Mechanism	Principle	Assessor	Mechanism	Principle	Assessor	Mechanism	
TANAP Commitment	Land (Title and/or Easement)	Value determined/agreed by State Authority		LRE	Not applicable			Not entitled			Not entitled			Not entitled			Not entitled		
	Assets	Value determined/agreed by State Authority		LRE				Replacement cost of structures and discounted net income of trees and vineyards			Replacement cost of structures and discounted net income of trees and vineyards			Replacement cost of structures and discounted net income of trees and vineyards			Replacement cost of structures and discounted net income of trees and vineyards		
	Standing Crops/Fruits	Value determined/agreed by State Authority		LRE				Market Value	Independent Study	RAP Fund	Market Value	Independent Study	RAP Fund	Market Value	Independent Study	RAP Fund	Market Value	Independent Study	RAP Fund
	Transaction Costs	LRE						TANAP			TANAP			TANAP			TANAP		

* Additional measures to cover community based losses associated with lost of forest and pastures shall be addressed in Community Based Programs financed by the RAP Fund



Table -58: Entitlement Matrix for Publicly Owned Land (Forest)

Land Ownership Type		Publically Owned Land																	
		Forest																	
Project Affected Person or Entity		Landowner			Landuser						Beneficiary (Squatter)						Community (Common Losses)		
		Forest Authority			Documented User (with formal Agreement)			Non-Documented User (without formal Agreement)			Producer/Cropper (unauthorised)			Collector/Grazer (tolerated)					
Compensation		Principle	Assessor	Mechanism	Principle	Assessor	Mechanism	Principle	Assessor	Mechanism	Principle	Assessor	Mechanism	Principle	Assessor	Mechanism	Principle	Assessor	Mechanism
Legal Requirement	Value of Land (Title and/or Easement)	Value determined/agreed by Forest Authority			Not applicable			Entitlement not recognized			Entitlement not recognized			Entitlement not recognized			Entitlement not recognized		
	Assets / Trees	Value determined/agreed by Forest Authority																	
	Standing Crops/Fruits	Value determined/agreed by Forest Authority																	
	Transaction Costs	LRE																	
IFC Requirement	Value of Land (Title and/or Easement)*	Not considered			Implicit in policies and entitled for compensation			Implicit in policies and entitled for compensation			Not entitled			Not entitled			Not entitled		
	Assets / Trees										Replacement cost of structures and discounted net income of trees and vineyards			Replacement cost of structures and discounted net income of trees and vineyards			Replacement cost of structures and discounted net income of trees and vineyards		
	Standing Crops/Fruits										Market Value	Independent Study	-	Market Value	Independent Study	-	Market Value	Independent Study	-
	Transaction Costs										Actual Cost	Receipt	LRE	Actual Cost	Receipt	LRE	Actual Cost	Receipt	LRE
		↓			↓			↓			↓			↓					
Project Affected Person or Entity		Landowner			Landuser						Beneficiary (Squatter)						Community (Common Losses)		
		Forest Authority			Documented User (with formal Agreement)			Non-Documented User (without formal Agreement)			Producer/Cropper (unauthorised)			Collector/Grazer (tolerated)					
Compensation		Principle	Assessor	Mechanism	Principle	Assessor	Mechanism	Principle	Assessor	Mechanism	Principle	Assessor	Mechanism	Principle	Assessor	Mechanism	Principle	Assessor	Mechanism
TANAP Commitment	Land (Title and/or Easement)	Value determined/agreed by Forest Authority			Not applicable			Not entitled			Not entitled			Not entitled			Not entitled		
	Assets / Trees	Value determined/agreed by Forest Authority						Replacement cost of structures and discounted net income of trees and vineyards			Replacement cost of structures and discounted net income of trees and vineyards			Replacement cost of structures and discounted net income of trees and vineyards			Replacement cost of structures and discounted net income of trees and vineyards		
	Standing Crops/Fruits	Value determined/agreed by Forest Authority						Market Value	Independent Study	RAP Fund	Market Value	Independent Study	RAP Fund	Market Value	Independent Study	RAP Fund	Market Value	Independent Study	RAP Fund
	Transaction Costs	LRE						TANAP			TANAP			TANAP			TANAP		

* Additional measures to cover community based losses associated with lost of forest and pastures shall be addressed in Community Based Programs financed by the RAP Fund



7.0 PUBLIC CONSULTATION AND DISCLOSURE

7.1 Introduction

This chapter deals with the consultation strategy to be followed during land acquisition activities and the grievance mechanism to be used to resolve the disputes arising from them.

The design and implementation of the TANAP Project as well as its land acquisition activities will be guided by stakeholder consultations including consultations with affected communities. The consultations aim at providing the public, affected communities and PAPs accurate and timely information about the Project, the procedures to be followed in land acquisition and potential impacts. Communicating information in a manner that is understandable to all stakeholders ensures constructive consultation. It also provides the basis of informed participation in land negotiations. Effective land acquisition planning requires regular consultation with PAPs and communities as well as with local/state authorities, civil society organizations and other groups that may play a significant role in shaping or affecting the Project, either positively or negatively.

Public consultations are also necessary to manage expectations in an early and transparent manner. Continuous consultations allow TANAP to negotiate compensation packages and other mitigation measures.

The public disclosure of the RAP allows for both national and international stakeholders to comment on the plan. Establishing a grievance mechanism ensures that complaints stemmed by the Project are dealt with Project specific channels before recourse to the legal system.

The World Bank's Operational Policy on Involuntary Resettlement (OP/BP 4.12), the IFC's Performance Standard on Land acquisition and Involuntary Resettlement (PS 5) and their respective handbooks on involuntary resettlement, make reference to the consultation requirements for projects involving physical or economic displacement. The Project, will not require the physical displacement of any communities⁴⁶ however, land acquisition process will be followed in order to address the economic displacement caused by the Project.

7.2 Consultation Activities for Land Acquisition

All consultation activities that are carried out under the land acquisition process will be in line with the Stakeholder Engagement Plan (SEP) that has been developed for the Project.

World Bank and IFC guidelines require that all stakeholders are identified in the early project development phase. Once the stakeholders are identified, local authorities, community leaders and other local organizations relevant to the Project's land acquisition activities will be informed. All project line managers and staff that will interact with the Project affected persons regarding the

⁴⁶ The Project might affect single houses here and there, but not entire communities.



anticipated effects of the project and responsible from measures to mitigate its impact will be briefed. Following the completion of the census and public notice on the cut-off date, relevant government authorities should be arranged to issue formal notice banning the construction or approval of construction of new buildings in areas to be affected by the Project. This will be done shortly before land acquisition is initiated in different segments of the pipeline. Additionally, an illustrated land acquisition information booklet providing details on eligibility, rates of compensation and other entitlements, a timetable for implementation and all applicable grievance procedures shall be prepared and distributed to all affected communities and stakeholders. During the implementation of the RAP, feedback for each of the groups and communities affected shall be collected in addition to launching a participatory monitoring and evaluation process. Finally, RAP information updates should be regularly prepared and issued as needed.

7.2.1 Summary of Consultation Activities

7.2.1.1 Stakeholder Identification and Primary Consultation

In order to inform national and relevant provincial authorities about the Project, preliminary consultations were already completed. These consultations, carried out in 20 provinces⁴⁷, aimed to collect feedback regarding the Project as well as to define the key constraints of the authorities within the 2 km corridor of the pipeline.

International and national NGOs were informed through meetings and their feedback was sought. During RAP preparation, PAPs and village headmen were engaged via socio-economic surveys. In addition to the local authorities that will contribute in the implementation of land acquisition activities, categories of other stakeholders affected by the land acquisition activities and the loss of access to common resources were identified in this phase.

7.2.1.2 Preparation of a Project Brochure

During the initial engagements in the ESIA process, a brochure providing non-technical information on the Project, studies to be carried out for environmental and social management, overview of the process for land acquisition and easement and information on the grievance mechanism was prepared. This brochure was distributed both to local authorities as well as to PAPs during ESIA socio-economic surveys.

7.2.1.3 Further Consultations with Local Authorities

Consultations on both provincial and district levels with the Land Registration and Title Deeds Offices, Directorates of Food, Agriculture and Livestock as well as the Ministry of Forestry Water Resources were carried out by the Authority Liaison, Mapping, Land Acquisition and Ground Investigation Services Contractor (LASC). During this phase, information pertinent to land valuation

⁴⁷During the first meetings the number of provinces visited for consultation was 21. However, after the the Bulgarian section of the pipeline was removed, the number of provinces affected by the Project decreased to 20, thus the consultations carried out after this change were realized in 20 Project affected provinces.



was requested from all public and private agencies and sources. Data collected was then used as input for valuation prior to the launch of land acquisition negotiations.

7.2.1.4 Preparation of Guide to Land Acquisition and Compensation (GLAC)

A land acquisition and compensation guide will be enclosed to the invitation letter that will be sent to landowners for negotiation meetings. The aim of the guide is to provide basic information regarding the entitlements of the PAPs whose land is subject to acquisition. The GLAC prepared for the project is presented in Annex 7.1.

7.2.1.5 Invitation Letter

After having identified the addresses of land owners, invitation letters will be sent to inform and notify the land owners of the decision of land acquisition and to invite them for negotiations. Invitation letters will be sent a second time to the landowners whose letters are returned during the first round of invitations due to erroneous addresses. The Guide to Land Acquisition and Compensation (GLAC) that will be sent with the invitation is presented in Appendix 7.1.

7.2.1.6 Informative Meetings Held Prior to Immediate Expropriation

In cases where negotiation activities for willing buyer seller approach fail to reach conclusion, Article 27 of the Expropriation Law will be initiated. Although this article of the Law does not require any meeting to be held prior to this process, LRE will nevertheless organize informative meetings in every village subject to land acquisition stating that Article 27 will be enforced.

7.2.1.7 RAP Disclosure

The RAP will be disclosed as a full document to national and provincial level public authorities to be shared with communities and other relevant stakeholders that may have an influence on the Project. The report will be prepared in both languages, Turkish and English so that all international and national civil society organizations can provide feedback.

7.2.1.8 Preparation of RAP Updates

The updates regarding RAP progress will be disseminated to concerned stakeholders.

7.2.1.9 Establishment of LRE Branch Offices

As per Article 16 of the HGA, in order to perform the State's obligations in relation to Land Rights on local level, ten LRE branch offices will be established along the pipeline route. The aim of the branch offices is to manage land acquisition procedures prior to and throughout the construction period of the Project. LRE branch offices will be provided regularly with updated project information, induction trainings on the SEP and Grievance Mechanism.



7.2.2 Stakeholder Identification During the ESIA Process

In the beginning of the ESIA process, a preliminary list of stakeholders was prepared via desktop studies. Various stakeholders such as public authorities, national and local organizations, interest groups and communities that could be potentially affected by and/or have an influence on the Project were identified for future engagement activities of TANAP. The stakeholders are categorized as follows:

Project Affected Persons and Communities living in settlements within the 5 km pipeline corridor which passes through the provinces of Ardahan, Kars, Erzurum, Erzincan, Bayburt, Gümüşhane, Giresun, Sivas, Yozgat, Kırşehir, Kırıkkale, Ankara, Eskişehir, Bilecik, Kütahya, Bursa, Balıkesir, Çanakkale, Tekirdağ and Edirne that will be directly or indirectly be affected by the pipeline and its auxiliary facilities.

Public Authorities at national, regional, provincial and district level that are affected by and have an influence on the implementation of Project activities.

Non-Commercial and Non-Governmental Organisations at international, national, regional and district level that will be interested in expressing views and opinions on the Project and that will have expectations on benefits brought by the Project.

Interest Groups such as universities and their foundations, cooperatives, local business establishments, business associations, chambers of commerce and etc. that will be interested in expressing views and opinions on the Project and that will have expectations on benefits brought by the Project.

Multi-National and International Organizations such as the United Nations, World Bank Group, etc. that will be interested in expressing views and opinions on the Project.

Media at national, regional, provincial and district level that will be interested in informing, expressing views and opinions on the Project.

7.2.3 Preliminary Consultations during the ESIA Process

During September 2012, within the context of the ESIA studies, a total of 40 preliminary consultation meetings were held with the governorships and directorates of Planning and Coordination by TANAP and Authority Liaison, Mapping, Land Acquisition and Ground Investigation Services Contractor (LASC) representatives. The government authorities have also been engaged via correspondences providing maps of 1/25,000 to request their existing and planned utilities and constraints on the 2 km corridor. Replies of authorities were registered in the Authority register.



Questions raised during the preliminary consultations include of issues such as; background information on the Project, public consultation process, benefits of the Project to Turkey, possible investment programs and land acquisition.

In addition to meetings realized with public authorities, Public Participation Meetings (PPMs) were held to inform the PAPs and other stakeholders about the Project and to gather any concerns, feedbacks and suggestions regarding the Project. These official PPM meetings were organized in collaboration with pertinent Provincial Directorates of Environment and Urbanization, and were held between February 25-March 11, 2013 in 21 provinces. Another round of not mandatory PPMs were held between March 18-29, 2013 in order to cover the other 42 districts along the route that were not visited during the official PPMs.

Various communication tools were employed for the announcement of PPMs. Announcements were made for the official meetings in one of the national newspapers with wide circulation as well as in one local newspaper of each province traversed by the pipeline. In addition to newspaper announcements, the Sub-governorates of 63 districts were informed by official correspondences. Details on venue, date and time of PPMs were communicated by phone to Mukhtars (village administrative representatives) of about 500 settlements within the 5 km corridor.

The average participation rate of PPMs was 55.5 percent. Among the 503 villages invited, representatives from 279 villages participated to the meetings. In total, 1,250 people attended the meetings. Among the questions raised during the PPMs, the majority was related to land acquisition, followed by project background/details, damage to land and reinstatement, local and national gas supply opportunities and employment opportunities respectively.

Land acquisition related questions were based on the time schedule of the activities, valuation process and management responsibilities related to compensation. Numerous attendees raised the issue of land users also being considered in any compensation scheme.

Project affected districts had previous experiences with pipeline projects. Concerns related to the damage of land, crops and assets as well as unclear or unjust compensation practices were raised. Another concern raised was the unfair distribution of Project benefits and the promises that were not kept by contractors of previous pipelines. The possibility of local gas supply to settlements was also a question frequently raised during the meetings.

7.2.4 Village Level Consultations during the ESIA Process

Village level consultations were carried out with the objective of providing general information on the Project as well as to collect socio-economic data on PAPs and communities while identifying their concerns pertaining to the Project. In this regard, three socio-economic surveys were conducted under the ESIA process;



Pipeline Survey (June 17- July 10, 2013): Two different types of questionnaires were carried out with village heads and households. The total numbers of settlement and household questionnaires were 267 and 1,840 respectively. The objective of both questionnaires were to collect socio-economic data on issues of concerns emerged during desktop studies as well as to gather opinions and knowledge on the pipeline and to capture respondents' expectations and concerns regarding the Project.

In addition to the questionnaires; a total of 85 focus group discussions with women, youth and fisherman were carried out. Focus group discussions aimed at informing and collecting data on the groups that were not covered in the questionnaires.

In-depth interviews were carried out with 151 key informants in all districts visited for the pipeline survey. Key informants were considered as local administrative leaders (i.e. sub-governors and mayors) as well as representatives of pertinent local organizations and associations. These interviews were an opportunity to disclose information on the Project and to collect opinions and comments of key informants.

AGI, Camp and Pipe Stock Yard Survey (September 24- October 11, 2013): Similar to the pipeline survey, settlement (115) and household (393) questionnaires were carried out with village heads and households. Additional 198 focus groups discussions were realized with both women and men.

7.2.5 NGO and Interest Group Meetings during the ESIA Process

Three consecutive consultation meetings on the November 12th, 13th and 15th of November 2013 were held with international/national NGOs and associations. The aim of these meetings was to ensure that:

- initial introduction of the Project was made to these stakeholders;
- current version of the SEP was presented in order to receive feedback and comments;
- questions/comments/suggestions of these stakeholders regarding the Project was collected .

Although a total of 270 national and international stakeholders were invited to the meetings, only 34 stakeholders with 45 representatives participated in the three meetings. Most of the questions/feedbacks were related to details on the Project, followed by social and environmental issues respectively.

The majority (78%) of the stakeholders that participated to these meetings have neutral attitude towards the Project. This ratio is not surprising, since these meetings were the first consultations to be carried out with these stakeholders regarding the Project. Another 11 percent was fully supportive while 5 percent was supportive, while 6 percent was unsupportive. The representatives



of the unsupportive group based their negative opinion on some other experiences they had with previous pipeline projects.

7.3 Consultation Activities Carried Out for RAP

A socio economic survey was carried out by Golder with the owners/users of Project affected lands by the RAP social team between February 20 and March 5, 2014. The details and results of this survey are presented in Chapter 4 of this report. During the survey, interviewees were informed of the Project and its pertinent land acquisition activities. Project brochures explaining the land acquisition process to be followed were also distributed both at household and settlement levels.

Focus groups discussions with women (17) and interviews with village heads (135) were held. Concerns and questions regarding the Project’s land acquisition activities of the interviewees were listed. A total of 876 questionnaires were conducted with households affected by the Project, where 57 percent (502) of the interviewees stated that they need further information regarding the land acquisition process. Among the major concerns and issues brought to light according to their inquiry frequency is given in Table 59 below.

Table -59: Issues Which Further Information is Required

Issues	%
When will we have information on the amount of payments to be made for our land?	61.0
When will the land acquisition/expropriation activity start?	59.2
Will I be able to cultivate my land again?	53.0
How much of my property will be affected?	49.2
When will the payments be made?	40.2
Will the land acquisition process be based on willing buyer/seller negotiations or will there be immediate expropriation?	25.5
Can I receive a compensation for the Treasury land I cultivate?	15.9

Source: RAP Socio-economic Survey Results, 2014

The majority of the interviewees (61 percent of the 502) requested to have more information regarding the amount of payments that will be made for the loss of land. The initiation date for the land acquisition works and the possibility of re-cultivating land used for the construction were other significant issues that were raised. Thirty three percent of these PAPs had inquiries other than the ones stated above such as; how the land will be affected and if reinstatement works would be carry out for their land.

In addition to collecting their concerns on the Project, all PAPs contacted were provided with information on the Project’s current grievance system and provided with the means that could be utilized for getting in contact with TANAP⁴⁸.

⁴⁸ During the period when the socio-economic survey was conducted no LRE branch offices had been established yet, thus PAPs could not be provided with contact information of LRE branch offices in their region. However, LRE will carry out informative meetings prior or parallel to sending out negotiation invitations and inform all PAPs and communities of the branch offices established.



During the socio-economic survey it was observed that many of the correspondents had little information on the land acquisition process and the legal framework of the project. However, during the assets inventory works that will be carried out by the LASC, all residents (owners and/or users) will be informed on the land acquisition process prior to receiving an invitation from LRE for negotiations that will also be accompanied by a Guide to Land Acquisition and Compensation (GLAC). The GLAC will provide specific information on the entitlements of all PAPs as well as providing information on the process of land acquisition and the legal framework to be followed for it.

7.3.1 Public Disclosure of the RAP

To comply with the World Bank and IFC policies, TANAP will ensure that the RAP is made available to IFC for submission to the World Bank InfoShop for public access at least 60 days before IFC's formal consideration. TANAP will also make sure that the RAP is distributed among pertinent stakeholders (i.e relevant ministries, provincial directorates of various state authorities, governorships and sub-governorships, universities etc.) of the Project in local language for review. An executive summary of the RAP in both languages (Turkish and English) will also be made available. Local language summary will be shared in multiple copies with community leaders in all 570 settlements.

The invitations for negotiations will include a document that will briefly describe the Project and will provide detailed and specific information on land acquisition.

Once the RAP Fund is established and operational, communities that are likely to experience livelihood losses as a result of losses of forest and pasture land will be identified. Collaborative arrangements will be established with selected communities for the design and implementation of RAP financed investments.

All feedback (comments and concerns) of relevant parties pertaining to the RAP will be collected in written format. After the 60 day period, all feedback received will be reviewed and necessary actions will be taken to integrate valid comments and provide answers to inquiries made by stakeholders.

7.3.2 Guide to Land Acquisition and Compensation

A Guide to Land Acquisition and Compensation (GLAC) was prepared to be distributed to all PAPs invited for negotiations, all headmen of project affected settlements and to various information points along the pipeline for other project affected parties to attain information on the land acquisition process of the Project.

The GLAC includes information on the following:



- project description;
- procedure to be followed for land acquisition, including legal requirements ;
- eligibility conditions for compensation;
- valuation for compensating assets lost to the Project;
- answers to major concerns or frequently asked questions by PAPs who are both owners and users.

The GLAC will initially be distributed along with the invitation letter sent to the land owners prior to negotiations.

7.3.3 Training of LRE Staff

Given that several pipeline projects, similar to TANAP, have been realized previously an expertise on the implementation of land acquisition works has been created. The line managers and staff undertaking the land acquisition works in LRE will be selected among experienced experts in the field. However, these managers and staff will be provided with updated information on RAP activities in addition to regular trainings arranged in certain intervals for the execution of land acquisition activities in line with international best practices. The trainings will be held in order to enhance the skills of LRE staff in communication, negotiation and conflict resolution.

7.3.4 Consultations with PAPs

The negotiation committees formed under the LRE will make visits to project affected settlements and to PAPs, individually, soon after the invitation letter for negotiations are sent to them.

The aim of the settlement level meetings is to deliver general information pertaining to the land acquisition process; valuation strategies for land/other assets, legal procedures and eligibility for compensation. In addition to the settlement level meetings, negotiation teams will hold meetings with PAPs individually in order to negotiate a value for the assets lost to the Project.

As this RAP was being prepared three LRE branch offices established in Kars, Erzurum, and Erzincan have initiated consultations with PAPs. Four other branch offices in Sivas, Yozgat, Ankara and Eskişehir will be established during July 2014 followed by three more offices in Bursa, Çanakkale and Thrace. The branch offices of LRE have already started sharing detailed information on the Project itself as well as its land acquisition activities that will be initiated soon. Most of the consultations made with PAPs in Kars, Erzurum and Erzincan indicate that PAPs have had difficulties in former pipeline projects and would like similar impacts to be mitigated before they arise in TANAP Project. Other significant issues brought to light by the PAPs have been local employment opportunities and the reinstatement works that will be realized in the future.



7.3.5 Feedback Management after Consultations

The feedback; comments and questions received by LRE's local branch offices after the negotiations and consultations both through written or oral tools (i.e hotline or face to face meetings) will be collected and recorded. Recorded feedback will then be revised for necessary response actions to be taken.

7.4 Approach to be adopted by LRE during Land Acquisition

Due to the previous pipeline projects implemented in Turkey, a certain amount of the PAPs will be familiar with the land acquisition process to be carried out. Therefore, it is of great importance that LRE adapts an approach which is transparent, participatory and one that sets best practice standards. The commitment of TANAP to meet both national and international standards for land acquisition requires that LRE adapts the following in its approach:

- Sharing transparent, timely and consistent information with all PAPs subject to land acquisition,
 - Providing detailed and understandable information on the valuation methods to PAPs,
 - Assuring PAPs that valuation commissions value each plot separately, considering all assets lost to the Project according to current regional prices,
- Ensuring the full disclosure of RAP in local language to all pertinent stakeholders,
- Training all staff appointed in the land acquisition process in regular intervals on RAP issues,
- Holding consultation and negotiation meetings in project affected settlements rather than in LRE branch offices,
- Comparing court assigned experts' valuations and LRE's primary valuations in order to find mechanism to further reduce disagreements on valuation.

7.5 Grievance Mechanism

7.5.1 Rationale

Many projects rely on grievance mechanisms to track adverse impacts and responses to them. Yet, in a pipeline project such as TANAP that affects over 60,000 owners along 1,805 km in 20 provinces, LRE's branch offices will be difficult to reach no matter how many they may be. Project Affected Persons (PAPs) might be reluctant to travel long distances to seek resolution to their problems. PAPs may also be reluctant to call these branch offices if they are not convinced that they can get immediate attention; given the distance between the locations where impacts generate and where the offices may be located.

During the course of construction, damage is likely to occur at several locations along different segments of the pipeline; these will be monitored in a proactive manner so that when damage occurs it will be compensated promptly. Once the construction starts, the Contractor may need



new land for access roads or for the expansion of existing roads. Therefore, monitoring of the relevant land acquisition activities will be carried out in a proactive manner without relying on grievance mechanisms for the identification of adverse impacts. The proactive process will identify the adverse impacts of the Project that may emerge once the construction activity starts; the process will formulate the required responses at a household and/or community level.

The proactive process will involve the recruitment of a group of experienced consultants with extensive familiarity with land acquisition issues in Turkey and who are able to work directly with PAPs and affected communities in parallel to construction activities along different points of the corridor. These local consultants will be the key element of Project's internal monitoring and will work closely with external monitors.

Women often fail to express their grievances and will be particularly reluctant if they were to travel to branch offices of LRE or to make phone calls. The proactive process of monitoring will identify women (as well as men) who may face hardship as a result of Project's land acquisition and/or construction activities and will implement appropriate measures to their concerns.

Experience elsewhere in Turkey shows that many items included in 'grievance forms' do not consist of complaints; rather they are individual or community demands or wishes for assistance. For instance, when PAPs note the availability of machinery in the construction area they may ask for assistance for the transport of building materials from the market to their homes or for the excavation of a portion of their land. Community leaders may ask support for the repair of village schools or village infrastructure. Private sector investors often find it difficult to refuse these requests and end up meeting a large number of demands not directly relevant to the Project.

A proactive approach will also help guide the individual and community demands for assistance so that community based assistance will help mitigate against loss of livelihoods caused by lost communal resources (such as pastures, forest and/or water resources). Response to demands of individual PAPs (over and beyond their entitlements) could target communities where the number of privately owned affected parcels may well exceed the average for the country (and thus result in a large number of households from a select number of communities to be disproportionately affected).

Unless a proactive approach is adopted, every community through which the pipeline passes and many households that live in and around these communities, whether they are directly and disproportionately affected or not, may seek assistance and Project's refusal to meet these demands may result in the tension between the people and the Project. It is therefore important to establish the criteria for assistance to be offered to individuals and/or communities. These may include the following but will be finalized in consultation with communities once the RAP Fund is established:



- Community based assistance will be provided only to settlements that lose access to forests, pastures and/or water resources;
- The loss of access should be measurable and substantial in terms of lost livelihoods to communities that use these resources affected by the Project; these communities need not lose private land to the Project. The community based impacts of communal resources can be said to be substantial if the Project affected pastures and forest land that consists of large areas and if a majority of households in a village supplement their living by grazing their livestock in pastures; by fishing in waters that may be temporarily or permanently affected; or by collecting wood and/or herbs from forests and/or working as forest workers⁴⁹;
- Assistance to PAPs and other members of the communities over and beyond the compensation paid to them for lost assets will be considered in communities where the number of parcels acquired, exceed the national average by 20 percent and/or where the construction activities affect a large number of homes, gardens and other assets.

7.5.2 Grievance Process

In line with the international standards, TANAP's grievance redress framework will ensure that all affected PAPs be able to place complaints, claims and/or requests without cost and under the guarantee that they are provided with a timely and satisfactory resolution for it.

Additionally, as stated in IFC's Resettlement Handbook, TANAP may have to make special accommodations for women and members of vulnerable groups to ensure that they have equal access to grievance redress procedures. Such accommodation may include employment of women or members of vulnerable groups to facilitate the grievance redress process or to ensure that groups representing the interests of women and other vulnerable groups take part in the process. TANAP should also be prepared to communicate with certain groups that do not speak Turkish as a mother language or as 'second language' through their local leaders.

It is important to be aware of the fact that the grievance mechanism will not work where the illiteracy rates are high and will especially hinder women's ability to express their concerns. Also the poor and the illiterate do not have the means for internet access and thus they cannot use web-based and written grievance tools. The Project will take into consideration these issues and give special attention to avoid such cases.

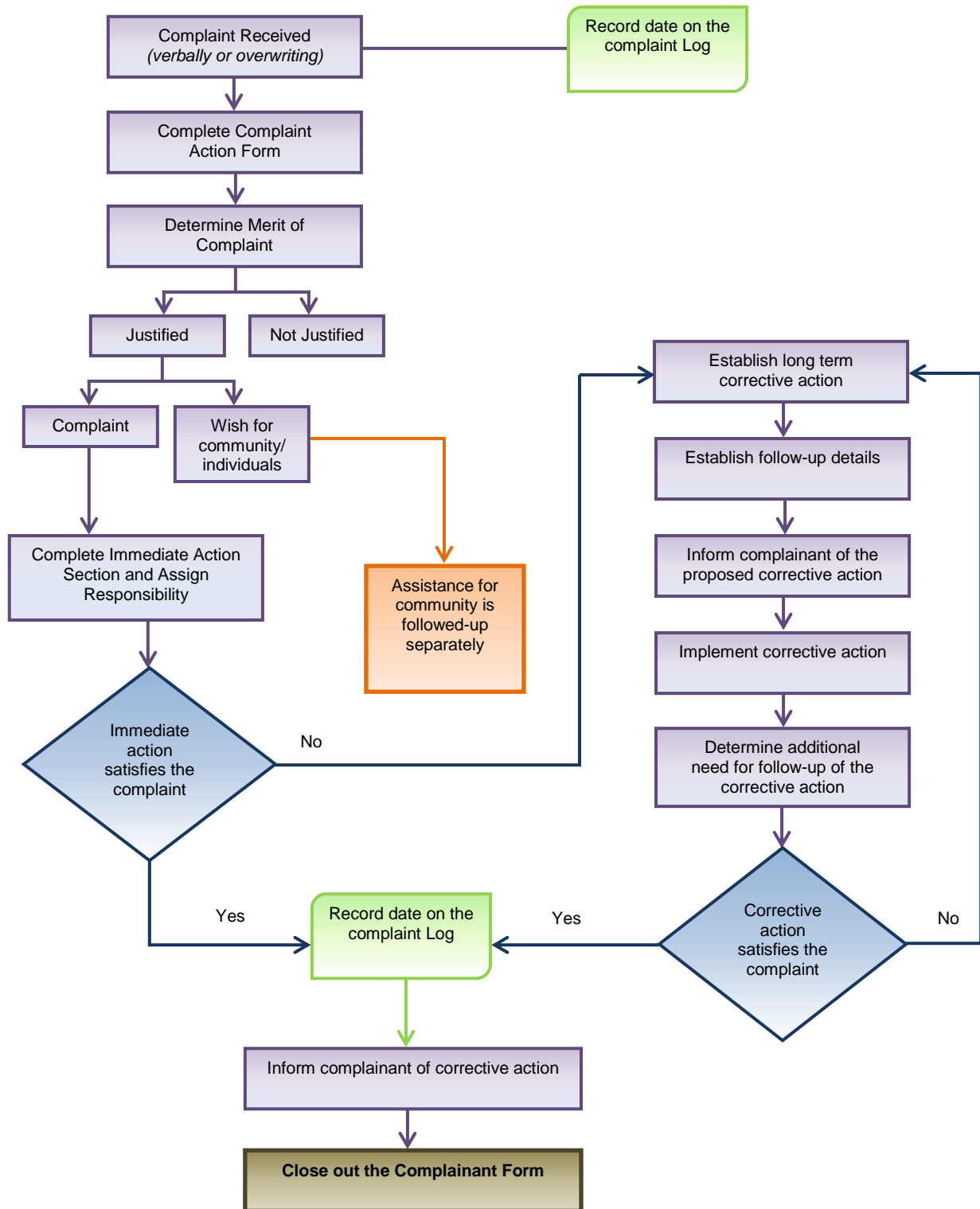
All PAPs and project affected communities will be provided with the information on different means/tools available for lodging a complaint, claim or request. The requests/wishes will be responded based on the criteria established by the RAP Fund Board of Directors and hopefully they will be community based responding to loss of access to forests, pastures, etc.

⁴⁹ Needless to say the relevant judgments will be relative but the GIS data presented in Chapter 6 shows the areas (provinces, counties, and villages) where affected pasture and forest lands concentrate. Relevant information will be available about water resources once the next stage of engineering design is completed. Thus, it will be possible to identify communities where potential impacts are likely to be large. The proactive monitoring team mentioned in this section will then launch a process of community based dialogue to establish whether livelihoods in the selected communities are indeed affected and, if so, what the communities would define as an appropriate Project response.



The complaints procedure to be followed for the Project is illustrated in Figure 54 below.

Figure 54: TANAP's Complaints Procedure





A Grievance and Dispute Resolution Procedure is followed by TANAP to manage the community concerns and requests through active and transparent engagement with stakeholders. As part of the procedure, a toll free number is set up and a complaint register form (Figures 55 and 56) is prepared for the complaints log. Each complaint registered is recorded in TANAP central complaints database.

Written grievances will be submitted with the Complaint Register Form or by including the following information in a letter or e-mail:

- Name;
- Organisation and position, if relevant;
- Address;
- Telephone/Fax and e-mail;
- Most effective means to send a response; and
- Details of the grievance (any important details; date of the incident, location, etc.)



RESETTLEMENT ACTION PLAN (RAP) FOR TANAP PROJECT

Figure 55: Complaint Register Form (Page 1)



		TANAP TRANS ANATOLIAN NATURAL GAS PIPELINE PROJECT	
Complaint Register Form / Şikayet Kayıt Formu			
Şikayetin Alındığı Yer / Location of Complaint Received		Tarih / Date:	
Alan Yetkilisinin Adı / Name of Person Incharge:		Şikayet Kayıt No/Complaint Register Number	
Şikayete Konu Alanın Koordinatları / Coordinates of the area subject to complaint : (UTM ED 50)			
Arazi Parsel numarası (Şikayet arazi konulu ise) / Land Parcel Number (If complaint is related to land)			
1 - ŞİKAYET SAHİBİ HAKKINDA BİLGİ / 1 - COMPLAINANT INFO			
Ad Soyad / Name Surname :		Şikayetin Geliş Yolu / Form of Complaint :	
T.C. Kimlik No / Identification Number		<input type="checkbox"/> Telefon-Ücretsiz Hat / Phone-Free Phone Line	
Telefon / E-posta Telephone / E-mail :		<input type="checkbox"/> Halk Toplantısı / Community Meeting	
Adres / Address:		<input type="checkbox"/> Dilekçe / Petition	
Köy - İlçe - İl Village -District -Province:		<input type="checkbox"/> Diğer (Açıklayın) / Other (Specify)	
2 - ŞİKAYET DETAYLARI / 2 - DETAILS OF COMPLAINT			
Şikayeti Açıklayın / Define The Complaint :			
Şikayet sahibi tarafından talep edilen çözüm / Solution requested by the complainant :			
Kayıt eden kişinin ad soyad ve imzası / Name Surname and Signature of the Registerer		Şikayet Sahibinin ad soyad ve imzası / Name Surname and Signature of the Complainant	
TNP-SOC-FRM -002 Rev.1			



Figure 56: Complaint Register Form (Page 2)

		TANAP TRANS ANATOLIAN NATURAL GAS PIPELINE PROJECT	
		Complaint Register Form / Şikayet Kayıt Formu	
3 - DÜZELTİCİ EYLEMİN BELİRLENMESİ / 3 - DETERMINATION OF CORRECTIVE ACTION			
1			
2			
3			
4			
5			
6			
Sorumlu Departman(lar) / Accountable Department(s)			
Sonlandırma Tarihi / Sing off Date			
4 - TAZMİNAT ÖDENMESİ - ŞİKAYET SONLANDIRILMASI / 4 - PAYMENT OF COMPENSATION - TERMINATION OF COMPLAINT			
Tazminat talebi var mı? / Compensation measures required? : Evet / Yes Hayır / No			
<p>Bu bölüm şikayetçi tarafından, talep ettiği tazminat ödendiğinde (tazminat talebi var ise) ve / veya bu formun önyüzünde belirttiği şikayeti giderildiğinde, doldurulup imzalanacaktır.</p> <p>This section will be filled out and signed by the complainant when requested compensation is paid (if there is a claim for compensation) and / or the complaint stated on the front page of this form is resolved.</p>			
Tarih / Date :/...../.....			
Şikayet Sahibinin Ad Soyad ve İmzası / Name Surname and Signature of the Complainant			



8.0 MONITORING AND EVALUATION

8.1 Objectives

The objective of monitoring is to provide feedback to TANAP on Resettlement Action Plan (RAP) implementation and to identify problems and successes as early as possible to allow timely adjustment of implementation arrangements. Monitoring and evaluation is also critical to confirming the success of sustainable livelihood restoration of the affected people. Perhaps the single most important objective of monitoring is to ensure that the land acquisition activities with respect to all Project components that are not covered by this RAP, especially those that emerge during Project implementation are implemented in accordance with the principles outlined in the RAP. In the course of a rather long process of construction some of the owners of affected assets may change, new parcels may be needed for access roads and other parcels may be affected to gain access to the pipeline corridor without requiring the construction of access roads, standing crops may not be recognized, construction debris may not be moved and the land may not be properly levelled prior to its return to the owners/users. Thus, a continuous process of monitoring will be launched simultaneously with construction activities.

The monitoring activities will be considered to be complete when all construction activities are completed and the adverse impacts of resettlements have been addressed in a manner consistent with the objectives stated in the resettlement plan or framework.

The purpose of resettlement monitoring in TANAP Project will be to verify that:

- Actions and commitments described in RAP are implemented fully and on time by TANAP;
- Commitment to livelihood restoration/improvement is recognized, monitored and documented;
- Construction activities are closely followed and all new land acquisition, crop compensation and construction damage issues are identified and addressed;
- Eligible affected people receive their full compensation within agreed timeframes with the recognition that the implementation of expropriation through the use of Article 27 of the Expropriation Law would allow the affected owners to receive an initial payment based on the decision of the Court and the final payments might be paid once the legal procedures are completed;
- RAP actions and compensation measures are effective in enhancing or restoring living standards and income levels with the recognition that such impacts will be minimal throughout the pipeline corridor but the areas impacted by AGIs and water crossings would require greater focus;
- Community level impacts are recognized and mitigation measures are implemented;
- Complaints and grievances logged by project affected persons are followed up and appropriate corrective actions are implemented; and



- Changes in RAP procedures are made during implementation so that compensation measures are effective in restoring living standards and income levels of affected people.

8.2 Livelihood Restoration

The single most important purpose of resettlement action plans is the restoration and/or improvement of livelihoods adversely affected by large scale investments such as oil or gas pipelines. However, projects often fail to adequately monitor and evaluate livelihood impacts of land acquisition activities. This is especially so for linear projects such as pipelines, roads, and highways those require small portions of large numbers of land plots distributed over long stretches. Such failure has multiple causes including:

- Lack of commitment to the identification and mitigation of Project impacts following the land acquisition process;
- Ignoring areas of high potential impacts (such as AGIs, Marmara Sea crossing) with the assumption that livelihood impacts along the corridor are minimal or negligible;
- Lack of qualified human resources to manage livelihood restoration and development processes;
- Failure to define and adhere to an adequate M&E framework that takes social issues of concern specific to different Project components; and,
- Failure to identify appropriate indicators.

The major emphasis of TANAP's monitoring will focus on the process issues during construction as described above. In addition, a unique model of livelihood monitoring will be carried out as a means to having more systematic and rigorous analysis of potential livelihood interventions. Unlike the traditional approach which tends to evaluate the cumulative project inputs and outputs, during TANAP Pipeline Project monitoring and evaluation will also be done at the household level, based on the household survey data compiled throughout the corridor and on socio-economic data to be generated once the locations of AGIs and the details of water crossing become available. A data management plan will be put together to ensure that all data pertaining to households will be recorded using a unique identifier, therefore ensuring that each household's progress can be tracked throughout the duration of the Project. This will enable the project to have a more dynamic approach for the corrective action plans/strategies especially in areas where the land will be acquired permanently and/or where impacts are expected to be more visible (such as in communities affected by the Marmara Sea crossing).

The TANAP Project has a commitment to restore and improve incomes measured at pre-Project levels in terms of cash and in-kind earnings from goods and services produced. Considering that the impacts will be small along the corridor this commitment will be particularly strong in areas such as AGI locations. Standards of living reflect the assets (and their conditions) that a household has including immovable assets (such as the size and quality of their home) as well as other



assets (such as furniture). Livelihoods will be defined as activities that define the mode of income of a household such as agriculture, wage labor, etc., technology or knowhow used to make a living through various activities that household members are engaged in and access to key services (such as schooling, health, extension services, water and sanitation, etc.). In other words, pre-Project level of incomes are calculated with reference to all income generating activities of a household, including agricultural goods produced and consumed.

A review of current practice in the development and implementation of Resettlement Action Plans (RAPs) demonstrates:

- Generally, RAPs neither define nor utilise a framework for livelihoods. It is important to understand the choices of affected populations with respect to livelihood restoration criterion prior to the design of component resettlement activities.
- Projects tend to equate livelihood restoration with the restoration of livelihood activities. This has led to livelihood restoration being considered as a final activity that follows land acquisition. Affected people may not wish to restore livelihood activities to the Pre-project level but desire to make a living from other sets of livelihood activities while improving their knowhow and access to services (and thus restoring their incomes and living standards). Therefore, as stated above, it is useful to distinguish between income, living standards and livelihoods so that opportunities that give rise to improved incomes can be distinguished from those that concern living standards and livelihoods.
- The use of a single measure (i.e., income) as an indicator of livelihood restoration has: (i) led to the minimization of the real-life complexity of livelihoods and thereby reduced our ability to analyse factors contributing to the viability and sustainability of individual livelihood activities and overall livelihoods; and (ii) implied that income streams from different activities can be treated equally and that trade-offs between such streams are deemed acceptable. TANAP project, on the other hand, will monitor changes in incomes, living standards, and livelihoods. It will do so, however, in select areas and with respect to those Project components that is likely to result in changes in livelihoods and living standards.
- Monitoring efforts often disregard the choices people make; instead they focus on 'desired changes' identified by experts. Thus, participatory monitoring and understanding the livelihoods implications of people's choices are important.
- Project commitment to livelihood restoration diminishes after the project has secured the site and by the time a project becomes operational, livelihoods is often no longer an active project concern. TANAP will define a longer term monitoring and evaluation process that will go beyond the Project construction.

8.3 RAP Monitoring Framework

There are several components of the monitoring framework for TANAP:



- Internal monitoring of planned and budgeted inputs and outputs;
- Internal monitoring of input and outputs of land acquisition requirements that emerge in the process of construction and the monitoring of construction related compensation to crops and other immovable assets;
- Internal monitoring of grievances (as discussed in Chap 7);
- Participatory monitoring whereby the affected people and the communities themselves as well as the labor force of the Project identify monitoring indicators that matter to them and assess relative success/failure of Project's land acquisition activities;
- External monitoring by independent experts of inputs, outputs, processes, and especially outcomes;
- External monitoring of RAP Fund activities and effectiveness of community based programs that fall within the Fund framework;
- External independent expert monitoring of impacts; and
- RAP Completion Audit by external Expert Panel based on internal monitoring data and reports.

The monitoring of large scale projects such as TANAP normally covers the following type of indicators.

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 and (b) the establishment of the land acquisition team (LRE).

Output indicators include activities and services produced with the inputs. Examples for output indicators in a RAP can be (a) a database of land acquisition, (b) compensation payments made for the loss of public assets; (c) payments for private land acquisition, etc.

Process indicators represent the changes in the quality and quantity of access of land owners/users to RAP related activities and services provided. These indicators would include the creation and functioning of grievance mechanism and the establishment of public consultation and disclosure channels.

Outcome indicators cover delivery of mitigation activities and measures to compensate physical and economic losses caused by the project such as (a) successfully negotiated land agreements; (b) restoration and compensation of agricultural and/or animal husbandry production; (c) restoration of affected incomes; (d) improvements in the attitudes of affected people and/or community leaders towards the project; (d) satisfaction with reinstatement activities; (e) participation in Community Investment Programs, etc.; and

Impact indicators define the change in medium and long-term measurable results in behavior and attitudes, living standards and conditions. Impact indicators aim to assess whether restoration



activities of the RAP are effective in maintaining and improving social and economic conditions of Project affected persons.

Impact monitoring measures the effectiveness of the RAP and its implementation in meeting the needs of the affected population. Impact monitoring will be conducted by external experts. The effects of the RAP will be tracked against the baseline conditions of the population as defined by the socio-economic studies conducted for RAP preparation. Additional data will be gathered and presented in a supplementary report to cover Project components not included in this RAP (such as AGIs); these data will be particularly important in the monitoring of livelihoods on household that lose large amounts of land permanently and those whose livelihoods might be affected through disturbances in community wide activities pertaining, for example, to fisheries. Impact monitoring will ensure effectiveness of mitigation activities before-during-after Project completion and will provide feedback to TANAP on modifications that may be necessary. Impact monitoring will focus on Project impacts and income restoration efforts so that the livelihoods adversely affected by the Project are restored and improved.

8.4 Internal Monitoring

Internal monitoring of planned and budgeted inputs and outputs; monitoring of input and outputs of land acquisition requirements that emerge in the process of construction; and the monitoring of construction related compensation to crops and other immovable assets; and the monitoring of grievances will be carried out by TANAP with support of the LRE.

- Internal monitoring will focus on measuring progress against the schedule of actions defined in the RAP and include:
- Review and report progress against the RAP to ensure that land acquisition activities progressed as planned and Schedule of activities was implemented;
- Verify that land acquisition and compensation entitlements are delivered and formulate alternative approaches if delivery systems fail;
- Review measures to enhance living standards are being implemented;
- Ensure that affected communities are treated equitably;
- Verify that measures to compensate all owners as well as users are implemented;
- Seek feedback from affected people and especially those likely to be affected by construction activities;
- Ensure the recruitment of a group of experienced consultants with extensive familiarity with land acquisition issues in Turkey and who are able to work directly with PAPs and affected communities;
- Identify problems, issues, or cases of hardship in gaining access to processes to verify and help improve the compensation payments made based on the urgent expropriation decision;



- Adapt a proactive process for monitoring that will help identify women (as well as men) who may face hardship as a result of Project's land acquisition and/or construction activities and implement appropriate measures to their concerns
- Maintain records of grievances and of responses, ensure Problems and conflicts are avoided; and
- Prepare progress and compliance reports and shared with external experts and other interested stakeholders.

8.5 Participatory Monitoring

This effort will be organized by a local civil society organization (to be identified) and be held in several areas where the water crossings are expected to create impacts that could not be captured by focusing on areas along the pipeline corridor and the AGIs. This can be helpful once these areas are identified.

8.6 External Monitoring

External monitoring systems, their numbers and composition is often influenced by stakeholders external to TANAP (and the LRE) and basically aim at outcome and impact monitoring. One of the critical functions of external monitors would be to focus on land acquisition, crop compensation and related issues that emerge at the outset of the expropriation process and continue throughout the Project construction. It is critical that independent observers/monitors observe implementation issues pertaining to these and help ensure that RAP policies and procedures apply to them.

The independent external monitors will:

- Assess overall compliance with the RAP;
- Ensure modifications made in inputs, outputs and procedures in RAP implementation constitute appropriate responses to emerging issues;
- Verify that livelihood restoration measures are implemented;
- Ensure that sufficient focus is placed on families and communities that are impacted by permanent and significant loss of immovable assets;
- Study community level responses to loss of community resources (such as pastures, forests, water resources, irrigation and other infrastructure; and
- Monitor RAP Fund implementation and assess the appropriateness of Fund financed activities, including community based programs.

8.7 Monitoring Schedule

Both internal and external monitoring will start simultaneous with land acquisition activities. External monitoring will intensify at the start of construction and will cover land exit as construction activities are completed. External monitoring of impacts, especially in areas where substantial



amounts of land are permanently acquired and where community based impacts emerge, will be particularly important.

It is expected that all internal monitoring reporting will be made on a quarterly basis. External monitoring results will be reported twice per annum throughout the construction period; subsequently annual reports for 3 years will be issued.

Both internal and expert RAP monitoring will continue until the RAP Completion Audit is issued. The key objective of RAP completion audit is to determine whether TANAP efforts, including cash compensation for land and other affected assets, to restore the living standards of the affected population have been properly conceived and executed. The audit should verify the physical inputs committed in the RAP have been delivered and all services provided. The socio-economic status of the affected population should be measured against the baseline conditions of the population according to the monitoring indicators identified during RAP preparation and any modifications that were done during RAP implementation. The RAP completion audit can be prepared within 24 months following completion of construction or at such time as livelihood restoration is complete.

Table 60 provides the details to the RAP monitoring reports that will be prepared.

Table -60: RAP Monitoring Reports

Type of monitoring report	Frequency	Organization Responsible
Internal monitoring <ul style="list-style-type: none"> ▪ Input and output monitoring of planned activities; ▪ Input and output monitoring of land acquisition/crop compensation activities that emerge during the course of construction ▪ Monitoring of grievances 	Quarterly	TANAP/LRE
Participatory monitoring	One-time	Consortium of Local NGOs
External monitoring <ul style="list-style-type: none"> ▪ Input, output, process, and outcome monitoring ▪ RAP Fund monitoring---inputs, outputs, outcomes ▪ RAP Fund impact monitoring ▪ Independent impact monitoring of Project by component 	Once every six-months	Panel of Internationally recognized Experts and/or Specialized Firms (local or international) selected based on competitive biddings



8.8 Monitoring Indicators

There are a large number of indicators that will be used by different agencies and phases of the Project. The participatory monitoring indicators will be identified by the civil society organizations together with the affected people. External monitoring experts/firms will design and modify the indicators they use and will identify these based on the process and/or the project component they focus. The completion audit indicators will be compiled to best summarize various types of monitoring exercises completed prior to the launching of the completion audit. Nevertheless, a number of indicators are provided below (Table 61) to guide the process.

Table -61: Suggested List of Monitoring Indicators

Monitoring Indicators	
1.	Progress in signing land purchase agreements
1.1.	Number of parcels acquired
1.2.	Percent of affected parcels acquired by type of ownership
1.3.	Parcels subject to land consolidation acquired
1.4.	Number private parcels acquired by province, country and settlement
1.5.	Payments made for public and private parcels acquired by type
1.6.	Number publicly owned parcels acquired
1.6.1.	<i>Treasury parcels</i>
1.6.2.	<i>Pasture parcels</i>
1.6.3.	<i>Forest parcels</i>
1.6.4.	<i>Parcels owned by other national agencies (with specification)</i>
1.6.5.	<i>Parcels acquired by local agencies</i>
1.7.	Parcels of Village Legal Entity Acquired
2.	Land acquisition for specific Project components
2.1.	AGIs
2.2.	Water crossings
2.3.	Others
3.	Mode of acquisition of parcels
3.1.	Negotiated acquisition by province, county, and settlement
3.2.	Payments made for negotiated settlements
3.3.	Ownership structure (single versus multiple owner) of private parcels acquired through negotiations
3.4.	Expropriated parcels acquired by province, county, and settlement
3.5.	Payments made for expropriated parcels and comparison of unit prices of negotiated versus expropriated parcels
4.	Processes completed
4.1.	Type of land acquired and registered
4.2.	Number of public consultation meetings held and attendance
4.3.	New parcels identified by the Contractor
4.4.	Acquisition of assets against which there is lien
4.5.	Acquisition of assets subject to land consolidation
5.	Other immovable assets on affected land acquired, number of affected parcels by province, country, and settlement; payments made
5.1.	Privately owned



Monitoring Indicators	
5.1.1.	<i>Vineyards</i>
5.1.2.	<i>Orchards</i>
5.1.3.	<i>Other trees</i>
5.1.4.	<i>Wells</i>
5.1.5.	<i>Barns</i>
5.1.6.	<i>Dwellings</i>
5.1.7.	<i>Fences or walls</i>
5.1.8.	<i>Ponds</i>
5.1.9.	<i>Irrigation canals affected</i>
5.2.	Publicly owned lands
5.2.1.	<i>Structures affected</i>
5.2.2.	<i>Roads</i>
5.2.3.	<i>Irrigation infrastructure</i>
5.3.	Private assets on publicly owned land
5.3.1.	<i>Structures</i>
5.3.2.	<i>Trees</i>
5.3.3.	<i>Crops</i>
5.4.	Assets of users on privately owned land
5.4.1.	<i>Structures</i>
5.4.2.	<i>Trees</i>
5.4.3.	<i>Vineyards</i>
5.4.4.	<i>Crops</i>
6.	Standing crops, number of parcels affected and payments made
6.1.	Parcels planned
6.2.	Parcels affected during construction
7.	Grievances recorded and closed by province, country and settlement
7.1.	Type of grievances
7.2.	Cost of resolution
7.3.	Percentage of wishes versus complaints
7.4.	Grievances that concern construction activity
7.5.	Grievances that concern land exit
8.	Work opportunities provided
8.1.	For Project construction by province, county, and settlement
8.2.	Duration of work
8.3.	Share of local labor within total
9.	RAP Fund activities
9.1.	Type of expenditures by province, county, and settlement
9.2.	Community based activities to restore income lost as a result of impacts on community assets (pastures, forest, etc.,)



9.0 COSTS AND BUDGET FOR COMPENSATION

As previously mentioned, the complete inventory of affected assets, carried out by LASC within the pipeline’s RoW, was not complete at the time of the preparation of this RAP. To this day, expropriation folders have been prepared for 481 km out of the 1,805 km of the pipeline. Once the entire pipeline route is covered, TANAP will be able to establish the detailed inventory of affected assets and will thus be able to prepare a final RAP budget.

Nevertheless, TANAP was able to provide the following budget for the pipeline’s RAP activities.

Table -62: TANAP Budget for RAP

Expense Category	Total (k TL)
Land Right Entity (With BOTAS service fee)	177,650
Lease for temporary fields	2,406
Acquisition – Notification to land owners for negotiations	780
Acquisition – by consent (30%)	37,409
Acquisition – Asset and crop payments	10,166
Acquisition – Registration cost in title deed offices	7,800
Court Costs – Immediate expropriation (Article 27)	15,958
Notification costs for article 27	648
Court costs – Acquisition (Article 27)	87,288
Court costs – Normal court cases (Article 10)	55,936
Notification costs for article 10	1,296
Forestry lands – Entry costs	51,720
Forestry lands – Annual lease	33,809
Livelihood Restoration and Resettlement Action Plan payments	2,442
Sub Total	485,308
RAP Fund (20% of Subtotal)	97,062
Contingency (10%)	94,660
Annual Forest Payments During Project Life	461,289
TOTAL	1,138,319

Although all costs have been considered in the present budget, any additional payment for loss of assets that may occur during land acquisition, construction and operation phases will be paid from the RAP Fund specially created to respond to individual and/or community based adverse impacts associated with land acquisition activities of the Project.

All transaction costs associated with purchase, expropriation, easement or rental of assets will be paid by the Project are estimated and included in the RAP budget. Transaction costs associated



with unanticipated expenses associated with physical and/or economic dislocation caused by the Project will be paid out of the RAP Fund.



10.0 IMPLEMENTATION SCHEDULE

The implementation schedule defines the duration and timing of the major activities to be carried out in the implementation of the RAP and identifies the organizations responsible for their implementation.

The key milestones and tasks for the RAP activities are:

- Preparation of the RAP;
- Consultation and disclosure of the RAP;
- Acquisition of land and assets;
- Compensation of PAPs in parallel to Project construction activities;
- Reinstatement and delivery of land to owners/users after the construction activities have been completed;
- Monitoring and Evaluation of activities according to RAP;
- Implementation of RAP's community based programs.

Preparations for developing the RAP were commenced in early 2013. The RAP is available in two languages; Turkish and English in order to be disclosed locally to all relevant stakeholders and to be presented to the possible lenders that TANAP may consult.

The disclosure of the RAP is planned to take place within Q3 2014. After the 60 day disclosure, all feedback and comments provided by the stakeholders will be integrated in the final version of the report.

The implementation schedule of the RAP is presented in Table 63.



RESETTLEMENT ACTION PLAN (RAP) FOR TANAP PROJECT

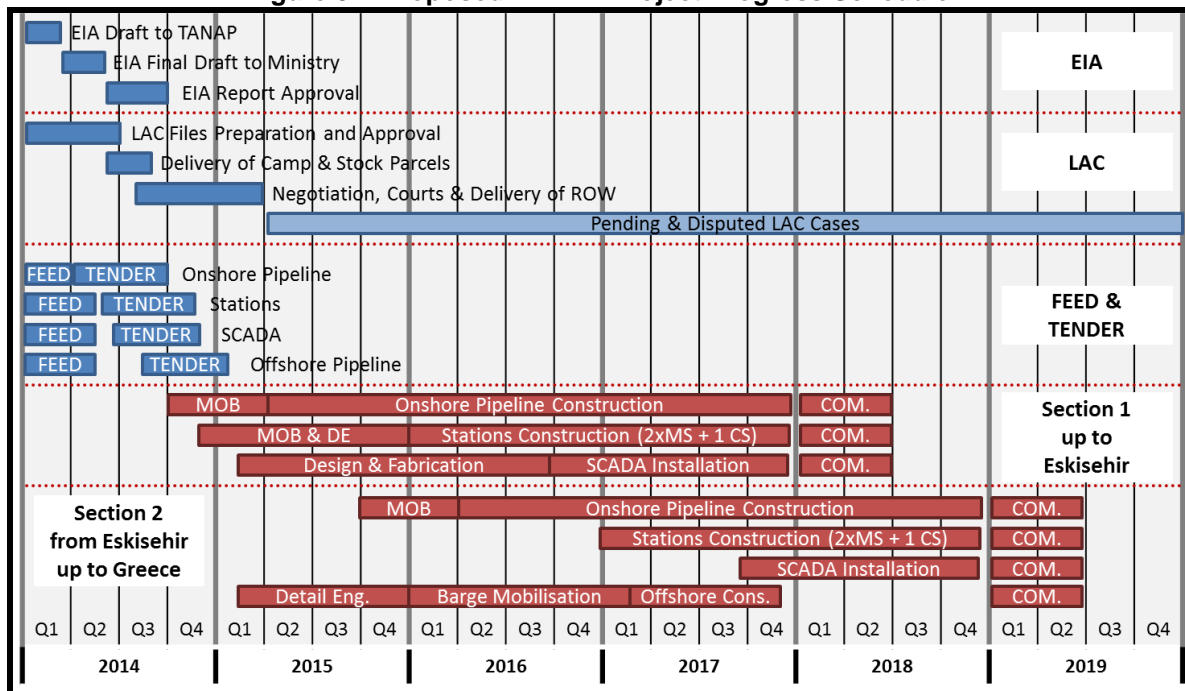
Activities	Responsible Organization	2013				2014				2015				2016				2017				2018				2019				2020				2021			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
2. Appointment of field staff empowered with and authorized to pay compensation for damage caused by construction and all relevant transaction costs	TANAP																																				
3. Establishment of principles (for cooperation between headquarter and field staff in design, implementation and monitoring of RAP Fund financed activities)	TANAP																																				
4. Establishment of RAP Fund board	TANAP																																				
5. Preparation of the by-laws of RAP Fund implementation	TANAP																																				
6. Appointment of headquarters staff to work in consultation with field staff for identification of community based programs	TANAP																																				
7. Appointment of field staff empowered with and authorized to pay compensation for damage caused by construction and all relevant transaction costs	TANAP																																				
8. Establishment of principles (for cooperation between headquarter and field staff in design, implementation and monitoring of RAP Fund financed activities)	TANAP																																				
9. Developing criteria for selection of villages to benefit from the Fund	TANAP																																				
10. Utilization of GIS database for selection of villages	TANAP																																				
11. Consultations in selected villages	TANAP																																				
12. Finalizing implementation arrangements	TANAP																																				
13. Baseline survey for selected communities	TANAP																																				
14. Implementation of Fund activities	TANAP																																				
14.1. First phase of community based programs	TANAP																																				
14.2. Second phase of community based programs	TANAP																																				
14.3. Third phase of community based programs	TANAP																																				
14.4. Fourth phase of community based programs	TANAP																																				
14.5. Fifth phase of community based programs	TANAP																																				

Activities
 Sub activities
 Milestone Activities
 * Report submissions



The RAP implementation schedule will be synchronized with the Project’s overall implementation schedule presented in Figure 57 below:

Figure 57: Proposed TANAP Project Progress Schedule



Where;

FEED: Front End Engineering Design

TENDER: Tendering for Engineering Procurement and Construction Management Contract

MOB: Mobilization

COM: Commissioning

LAC: Land Acquisition

EIA: Environmental and Social Impact Assessment.



Report Signature Page

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