

SOCIAL RISK MANAGEMENT LLC

# Tufanbeyli Thermal Power Plant Livelihood Restoration Plan(LRP)

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Final Report

**ENERJISA**

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## Executive Summary

- I. Tufanbeyli Thermal Power Plant (TPP) Project is located in Adana's province's northern Tufanbeyli district bordering Kayseri and Kahramanmaras provinces. The project lies in an area of 1,632.7 hectares, affecting the villages of Yamanli, Yesilova, Kayarcik, Taspinar and Pinarlar. The project is composed of two main sites; plant facility site and coal mine area including limestone site. The TPP Project will have an installed capacity of 450 MW, and serves a fundamental energy investment to narrow Turkey's energy gap.
- II. The land acquisition process is considered as involuntary when project affected people (PAP) or communities do not have the right to refuse land acquisition resulting in displacement. Land acquisition in a project might lead to displacement for the local communities. For IFC, there are two types of displacements; physical and economic. Physical displacement is defined as the actual physical relocation of people resulting in a loss of shelter, productive assets or access to productive assets (such as land, water, and forests) whereas the economic displacement refers to an action that interrupts or eliminates people's access to productive assets without physically relocating the people themselves (IFC, 2002).
- III. Tufanbeyli Thermal Power Plant (TPP) Project does not entail any physical displacement. However, land acquisition for the Project may lead to economic displacement. Therefore, this Livelihood Restoration Plan (LRP) was prepared in order to (i) ensure entitlements for Project affected persons (PAPs) are prepared in a transparent, consistent and equitable manner<sup>1</sup>, (ii) define mitigation measures for possible economic displacement (iii) identify PAPs that require assistance other than cash compensation to restore livelihoods (iv) and establish monitoring and evaluation mechanisms to implement it.
- IV. The aim of this LRP is to minimize the potential adverse impact of the Project and to ensure that the overall impact of the Project will be positive and contribute towards local development and the prosperity of the area.
- V. The TPP Project area is predominantly under private ownership. Almost 91 percent of the overall Project area belongs to the villagers accommodating in the Project affected villages and only 9 percent of the Project area belongs to the Treasury. 1015 households are affected in the Project area in a total 1970 parcels. The Project area covers 1,632.7 hectares with 1,484.5 hectares under private ownership.
- VI. The land acquisition procedures for the TPP Project have already been initiated before the definitive investment decision was taken in November 2010. After taking over the Project from the previous licence owner, Enerjisa declared to the public via an initial site visit held in 2007 that Enerjisa is the new Project owner. After this declaration, land appraisal including asset inventory was undertaken in 2008 by an independent company. Nevertheless, Enerjisa had postponed the start date of the construction works for the Project as the investment decision could not have been taken, yet at that time. Despite that, regular visits of the Project Team and Land Acquisition Team of Enerjisa have been undertaken from the initial visit to date. Upon the investment decision taken at the end of 2010, Enerjisa Project Team visited to the site in January 2011 to declare this decision to the local public and give information about the Project-related works for 2011 and briefly the following years. Then, Land Acquisition Team

<sup>1</sup> [http://www.ifc.org/ifcext/policyreview.nsf/Content/PerformanceStandard5 para25](http://www.ifc.org/ifcext/policyreview.nsf/Content/PerformanceStandard5_para25) p.6

held interviews with the landowners throughout the following months so as to inform them about the land acquisition procedure and offered compensation price of Enerjisa for ensuring willing seller/willing buyer negotiation. Enerjisa has acquired all private parcels (215) in the power plant area through Energy Market Regulatory Agency (EMRA) expropriation. Even though Enerjisa aimed to purchase all land fully required by the Project through willing buyer seller negotiations, due to the constraints on land titles and deeds, it was able to do so for 221 parcels out of 1755 parcels (nearly 13 %) in the mine area, and nearly 10 percent of the required parcels to be initially used in the mine area could be acquired through negotiation till the end of 2011. The acquisition process is still ongoing.

- VII. The TPP Project area is compact, situated in a plane settlement where transportation links amongst the villages and the town centre are decent. Among the privately owned parcels, Yamanli village is being affected the most. 63 percent of the Project area is lying in the borders of Yamanli Village. Kayarcik village is the second most affected village, followed by Yesilova. Kayarcik village is predominantly affected by the power plant site, whereas Yamanli village is impacted by the mine area. Pinarlar Village is the least affected village.
- VIII. The total population of the Project area is 2,126 people, though the Project area population increases significantly over the summer months. The average household size in the Project area is 3.51 and 44 percent of the households are composed of 1-2 people. Half of the population is over age 45, and “elderly” comprise almost a quarter of the total population. The average age for the male population is 44.66 and for the female population 42.43. At the same time children make up almost 18 percent of the population. The active working age group is only one third of the total project area.
- IX. Around 23 percent of the PAPs are illiterate. The illiterate population is predominantly elderly women-women aged 65 and above make up 81 percent of the illiterate population. Age and gender are two important contributing factors to low literacy. However, among the younger generations gender is not a contributing factor.
- X. The economic activities in the Project area are predominantly rural and the main source of income is agriculture. Agriculture is the main economic activity in the Project area. Economically active population comprises one third of the total population. Moreover, entrepreneurial skills of the population are very limited. Less than two percent of the population is involved in trades.
- XI. Seasonal employment is limited to only 9 percent of the population. Yet, due to high migration from the Project area in the past decades, one in five households had a relative working abroad.
- XII. The land in the Project area is fertile and mostly composed of plane terrains. Almost all of the land households own are utilized for farming. The land lost for Project area is irrigated naturally by the flow of river and use of gravity; however, remaining land is not irrigated. The irrigated land creates higher incomes and therefore is more lucrative for agricultural production whereas rain fed farming supports the subsistence farming for the households. The households produce the grains they consume throughout the year from their rain-fed land. Yamanli village is losing majority of its agricultural land for the Project.
- XIII. 87 percent of the households derive their income from agricultural production. On average annual income from agricultural production is almost 37,000 TL (\$20,555<sup>2</sup>). Pensions prove to be significant source of income for more than half of the project affected households. Annual income from sale of garden produce is twice as much as income from a steady employment, yet only 10 households out of

<sup>2</sup> Throughout the report \$1 = 1.80 TL conversion rate is applied

247 engage in garden produce. Livestock production is also an important element in rural life. More than one third of the households keep livestock and are involved in agricultural production. Because majority of the population (95 percent) is unskilled, income gained from regular employment is also low and is supported by agricultural production to fulfil a decent living standard.

- XIV. Agricultural income comprises almost 90 percent of the total household income in Kayarcik and Yamanli Villages, and 72 percent of the total income in Yesilova village according to survey results. Among the villages Yamanli village has the highest level of income with 37,380TL (\$20,767) annually.
- XV. The households involved in farming prefer to cultivate high income generating products in their irrigated land. For dry land, where irrigation is not feasible, classic cash crops are cultivated. Among the cash crops, wheat and common vetch is cultivated on rain fed land. On irrigated land, the most popular products for cultivation are sugar beet and potato. In Kayarcik village, sugar beet and potato production comprise almost all of household agricultural income. Among the vegetables, tomato and bean are the most cultivated products. Dried products such as chick peas are also cultivated by almost one third of the households.
- XVI. The project area derives critical income from sugar beet and potato cultivation. Income generated from potato is the highest, on average households gained 39,078 TL (\$21,710) from cultivating potatoes. The second most profitable product is sugar beet. Annual income from sugar beet was 22,272 TL (\$12,373). Income from rain-fed farming such as wheat production is limited even though wheat production is widespread. Households usually keep half of their wheat production for their home consumption and sell the rest in the market. Wheat is consumed as flour, bulgur for household use and hay as forage.
- XVII. The household cash expenditures are very low. Majority of the households utilize their own production, they grow their garden crops and consume at the household. Therefore, their in-kind expenditures are much higher than their cash expenditures. This finding is significant because due to the Project, Project affected households (PAHs) in Yamanli are going to lose almost all of their land.
- XVIII. The women at the Project area were very vocal their desire to contribute financially to the household. The economic support they create by the agricultural work they undertake is not viewed as income generation. The employment potential at service sectors could be important for women's economic development.
- XIX. There are three categories of land based vulnerable groups (i) those PAHs that have lost all or most of their arable land and had to share the compensation with a large group of titleholders, even though in practice they were the only cultivators; (ii) PAHs that the households that lose all or most of their arable and there is no additional land to replace their land loss; (iii) PAHs who do not have the legal titles and therefore are "landless" officially, even though they cultivate the land and their income is based on agriculture. Enerjisa is planning to identify these vulnerable groups and is devising income restoration strategies to train these PAHs on alternative income generation activities in order to impede income loss.
- XX. Daily life in the Project area is predominantly agrarian. People's lives revolve around farming and livestock production. Majority of the households live in economic hardship. When asked if they can make a decent basic living with their current income, more than two thirds of the households said they are finding it difficult to make a living. Majority of the households believe that their socio-economic status is not improving.

- XXI. The project affected populations have been informed about the Project by Enerjisa staff or word of mouth through family and friends. 95 percent of the interviewed households stated that they have already heard about the Project. Throughout the Project, from the planning phase to the start of the construction phase, Enerjisa has led participatory meetings with PAPs and has placed utmost importance on public consultations. Consultations are continuous, and Enerjisa staffs are well known by all PAPs in the area. Enerjisa has involved all key stakeholders and has solid relations with the primary stakeholders.
- XXII. Land and asset valuation of the Project was undertaken by a third party consultant that ensured the compensation amounts are calculated with reference to principles described in the World Bank's operational policy, OP 4.12; which was used for determining the replacement costs for agricultural lands including crops, trees and orchards.
- XXIII. It is expected that TPP Project which will be carried out in the villages of Kayarcik, Yesilova, Yamanli, Taspinar and Pinarlar will have direct positive impact on the project affected areas. These benefits can be employment opportunities, training opportunities, cash money for the local people, improvement of physical and social infrastructure and revival in the local economy. While the sum of cash money to be received by the landowners whose lands are to be acquired will provide a short-term benefit for them, other benefits listed will be experienced in the medium term since they will spread over the entire construction process.
- XXIV. Lack of economic opportunities and unemployment were the key problems in the Project area. The Project is expected to boost the local economy. At the peak of the construction the project is aiming employ up to 1,500 people in the Plant construction site and 500 people in the mines. There will be a demand for services sectors that might be met locally. Furthermore, there will be an increased demand for local produce, Enerjisa and subcontractors will most probably act as major buyers for local produce and dairy products. Moreover, the Project is going to create employment opportunities for the unskilled and existing skilled labour forces. Enerjisa is planning to train the local unskilled labour force in a range of skill sets through certified training programs in order to create a skilled labour force in the region that can gain long term benefits of employment in any construction facility.
- XXV. Enerjisa's focus on education is fostered by the support for local schools. Enerjisa is planning to rebuild two schools in Kayarcik and Yamanli villages. Enerjisa is also planning to support local community buildings.
- XXVI. In addition to these, Enerjisa is investing heavily in local infrastructure via improving transportation links, building a by-pass route to Taspinar village, supporting access to water supply and sanitation by improving the borehole in Taspinar village and supporting environmental sustainability by distributing bins for waste collection in villages. Enerjisa is exploring alternative irrigation schemes to mitigate loss of income from irrigated land such as drip irrigation.
- XXVII. Enerjisa is emphasizing the importance of mutual agreement in the acquisitions for the mine area, and compensations for the acquired parcels are paid promptly and are at land replacement costs. The sum of money received by the sale of land is a critical component for income restoration. Enerjisa is planning to assist the PAPs for investment opportunities in order to ensure that their livelihoods can be restored and money received as compensation can be used as a tool for better and sustainable living in the long run rather than it is spent on daily needs only.



- XXVIII. Forthcoming potential adverse impact and mitigation measures for the Project entail measures to reduce income loss due to loss of land. Even though compensation values are assessed at land restoration, because most of the required lands are shared by high number of shareholders, on average the amounts received per households is not adequate to restore income mainly for those had to share compensation. Therefore, Enerjisa aims at devising strategies to avoid income loss in accordance with IFC PS 5 para 28 such that Enerjisa is going to advise the PAPs on alternative investment strategies and explore opportunities for drip irrigation, intensive farming, orchard development, livestock production, and dairy production in order to build on their local agrarian knowledge. Moreover, Enerjisa is devising technical skill certified training programs in order to train the youth.
- XXIX. Majority of the households worry about the deterioration of community health that would be triggered by the Project. As Enerjisa is well aware of the sensitivity of this issue for the local people, several appropriate measures like more advanced technology in the plant, strict health and safety regulations, and regular health check-ups with the community will be taken promptly and all these measures will be explained to the public through information sessions. Thus, it is aimed that the Project is not going to cause any adverse health impact. Furthermore, any complaints rising from pollution will be kept under the Project grievances mechanisms and will be dealt promptly. Enerjisa is committed to clean energy and environmental monitoring. The public will be informed about the regular assessments Enerjisa is conducting in order to depict changes in the level of pollution.
- XXX. Other potential adverse impacts can be disturbance to daily life, safety risk, damages to crops and roads due to construction. Enerjisa ensures that disturbance to daily life will be minimal. Complaints will be dealt promptly and PAPs will be compensated according to national guidelines should there be any damage to crops. Enerjisa places utmost importance for safety of the PAPs, and safety measures are in place and regular trainings are undertaken for the workers in order to ensure public safety.
- XXXI. There is a written grievance mechanism to ensure all complaints pertaining to the Project are kept in files, and sent to Ankara. Any disputes are solved through continuous communication between the parties. If the dispute cannot be solved locally, it is elevated to Ankara office. A monitoring and evaluation mechanism has been established to measure differences in socioeconomic, health, educational and cultural status before and after land acquisition. Indicators are defined to measure socio-economic changes in order to avoid damaging the living conditions of local people (whether they are the ones who are directly or indirectly affected by the Project or not), and to restore people's livelihood.
- XXXII. The LRP Budget shows actual costs for all resettlement activities including development, implementation, social outreach program, monitoring and evaluation of LRP and other contingencies. Costs planned for development and implementation of LRP include not only the payments done until now but also planned budget for forthcoming expenses until the LRP Completion Audit. In addition to these direct costs, LRP budget involves management costs. All management costs excluding monitoring budget was budgeted as 107,299,577.20 TL (\$59,610,876.22) between 2011 and 2015. Moreover, budget allocated both for cost internal and external monitoring activities from 2012 till 2015 was determined as 513,000 TL (\$285,000) (Table 8-1). Additionally, a rough budget was estimated for social support program as 4.834.000,00 TL (\$2,685,555.56). To sum up, total LRP Budget including

contingency (10%) is 108.372.277,20 TL (\$65,885,463.84). The estimated Unit Cost for LRP was calculated as 106,770.72 TL (\$64,911.79) per household (1015 households).

## LIST OF ABBREVIATIONS

BOT	Build Operate Transfer
CSR	Corporate Social Responsibility
EMRA	Energy Market Regulatory Agency
EP	Equator Principles
FBC	Fluidized-bed Combustion Technology
GN5	Guidance Note on Performance Standard 5
HA	Hectare
HH	Household
IFC	International Finance Corporation
LRP	Livelihood Restoration Plan
MoEF	Ministry of Environment and Forestry
PAPs	Project Affected Persons
PAHs	Project Affected Households
PS5	Performance Standard 5
TPP	Tufanbeyli Thermal Power Plant

## 1. INTRODUCTION

Tufanbeyli Thermal Power Plant (TPP) Project is located in Adana's province's northern Tufanbeyli district. The project lies in an area of 1,632.7 hectares, affecting the villages of Yamanli, Yesilova, Kayarcik, Taspinar and Pinarlar. The project is composed of two main sites, plant facility site, coal mine and limestone sites. The TPP Project will have an installed capacity of 450 MW, and serves a fundamental energy investment to narrow Turkey's energy gap. The Environment Impact Assessment (EIA) for the TPP Project was conducted and approved in 2006. After the Project was acquired by Enerjisa, Enerjisa carried out further EIA in 2008 to assess the impact of capacity increase from 300 MW to 450 MW.

### 1.1 BACKGROUND

Turkey is facing a growing demand for electricity due to its rapid growth as one of world's fastest growing economies over the past decade. According to the IMF April 2011 Report on the World Economy "In emerging Europe, the rapid recovery is projected to continue in Turkey, where robust private demand and buoyant credit growth are lifting economic activity above its potential level amid still-accommodative macroeconomic policies"<sup>3</sup>. As a rapidly developing and industrializing country, Turkey is in need of reliable, affordable, sustainable and high quality energy. The energy policy of Turkey, as formulated in the development plans and programs prepared by the State Planning Organization (DPT), is to meet the energy demand in the country reliably, continually and with appropriate costs. In the Ninth Development Plan period (2007-2013), it was estimated that electricity demand would have an average yearly increase of 8.1 percent parallel to the developments in industrial production and the services sector<sup>4</sup>.

Turkey attaches high importance to the development of renewable energy. In the energy sector, the Build-Operate-Transfer (BOT) Model was introduced in 1984 in order to facilitate private sector involvement. In addition, the preparation of a program to increase energy production utilizing renewable energy resources is among the short-term objectives in the Accession Partnership with the European Union (DPT, 2006). Through this accession process, Turkish energy legislation was harmonized with the corresponding European Community legislation. The 'Electricity Market Law' was enacted in 2001 to stimulate a liberalized electricity market and to provide for fair and transparent market regulation.

In order to ensure access to clean, affordable, high quality energy sources, Turkey is focusing on increasing investment in an array of energy sources. Upon signing Kyoto agreement in 2009, Turkey has emphasized its commitment to renewal energy sources. It is expected that renewable energy sources with comprise around 30 percent of total energy production by 2023<sup>5</sup>. However, renewal energy sources alone cannot bridge the current energy gap in Turkey. Therefore, in addition to renewable energy sources, other energy sources need to be tapped. The most common energy source in Turkey in addition to hydroelectric power source has been thermal power plant. Based on utilization of local lignite sources, thermal energy is a vital source of electricity

<sup>3</sup> <http://www.imf.org/external/pubs/ft/weo/2011/01/pdf/text.pdf> World Economic Outlook ; April 2011 "Tensions From The Two-Speed Recovery Unemployment, Commodities, And Capital Flows" p. 65

<sup>4</sup> Devlet Planlama Teşkilatı (State Planning Organization). (2006). *9.Kalkınma Planı Stratejisi (2007-2013) Hakkında Karar (Decision Regarding 9th Development Plan)*. Retrieved 2011, from DPT (SPO): <http://mevzuat.dpt.gov.tr/bkk/10399.htm>

<sup>5</sup> Electricity Energy Market and Supply Security Strategy Paper, May 2009, Ministry of Energy and Natural Resources

and serves as an essential source for a low cost, reliable and clean energy. Therefore, thermal power plants play a critical role for exploitation of local low energy coal and lignite sources in order to generate sustainable energy.

The most appropriate technology for clean and efficient electricity from domestic lignite is the fluidized-bed combustion technology. Fluidized-bed combustion technology (FBC) is a technology that can burn low quality and affordable fuels that are rich in sulphur, in an environmentally friendly and efficient way, with minimal sulphur emissions. Currently, FBC technology is the best available technology to generate electricity from coal in the context of large combustion plants<sup>6</sup>. Furthermore, in “Turkey Energy and Environment Evaluation Synthesis Report” prepared by United Nations/World Bank in December, 2003, it was emphasized that FBC technology is one of the cleanest coal burning technologies that can be used in generation of electricity from coal.<sup>7</sup>

In line with Turkey’s commitment for clean and efficient energy sources, Enerjisa has acquired the rights to build and operate Tufanbeyli Power Plant in 2006. Tufanbeyli Power Plant will be built by using FBC technology, utilizing the low energy lignite mines in the area along with the limestone mines for desulphurization. Due to the extensive nature of the project, project will require land acquisitions in Tufanbeyli district. The land allocated for the project does not entail any physical structures, hence project triggers economic displacement.

This Livelihood Restoration Plan (LRP) is prepared in order to (i) ensure entitlements for Project affected persons (PAPs) are prepared in a transparent, consistent and equitable manner<sup>8</sup>, (ii) define mitigation measures for possible economic displacement (iii) identify PAPs that require assistance other than cash compensation to restore livelihoods (iv) and establish monitoring and evaluation mechanisms to implement it.

## 1.2 ORGANIZATIONS RESPONSIBLE FOR THE PROJECT PREPARATION

The key organization for the implementation of the LRP is Enerjisa. It is the responsible party to construct and operate the project and coordinate the involvement of different parties responsible for various aspects of the LRP. This includes Social Risk Management, LLC, which has been charged with drafting this LRP.

## 1.3 BRIEF DESCRIPTION OF THE PROJECT

Tufanbeyli Power Plant is located in Tufanbeyli district of Adana Province. The project area lies in the borders of Yamanli Village, Kayarcik Village, Yesilova Village, Taspinar Village, and Pinarlar Village.

<sup>6</sup> This is in references document (European Integrated Pollution Prevention and Control Bureau, Large Combustion Plants D2 March, 2003) published in 2003 for European Union Integrated Pollution Prevention and Control Regulations (Council Directive 96/61/EC). Legal basis of the mentioned regulation is the protection of environment. In the Article 2 (11) of this regulation, “the best available techniques” were designed to be basis of emission limit values and to decrease the emissions and effect to environment on the conditions of this principle does not exist and they were described as the most efficient and advanced techniques that can be practiced. In the same article, techniques reaching an available capacity in economic and technical way were described with “available techniques” term, the most efficient techniques that will provide the highest protection of environment as a whole were described with “the best” term.

<sup>7</sup> Turkey Energy and Environment Review Synthesis Report, Joint UNDP/World bank ESMAP, December 2003

<sup>8</sup> [http://www.ifc.org/ifcext/policyreview.nsf/Content/PerformanceStandard5 para25](http://www.ifc.org/ifcext/policyreview.nsf/Content/PerformanceStandard5_para25) p.6

The right to build and operate Tufanbeyli Power Plant was approved by Energy Market Regulatory Agency (EMRA) in 10.02.2004 for a period of 30 years. Enerjisa acquired the rights from Ciner group in 2006. Initially, in 2005 Ciner Group had proposed Tufanbeyli Power Plant with an installed capacity of 300 MW (2 x150). An EIA Report was prepared for the proposed power plant in compliance with the Turkish EIA Regulation issued in the Official Gazette dated December 16, 2003 and numbered 25318. Republic of Turkey, Ministry of Environment and Forestry (MoEF)<sup>9</sup> approved the EIA Report on February 15, 2006. After gaining this approval, Ciner Group handed over all the licences for lignite and limestone deposits and liabilities related to TPP Project to Enerjisa.

After the handover of the Project, Enerjisa revised all the feasibility, engineering and operational studies related to energy generation facilities, lignite and limestone deposits, and redesigned the Project in order to make it more efficient and profitable. Enerjisa decided to increase the capacity from 300 MW to 450 MW and conducted additional analysis to assess the environmental impact for the additional 150 MW in 2008.

Power plant will use lignite and limestone throughout operation. Enerjisa has obtained exploration and operation licenses for lignite and limestone mines. Operating Licence (IR-74787) was obtained by combining the Exploration Licences of lignite deposits; expected capacity of the reserves of this deposit is 154,057,000 tons and 25,500,000 tons respectively. In addition to lignite, limestone mine is required for desulphurization. Limestone will be supplied from the licensed deposits AR-91326 (IR-68342) and AR-94570 whose Operating Licence process has been completed. These sites have been approved by a decision of the MoEF dated 15 February 2006 and numbered 1081 with an EIA Positive Certificate. If these deposits do meet the demand, the licensed deposits in the vicinity will be explored. The top soil (vegetal) and overburden material will be stored separately in the Project Site during the operation phase of the mines. The vegetal soil will be covered with plastic material, overburden material will be used for storage of ash and this area will be covered with the vegetal soil. The project aims to recover the explored land in the lignite mine area by re-vegetation once the lignite sources are exploited. Limestone deposits are close to the surface, hence stone mines is not expected to need deep excavations.

The construction phase for the power plant is expected to take three years, and mine work will continue throughout the operation.

#### 1.4. BENEFITS OF THE PROJECT

The project will not only help to fulfil the energy gap faced in the Turkish market but will also contribute to local development. Major benefits of the project include:

1. *Increased work opportunity and growth in local employment:* TPP is the largest investment ever made in Tufanbeyli district. Tufanbeyli district is a predominantly rural area that has been marked by high rates of out migration due to lack of job opportunities. The land is fertile and serves as a potato producing centre, yet there is no other entrepreneurial activity besides farming and agriculture. Thus, for the first time the young generation has a chance to build their skills and take part in the labour force. The project is aiming to employ up to 1500 people during peak construction phase for the plant area, the job opportunities for the

<sup>9</sup> MoEF was re-organized after June, 2011 and it was separated two different but related ministries which are Ministry of Environment and Urbanization, and Ministry of Forestry and Hydraulic Works.

mine areas are expected start around 85 people in 2012, increasing to 550 by 2015<sup>10</sup>. This is a great economic opportunity for the residents of Tufanbeyli and directly impacted project affected populations. Currently out of 61 workers employed by the Project, half of them are from directly affected populations. Enerjisa requires local employment as a pre-requisite from his subcontractors, and places prime importance to training the staff to do so. Therefore, it is not only going to create employment, but also establish a skilled workforce that can transfer their skill sets to seek employment elsewhere when the Project is completed.

2. *Investment in infrastructure:* Enerjisa is going to build a new road by-passing Taspınar village in order to avoid disruption to village life of Taspınar village. The newly built road is going to be used for construction route. Enerjisa is also supporting the local villages with their infrastructural problems. Kayarcık village also needs an access road to the villages grazing ground which is 8 km on foot around the hill. Enerjisa promised to build a new road that will decrease the access time to the common grazing ground to one-third provided that Kayarcık Village ensures clearance of titles and permits for the access road. This will also have a positive impact on livestock production as the villagers will be able to increase their livestock size and will have access to wide open spaces for grazing purposes. Moreover, Enerjisa will improve a borehole in Taspınar village to increase access to potable water. Enerjisa will also analyze the potential to assist the development of a drip-irrigation scheme for rain-fed agricultural land that is not being utilized by the PAPs. Irrigation facilities would allow the PAPs to compensate for the lost land, and restore their agricultural income. In Yamanlı and Yeşilova villages key infrastructural needs are improvements of inter-village roads and waste collection. Waste collection is a chief concern in the all there highly impacted project villages. Enerjisa will review the waste collection and disposal in the project affected region, and will try to respond to the waste management needs of the PAPs through delivering waste bins and arranging an awareness raising activity for better implementation in collaboration with the local municipality. Moreover, all villages lack communal grounds for children to play or elderly to gather. If appropriate, any investment in creation of communal areas will benefit project affected populations immeasurably.
3. *Support for the local economy:* Enerjisa and subcontractors will most probably serve as a major buyer of local produce ranging from fruits and vegetables to dairy products from project affected villages. Once Enerjisa and its subcontractors increase their presences in the area, demand for local produce will also increase. One of the chief expected impacts of the Project will be its impact on service sector in the project area. The demand for service sector in the area is going to be immense, if can be locally and appropriately met. Possible service areas are food services such as supply of food ingredients, restaurants for serving food, teahouses or coffee houses, dairy produce to meet demand at construction site, cleaning services and transportation services. One of the villages has already established a cooperative for transportation and services, the other villages are also willing to supply similar services to contractors even though they have such cooperatives. However, the others can be encouraged to join the initiative of the existing cooperative in order to avoid any financial problems in the future. If requirements of the contractor and Enerjisa are met by the local transportation cooperative, it can provide services to and from construction facility to the villages and supply a number of trucks and tractors to be used for the mining services. The headmen of the Project affected villages are also planning to create similar cooperatives or collaborate with existing cooperatives in neighbouring villages to incorporate food and cleaning services under one roof. These cooperatives could serve as one of the major income sources for the villages that are directly

<sup>10</sup> For a detailed description of expected job opportunities please see Chapter 5, figures 5.1 and 5.2.

affected by the Project. It will allow them to invest their land compensations into high yield investments while creating employment for some of the villagers.

4. *Enhanced education facilities:* Enerjisa is keen on making a positive contribution to society through its Corporate Social Responsibility (CSR) activities. One of the key sectors in which Enerjisa has invested as a part of its CSR policy is education. So far, Enerjisa has distributed school uniforms and winter coats to all students in Yamanli and Kayarcik schools. Moreover, Enerjisa distributed new school bags specifically made for TPP project to the schools in Yamanli, Kayarcik, Kirazliyurt, Pinarlar and Bozguney primary schools<sup>11</sup>. Enerjisa has also donated photocopiers to Yamanli and Kayarcik schools.
5. *Support to local community:* Enerjisa has been the key sponsor for the Tufanbeyli Festival. Through supporting community wide activities, Enerjisa is nurturing the cultural activities in the area.

### 1.5 IDENTIFICATION OF THE PROJECT AFFECTED AREAS AND ASSETS

In accordance with the National Legal Framework and World Bank/IFC Standards, Enerjisa aims to minimize adverse impacts of the Project on local communities. Turkish legislation protects the rights of those who lose their lands and assets as a result of similar investment projects. The WB/IFC Performance Standards, which broadens the understanding of the rights of the project affected persons (PAPs) and provides further guidance to avoid or minimize potential adverse impacts to local communities.

The land acquisition process is considered as involuntary when project affected people or communities do not have the right to refuse land acquisition resulting in displacement (IFC PS 5, 2006, p.18). Under such circumstances, lands can be acquired through expropriation in accordance with the national legal legislation. However, expropriation is not the only way of land acquisition for the privately-owned parcels; land can be acquired through willing buyer/seller arrangements. Enerjisa recognized that willing buyer/seller negotiations is the best option. There are instances, however, where the willing sellers confront difficulties in handling land acquisition through negotiations, such as when there is dispute among owners. In such cases, the Government agency in charge of the energy sector, EMRA, can declare the project to be in the public interest and expropriate the land within the national legal framework. However, because Enerjisa is paying for land, whether it or EMRA acquires the land, the compensation is paid at levels higher than what a public agency would have paid.

Land acquisition in a project might lead to displacement for the local communities. For IFC, there are two types of displacements; physical and economic. Physical displacement is defined as the actual physical relocation of people resulting in a loss of shelter, productive assets or access to productive assets (such as land, water, and forests) whereas the economic displacement refers to an action that interrupts or eliminates peoples' access to productive assets without physically relocating the people themselves (IFC, 2002).

Tufanbeyli Thermal Power Plant (TPP) Project does not entail any physical displacement. However, land acquisition for the project may lead to economic displacement. The aim of this LRP is to minimize the potential adverse impact of the project and to ensure that the overall impact of the project will be positive and contribute towards local development and the prosperity of the area. The Project area is agrarian, where the major source of income is based on cultivation of potatoes, sugar beet, green beans on irrigated land and basic grains on rain fed land. The irrigation method used in the area is based on utilizing the natural flow of the river.

<sup>11</sup> Enerjisa distributes school supplies not only to PAPs but also to nearby villages.



The land is fertile, irrigated and plain, making it suitable for efficient agricultural farming. The land is predominantly used for cultivation of potato seeds and potato production. It is common practice for the landowners to rent their land for mass potato cultivation and the landowners work on their land as paid agricultural workers.

The TPP Project area is predominantly under private ownership. Almost 90 percent of the overall Project area belongs to the villagers accommodating in the Project affected villages. The Project has two sites; the first site is designated for the plant area. Kayarcik village is affected the most from loss land in the plant area. The second site is for the mine area including limestone quarries. Yamanli Village is particularly impacted from the land acquisitions from the mine area. The limestone area which indirectly affects Taspinar village as it is the closest village (Table 1.1).

Table 1.1. Project Facilities Affecting the Surrounding Villages

Project Facilities	Affected Villages	Number of Affected Privately-owned Parcels	Number of Affected Publicly-owned Parcels
<b>Mine Area</b>	Kayarcik,	378	-
	Yamanli,	1198	-
	Yaşilova,	155	-
	Taspinar,	22	-
	Pinarlar	2	-
	-	-	39 (Treasury)
<b>Power Plant Area</b>	-	-	3 (Village Legal Entity)
	Kayarcik,	193	-
	Yamanli,	22	-
<b>Limestone Area</b>	-	-	12 (Treasury)
	-	-	3 (Forestry area)

Source: Enerjisa

Lands which are required for the Project vary by the ownership status; privately-owned lands, Treasury lands and lands belonged to village legal entity. The allocation of these required areas are given in Table 1.2.

Table 1.2. Allocation of the Project Area

	Number of parcels	Land size in hectares	Percentage (%)
<b>Privately owned land</b>	1,970	1,484.5	91
<b>Treasury</b>	51	145.1	9
<b>Village Legal Entity</b>	3	3.1	0
<b>Total</b>	2,024	1,632.7	100

Source: Enerjisa

The land acquisition procedures for the TPP Project was initiated in 2008 with the land appraisal and asset inventory studies in 2008, then, after the investment decision was taken in November 2010, this process re-started at the beginning of 2011 and the actual land values offered by Enerjisa was shared with the landowners by Enerjisa's Land Acquisition Team through community meetings or one-by-one interviews. Upon re-commencement of public consultations, Enerjisa informed the affected populations extensively on the requirements of the projects, project structure, procedures for acquisition and the pricing structure. Enerjisa understands importance of willing buyer seller negotiations. Therefore, Enerjisa initiated talks with the PAPs in January 2011. Acquisitions for the mining land started in April 2011.

Enerjisa can only purchase land from PAPs if the land is fully owned by the titleholders and all titleholders agree to sell the property. For the Project, in the mine area only 110 parcels are owned by single titleholder which is less than ten percent of the total land. Even for the parcels that are fully owned by one person, negotiations are a lengthy process. Until December 2011, Enerjisa personnel had organized in several public consultation meetings in addition to the ongoing open communication at the project information office at Tufanbeyli district centre. Even though Enerjisa aimed to purchase all land fully required by the Project through willing buyer seller negotiations, due to the constraints on land titles and deeds, it was able to do so for 221 parcels out of 1755 parcels (nearly 13 percent) in the mine area till the end of 2011 (Table 1.3). The acquisitions for mine area was planned to be conducted through step by step upon the need for use. From the lands to be initially used on the mine area, 97 parcels out of 955 parcels (10 percent) initially required for the Project were acquired through mutual agreement. The acquisitions are ongoing. Enerjisa places utmost importance on willing buyer seller negotiations and the acquisitions are proceeding in a fast pace. However, due to the large scale of the acquisitions and the nature of settlements, there are factors that delay the acquisitions. The major constraint faced during acquisitions was miswritten titles<sup>12</sup>. Moreover, in an environment marked by high migration, it is difficult to reach family members who have migrated to the major cities or even abroad. In order to ensure that each titleholder is compensated fairly, titles need to be in place. Furthermore, most of the parcels are owned by a large number of shareholders<sup>13</sup>. The majority of the PAPs could not gather the consent of the shareholders for the acquisition procedure. Enerjisa is trying to accommodate all parcel owners in the mining area by mutual agreement. Yet in cases where mutual agreement cannot be reached due to reasons given above, Enerjisa will need to transfer the parcels to EMRA for acquisition.

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<sup>12</sup> Due to technical difficulties, the deeds were written under wrong names when the deed and cadastral services registered the land. This has not been an issue previously because the land exchanges hands rarely. Moreover in village environment everybody knows the rightful owners of the parcels as the land has passed from older generations to younger generations. Ownership of wrong titles was the most voiced concern in the project area.

<sup>13</sup> One of the challenges for the land acquisition for the Project is high number of titleholders and updating of the deeds. In some of the parcels, the parcel is shared by 11 title owners. Even if all of the heirs are in the village (in most cases the majority has migrated), to gather everyone for title registration is a lengthy and bureaucratic process. Moreover, if one shareholder does not agree to the proposed compensation, he/she can block the whole negotiation process.

Table 1.3: Parcels directly acquired by Enerjisa (Mine area)

Village name	Number of Parcels	Number of Titleholders	Total area in m <sup>2</sup>
Yamanli	131	133	818,992.07
Yesilova	15	11	44,308.09
Kayarcik	58	116	278,028.31
Taspinar	7	10	141,753.18
<b>Total</b>	<b>221</b>	<b>270</b>	<b>1,283,081.65</b>

Source: Enerjisa

The land allocated for power plant had to be expropriated through EMRA. Even though Enerjisa had started negotiations for mutual agreement, initially cooperation among the project affected villagers was low. Enerjisa had to use expropriation to ensure that works on the construction can start at a timely manner. Therefore with the permission granted from Turkish Expropriation Law act number 27, Enerjisa was given the right to expropriate and use the land on 12.05.2011. Despite the legal permission to access the site, Enerjisa continued to have constant communication with the Project affected populations and did not enter site without their approval. Out of 227 parcels located in the power plant are required for the Project; 12 of them were the Treasury Lands while the remaining parcels were privately-owned lands (See Table 1.4). They are all acquired through EMRA.

Table 1.4: Private Parcels Acquired Through EMRA (Power Plant Area)

Village	Number Of Parcels	Area In Hectares	Number Of Titleholders
Kayarcik	193	134.57	172
Yamanli	22	14.50	19
<b>Total</b>	<b>215</b>	<b>149.07</b>	<b>191</b>

Source: Enerjisa

As of 26.12.2011, Enerjisa

- All privately owned parcels in the power plant area were acquired via EMRA. Enerjisa has paid 5,412,150.20 TL (\$) for 215 parcels.
- Acquired nearly 13 percent of the privately-owned parcels required for the mine area through willing buyer seller negotiations. Enerjisa has paid 8,135,940TL (\$4,519,967) for 221 parcels affecting 270 titleholders.
- Is proactively continuing to acquire the remaining parcels in the project area through willing buyer seller negotiations.

## 1.6 ENERJISA SCOPE OF LIVELIHOOD RESTORATION PLAN

Enerjisa has acted in accordance with IFC PS 5 to minimize the adverse project affecting on the affected people; the company has made the necessary adjustment to project plans to minimize adverse impact and has followed willing buyer/ seller negotiations to have an overall positive impact. The purpose of this LRP is to describe how measures to minimize the possible impacts on livelihoods would be implemented and how monitoring will be undertaken to ensure success of the mitigation measures.

The scope of the LRP developed and implemented for the Project covers the following key components:

- Identification of the Project-affected areas and assets, as well as the affected owners and tenants/users;
- Description of the legal framework;
- Completion of the land acquisition process including public consultation, interviews with all project-affected land owners, valuation of assets and description of compensation and other resettlement assistance to be provided;
- Conducting a socio-economic survey in the 5 affected rural settlements;
- Description of institutional arrangements for implementation;
- Procedures for a grievance mechanism;
- Arrangements for monitoring and implementation; and
- Preparation of an implementation schedule and budget.

The chapters below give details of these activities:

**Chapter Two** describes the national legal framework considered for land acquisition, resettlement and compensation processes and World Bank/IFC Policies and Equator Principles (EP) to be adopted with regard to these issues;

**Chapter Three** provides detailed information about the socio-economic characteristics of the project-affected populations interviewed with a brief socio-economic baseline of the project-affected region;

**Chapter Four** describes the land acquisition procedures followed by Enerjisa and the implementation process, including valuation of assets, land acquisition, compensation and consultation, with regard to recent Turkish legislation;

**Chapter Five** presents the current and future impacts attributable to the Project and areas of intervention with appropriate mitigation measures, including income restoration calculations for loss of immovable assets, including productive assets, building, and infrastructure; and Mitigation Action Plan.

**Chapter Six** explains the public consultation and disclosure processes and activities to be carried out within the context of the LRP, including the provision of a mechanism for grievances and dispute resolution;

**Chapter Seven** outlines the monitoring and evaluation mechanism for the LRP, including the provision for expert monitoring;

**Chapter Eight** details LRP costs and the budget for all works carried out through the acquisition process and subsequently; and

**Chapter Nine** presents the LRP implementation program along with the details of implementation responsibilities.

## CHAPTER 2: LEGAL FRAMEWORK

This section outlines the principal policy and legislative framework that pertains to land acquisition, expropriation and involuntary resettlement in Turkey as it applies the TPP Project. It provides a summary of the relevant IFC policies and Equator principles and illustrates that Turkish Law and the international guidelines have similar objectives. The local legislative framework provides resettlement options for those who are homeless and landless and whose entitlements are not clearly defined by international policies. The international policies, on the other hand, facilitate the resettlement of property owners without the undesirable conditions imposed upon them by local legislation. Both the local and international legal frameworks provide adequate compensation to affected private and public parties in a transparent manner even when expropriation procedures are used and the land is acquired through public interest. In other words, the international and national policy/legal frameworks complement each other in providing residents of affected settlements resettlement options. They also ensure that those who opt against resettlement benefits would receive compensation at replacement cost.

### 2.1 NATIONAL LEGAL FRAMEWORK

#### 2.1.1 Turkish Constitution

The Turkish Constitution, as amended in October 2001, includes important elements to protect the public interests and private property during a process of expropriation. Expropriation is the confiscation of immovable property belonging to real and private persons by the administration in line with the procedures set by the related legislation provided that compensation is paid in advance or by instalments if requirements are met in order to perform public service taking into consideration public interest.

As well-known, in case of the expropriation of the privately-owned lands and assets on behalf of the public interest, the responsible public authority of this expropriation process is supposed to pay the compensation for the expropriated assets to the title holder via bank transfer before the land acquisition process and the construction phase of the Project initiated.

The Turkish Constitution, Article 46, addresses expropriation issues under the heading of “Social and Economic Rights and Responsibilities”. 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 relevant laws, consisting of the Expropriation Law and Resettlement Law.

In Turkey, investment projects are regulated by different governmental ministries and the public interest decisions for these are taken by the relevant public agencies. The energy projects that are built for electricity production fall within the responsibility of the EMRA. EMRA ensures that a public interest decision is available at the outset of such projects.

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

### 2.1.2 The Legal Framework and Customary Land Rights

Customary land rights are recognized by modern laws to a certain extent. In case of agricultural lands in Turkey, a formal title for holding these lands is a relatively recent development. More common is the recognition of the rights of users/cultivators. The right of ownership through usufruct is recognized by modern law under certain circumstances, when, for instance, the land is used for 20 years without any dispute or interruption by the same person or the family.

Although the Turkish Civil Code Law No.4721 amended in 2001 provides equal rights of inheritance to all successors regardless of their gender and age, traditions often hinder women's ability to exercise their entitlements because it is a common practice to distribute land among male heirs. This social practice may adversely impact on equity between man and woman. This is the culturally adopted pattern in rural however, this is, fortunately, not relevant in rural areas affected by the TPP Project.

### 2.1.3 Expropriation Law

In accordance with the Constitution all expropriation processes are conducted according to the Expropriation Law (No. 2942) amended in 2001 (No. 4650). A decision of Public Interest is necessary for the expropriation of any immovable asset. Only public agencies are allowed to acquire land as a result of a decision of Public Interest. For energy projects a decision of Public Interest is taken by EMRA in accordance with Article 5 of the Expropriation Law.

According to the Decision on 9th Development Plan Strategy issued in 2006, one of the basic foundations on the development strategy related to the years 2007-2013 is to increase competitive power by developing the energy infrastructure (Decision No: 2006/10399)<sup>14</sup>. The development of the energy infrastructure is very important also with respect to the goal of minimizing dependency upon imported energy via increasing domestic electricity production with favourable costs. Based on the above mentioned, decision that the TPP is of public benefit was taken and the related articles of the Expropriation Law was put into operation.

The Expropriation Law ensures that affected people are paid compensation in full before the land changes hands. The Law requires that official attempts are made in order to negotiate the transfer of ownership or use rights and cash payments are made in full to the bank accounts of the title holders as the valuation process is completed. At this point, Enerjisa as the Project Owner can purchase the lands directly by the will of land owners with mutual negotiation in line with the respective Law (Law of Expropriation) or may prefer to acquire land through expropriation of lands to be undertaken by means of Energy Market Regulatory Authority (EMRA).

<sup>14</sup>

<http://mevzuat.dpt.gov.tr/bkk/10399.htm>

In the TPP Project, Enerjisa prefers to acquire lands through willing buyer-willing seller principle in line with IFC Performance Standards and Equator Principles. However Enerjisa is obliged to acquire privately-owned lands through expropriation, if the following cases exist:

- 1- Not reaching on an agreement in negotiations between the property owners and Enerjisa
- 2- When there is a disagreement among the land shareholders and when the shareholders do not have officially land registry for their shares in that land
- 3- When only a small portion of the land composed of parcels is needed, and therefore, the land parcels can only be acquired through subdividing lands into pieces.

In case that one of these three cases happens, Enerjisa is responsible of depositing the compensation amount to the relevant bank account opened in an interest yielding bank to be paid to the land owners whose land has been expropriated by means of EMRA during the expropriation process. In the TPP Project, Enerjisa had to involve EMRA for the expropriation for power plant area. Whether lands are acquired through expropriation or they are purchased by Enerjisa, the compensation amounts paid or to be paid to land owners are higher than the market values of the immovable assets in both cases of land acquisition.

As a result, the expropriation process shall be completed within six months following the decision of public utilities taken according to the Expropriation Law. If the expropriation does not take place within six months, it is required to take official permission for extra time.

#### 2.1.4 Treasury Lands

In order to acquire Treasury lands, Enerjisa is required applying to EMRA for a public interest decision. Provided that public interest is decreed, Enerjisa is eligible to apply to the Treasury Department for the use of these lands. In TPP Project there is 1451 decares of Treasury land.

Right of use for these lands is recognized based on on-site surveys. For parcels under the treasury of the finance, whether they are lands registered in the name of the treasury or they are treasury lands under the command and possession of state without registration, constitution of servitude is listed according to rental and use without compensation. Rental is made for the immovable properties on which depot area, road, emergency lane etc. will not be constructed; easement is constituted for those immovable properties on which power plant, power conduit etc. will be constructed. EMRA makes a list of all parcels necessary for the project and submits the list to the Committee. Committee Decision is taken. After the Committee Decision is taken, the related correspondence is made by EMRA to the Revenue Office/Provincial Directorate of Real Estates according to the situations requiring constitution of servitude, rental, and usufruct without payment.

Provincial Directorate of National Real Estates asks for the opinion of the related institutions and establishments such as SHW (State Hydraulic Works), Provincial Directorate of Agriculture, Provincial Directorate of Forestry, Highways etc. according to the project. The related institutions and establishments carry out the necessary investigations and submit their opinions to the Provincial Directorate of National Real Estates. Provincial Directorate of National Real Estates collects the opinions and makes evaluation and submits its opinion to the General Directorate of National Real Estates about the issue. Provincial Directorate of



National Real Estates also informs EMRA. Under the framework of the appropriate opinion, easement contract, rental contract or contract anticipating usufruct without payment is signed between the Provincial Directorate of National Real Estates and the company according to the situation and payment is done according to this contract.

Enerjisa has commenced the correspondence to the Revenue Office/Provincial Directorate of Real Estates.

### 2.1.5 Lands Belonging to Village Legal Entity

For the lands belonging to the village legal entity, in accordance with the 30th Article of the Expropriation Law numbered 2942, a decision is taken for the transfer of these lands to the Treasury. This decision taken by EMRA is implemented after the determination of the transfer amount and upon that the village legal entity gives consent in relation to the transfer.

### 2.1.6 Privately-Owned Lands

#### 2.1.6.1.Full title owners:

There are two categories of privately owned land. The first category consists of those who have legal title to their land. This group may have 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. Should there be an agreement on the price of the land, the compensation amount is deposited in the bank account of the affected landowners immediately.

The second category consists of households that cultivate land but have no legal title. In this case, should the affected people cultivate publicly owned land for a long period of time, they are entitled to the legal ownership of such land. The local laws recognize the entitlements of traditional owners and those who have cultivated on a piece of land for 20 years without interruption, as explained above.

Until recently, much of agricultural land was held without a formal title. The rights of lineage and families were recognized rather than the rights of the uniform civil law system that became operational well after the Turkish Republic was established<sup>15</sup>. When disputes arose on ownership issues, customary mediation mechanisms or modern courts determined the rights in many areas until a formal land registration system was established. Modern laws also recognise, through the usufruct (“zilyet”) system, the right of ownership if users can demonstrate that they have used the land for at least 20 years without any dispute or interruption<sup>16</sup>.

<sup>15</sup> Even when the civil code is in force with regard to land, often when the patriarch with a formal land deed dies, the eldest son takes over the management without dividing the land and registering the shares of his mother and his siblings on the title deed. However, the adversely affected people have the right to successfully challenge the traditional practices in the civil courts, seeking justice under the modern laws. When expropriation of these lands occurs under the modern legislative structure, the expropriation agency assumes a great burden to research the customary rights, to ensure their recognition and to register the entitlements to heirs as per the modern civil code before compensation can be made to all affected persons.

<sup>16</sup> While user (usufruct) rights established under customary law are recognised as legal rights under the modern law of Turkey, there are other aspects of customary land use that may be contradicted by civil law. For example, in practice, the management and inheritance

### 2.1.6.2. Use and Sub-division of Agricultural Land

In accordance with the 13<sup>th</sup> Article of the Soil Protection and Land Use Law (5403), absolute agricultural lands, special product lands, planted lands and irrigated agricultural lands cannot be used for purposes other than agricultural purposes. However, provided that there is no alternative area and that the Committee for Soil Protection deems appropriate (Additional paragraph: 26/03/2008-5751S.K./1st article), upon the demand made by the Energy Market Regulatory Authority, in accordance with the Electricity Market Law dated 20/2/2001 and numbered 4628, the demands for the use of such lands for purposes other than agricultural purposes can be given permit by the Ministry for investments related to the use of renewable energy resource areas. (Additional sentence: 31/01/2007-5578 S.K./3rd article) According to this, the use of agricultural lands, all of which are classified as agricultural fields and belong to private persons, could be possible for purposes other than agricultural purposes in accordance with the Law numbered 4628.

In addition, in accordance with the 8<sup>th</sup> Article of the Soil Protection and Land Use Law numbered 5403, “parcel size determined by the Soil Protection Committee cannot be smaller than 2 hectares for absolute agricultural lands and special product lands; 0.5 hectares for planted agricultural lands; 0.3 hectares for lands on which greenhouse cultivation is done; and 2 hectares for marginal agricultural lands. Agricultural lands cannot be subdivided, divided or allotted in small parcels under the sizes mentioned. However agricultural lands cannot be subdivided into lands smaller than the determined minimum sizes of agricultural land parcels except areas needed for public investments and with the contrary opinion by the Ministry”<sup>17</sup>. However as has been specified in the related article of the law, these lands can be subdivided according to needs, can be acquired through subdivision if they will be used within the framework of investments related to the use of energy resource areas.

## 2.2 WORLD BANK / IFC POLICIES AND GUIDELINES

Since the Project is partly funded by a consortium of banks, it has to comply with the World Bank Group/IFC Policies as well as the Equator Principles. The policies and principles related to land acquisition are described.

### 2.2.1 The IFC Policies

For social aspects of the Project, Enerjisa took into consideration certain basic documents of World Bank Group Policies and Guidelines. These reference documents are as follows:

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of land used for cultivation is occasionally passed from father to the eldest son, unless otherwise decided upon within the extended family. Customary law in the Project areas may deny women the right to ownership and management of cultivated lands. These customs are not recognised by civil law, which states that all siblings and extended family members, regardless of gender and age, have similar inheritance rights. Therefore, even in areas where cadastral surveys have been completed and “zilyet” rights have been converted into formal legal rights, families continue the management of cultivated land and the sharing of revenues under the customary system.

<sup>17</sup> <http://rega.basbakanlik.gov.tr/eskiler/2007/02/20070209-1.htm>

- IFC Sustainability Framework 2012 edition<sup>18</sup>
- The Operational Policy (OP) 4.12 issued on December 2001,
- The Performance Standard 5: Land Acquisition and Involuntary Resettlement updated in January 2012,
- The Guidance Note 5: Land Acquisition and Involuntary Resettlement which is updated in January 2012
- IFC's Handbook on Preparing a Resettlement Action Plan utilized in the preparation of LRP.

The main objective of these documents is to ensure that potential adverse impacts on the community are mitigated through planning. To make it clearer, taking precautions to satisfactorily compensate the losses of people who were obliged to displacement due to physical or economic reasons, endeavouring as much as possible to enhance the living conditions and means of livelihood of the people who are affected by a project financed by World Bank Group are the basic aims of the policies indicated in these documents. Considering these core issues, the following policy objectives of OP 4.12 are taken into account:

(a) Involuntary resettlement should be avoided when feasible, or minimized, exploring all viable alternative project designs.

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

(c) Displaced persons should be assisted in their efforts to improve their livelihoods and standards of living or at least to restore them, in real terms, to pre-displacement levels or to levels prevailing prior to the beginning of project implementation, whichever is higher.”(WB, OP 4.12, p.1)

In compatible with these principles, involuntary resettlement could be avoidable for the TPP Project. Thus, no physical displacement was required for the local communities due to the land acquisition needed for the TPP Project. Rather, local people are only subjected to economic displacement as a result of the Project.

The primary concern of Enerjisa is to compensate loss of asset on time and in a fair way at the replacement cost<sup>19</sup> calculated according to capitalization of income method. This is an appropriate approach as it is compatible with international standards and principles set in related reference documents. According to OP 4.12, where domestic law does not meet the standard of compensation at full replacement cost, compensation under domestic law is supplemented by additional measures necessary to meet the replacement cost standard. In order to meet this requirement, Enerjisa, paid compensation, through open and transparent negotiations with affected households at prices over the levels determined by an independent firm; it also met all the transaction costs.

<sup>18</sup> [http://www1.ifc.org/wps/wcm/connect/topics\\_ext\\_content/ifc\\_external\\_corporate\\_site/ifc+sustainability+framework/2012+edition/2012-edition](http://www1.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/ifc+sustainability+framework/2012+edition/2012-edition)

<sup>19</sup> Replacement Cost is the method of valuation of assets that helps determine the amount sufficient to replace lost assets –market value of the affected assets- and cover transaction costs. In applying this method of valuation, depreciation of structures and assets should not be taken into account.

In addition to these, the related policy frameworks require the Project Owner to handle the process by taking the vulnerable groups into consideration. This vulnerability may be about social parameters such as elderliness, being a widow head of household and also may be about property based issues such as being a shareholder. Enerjisa handles the land acquisition process by considering such parameters so that no one is aggrieved<sup>20</sup>.

### 2.2.2 The Equator Principles

The Equator Principles Financial Institutions (EPFIs) adopted a set of policies issued in 2006 and developed for determining, assessing and managing social and environmental risk in project financing to ensure that the projects financed by the EPFIs are socially and environmentally responsible. Accordingly, they point out significance of the Principles to the borrowers, as the responsible for the planning and implementation of the Project activities so that negative impacts on project-affected ecosystems and communities can be avoided where possible, and if these impacts are unavoidable, they should be reduced, mitigated and/or compensated for appropriately (EP, 2006, p.1).

According to the EPs, projects should be classified by potential risks and impacts and conform to the social and environmental performance standards of IFC. The standards will be used for the assessment of the risks and impacts resulting from the project and will also be assessed in compliance with the national laws and regulations. This assessment is needed to design and implement project specific action plans and management systems, which will help to describe necessary actions for implementation of mitigation measures.

The EPs state that for projects with significant adverse impacts, the process will ensure the free, prior and informed consultation with affected communities and facilitate their informed participation as a means to establish, to the satisfaction of the EPFI, adequately corporate response (EP, 2006, p.3).

## 2.3 ENERJISA'S CORPORATE POLICY

The general corporate policies of Enerjisa comprise five major and mutually complementary policies which are as follows: Management Policy, Human Resources Policy, Quality Policy, Environmental Policy and Occupational Health and Safety (OHS) Policy. In addition to these policy documents, Enerjisa has Social Code of Practice related to the project selection and implementation process which state that;

- *In selection of the projects, it (Enerjisa) pays strict attention not to create any adverse social impacts and to this effect, it develops projects which will provide for positive social interactions;*
- *It creates priority to projects that will create employment in the region;*
- *It performs Social Responsibility activities within the framework of the resettlement plans/social*

<sup>20</sup> The details of how Enerjisa handled the process are given in Chapter 4 Land Acquisition Procedures followed by the Project.

*management plans in order to make a positive contribution in the socio-cultural environment;*

- *It always acts in a sensitive and responsible manner against the society and the environment that it lives in;*
- *High priority is attached to employment of the local people during both the construction and the operation stages;*
- *Special projects are developed for social development of the regions where its activities are conducted. The remarks and recommendations of the local people and the Non-Governmental Organisations about the project-related activities are obtained and considered duly.*

Enerjisa is committed to being Turkey's premier Energy Company as stated in the Quality Policy and intends to build and operate environment friendly and highly efficient plants in order to contribute to the development of the society. The TPP Thermal Power Plant is going to be carried out in accordance with this goal. Enerjisa's environmental policy relates not only to the physical environment but also the social environment in which its activities are undertaken. In this respect Enerjisa will meet all Turkish legal and IFC/World Bank requirements to ensure that land acquisition activities have minimal or no adverse impacts.

In addition, Enerjisa has a corporate plan for ensuring the engagement of stakeholders, as a prerequisite of internationally recognized policies and standards. The Stakeholder Engagement Plan (SEP) has been developed in 2009 to describe how to engage governmental stakeholders, local residents and communities, NGOs, media, and other interest groups in all phases of a proposed Project. It "is an ongoing, multi-faceted plan designed to inform and consult with PAP and other project affected groups about the Project and its potential impacts on an ongoing and constructive manner." In preparing the Plan, Enerjisa took account of the public consultation and disclosure guidelines set out in IFC's "Doing Better Business through Effective Public Consultation and Disclosure – A Good Proactive Manual" (October 1998). Stakeholder engagement as part of the land acquisition at the TPP Project is carried out in accordance with the Stakeholder Engagement Plan. Details on the public consultation and disclosure process followed are given under Chapter 6.

## CHAPTER 3: SOCIO-ECONOMIC CHARACTERISTIC OF THE PROJECT AFFECTED POPULATIONS

In order to understand the PAPs general demographic characteristics, socio-economic status and living conditions, a social survey was conducted. The aim of the social survey was to: (i) make an overall assessment on the potential social impacts and benefits of the TPP Project and (ii) develop mitigation and/or enhancement measures on the basis of the findings. The methodology of the surveys combined qualitative and quantitative methods to assess the picture at a household level. The qualitative methods included interviews with the village headmen, focus group meetings with women and youth in the villages. The quantitative methods included a detailed survey of the project affected population to depict their socio-economic status and their perceptions of the project impact.

The TPP Project is in the borders of Adana province on southern Turkey and lies in the district of Tufanbeyli (Map 1 and Map 2). Tufanbeyli district is northern Adana bordering Kayseri and Kahramanmaras provinces. The Project area is compact, situated in a plane settlement where transportation links amongst the villages and the town centre are decent. The villages impacted by the Project area are ten to fifteen minute-drive from the town centre, there are frequent minibus service during the day that transports villagers to the town centre. The villages impacted by the Tufanbeyli Power Plant are Yamanli, Kayarcik, Yesilova, Taspinar and Pinarlar villages.

Map 1: Map of Turkey





Map 2: Map of Tufanbeyli and Project Site



The project area is composed of two sites that are adjacent to one another. The impact of the project on each village depends on the location of the village and how it will be influenced by the constructions. Kayarçık village is giving most of its land to the Plant Station area, whereas Yamanlı Village is predominantly affected by the lignite mine. Taspınar village on the north is going to be affected by the mine area as well. Yamanlı is the most affected village among all project affected villages and Pınarlar Village is the least affected village (Table 3.1.).

Table 3.1: Project Affected Households and Privately-owned Parcels

	Population Size*	Household Numbers*	Households Directly Affected by the Project <sup>21</sup>	Parcels Affected by the Project
<b>Yamanlı</b>	610	242	469	1220
<b>Kayarçık</b>	973	400	413	571
<b>Yesilova</b>	266	143	113	155
<b>Taspınar</b>	43	9	18	22
<b>Pınarlar</b>	234	69	2	2
<b>Total</b>	<b>2126</b>	<b>863</b>	<b>1015</b>	<b>1970</b>

Source: Enerjisa 2011 and TUIK 2010

\*Population size data from TUIK and number of households in each village data is received interviews with village headmen.

<sup>21</sup> The immigration rates of the villages are very high, since 2000 population of the villages have decreased on a range of 36% to 48%. The population data of the villages are obtained from the TUIK, National Statistics Department. The values are based on the population census of 2000, and recently launched annual population and demographic data according to household addresses. The decline of the population of the villages is chiefly due to economic hardships and lack of employment in the area. As the project area is prone to migration, a high number of project affected households are not permanent residents of the project area. They have already migrated.

The population of the villages vary significantly during the year. During the interviews with the village headmen, Yamanli headman said that during summer population reaches 1,500 people and Yesilova headman said the summer population is around 700-800 people, and Kayarcik headman said population elevates to 2,000 around summer; almost triple the regular population size. Usually the migrated households have kept their ties to the villages. They have close relatives who live in the village and they spend summer months altogether at the village. Therefore, there is a wide difference among the number of the project affected households and total household number in the Project area. In Kayarcik village, even though not all households are affected by the Project the total number of Project affected household is larger than the total number of household of that village. The same is true for Yamanli and Yesilova villages, as well. It is because the villages have high rates of outmigration, and land titles of the deceased have passed from older generations to younger generations that had already migrated to nearby cities and towns. Hence, it is essential to understand that project entails indirectly affected households, those who had inherited land but are no longer permanent residents in the villages, and they will be receiving the cash compensations from inherited land. The impact of the Project for those households is not expected to cause economic displacement as they have already left the Project area. A census of the Project area will be conducted in the monitoring and evaluation phase to depict the exact number of households that do not reside in the project area.

### 3.1 OVERVIEW OF PROJECT AFFECTED VILLAGES

#### YAMANLI

Yamanli is the most affected village in the project area. The village is losing almost all of 22 of its arable land for the mining area of the Tufanbeyli project. There are 242 permanently residing households in the village. The population ranges from 600 to 1,500 depending on the season. The village has a headman's office and a coffee house for social gathering. The major source of income for the village is agriculture, followed by livestock production. The trading and entrepreneurial activities are very limited. The school in Yamanli is also serving as the main school for mobile education of Yesilova village. The village will be on the footstep of the mine, none of the residential buildings are impacted by the mine construction field. All of the land that is lost to the project area is irrigated farm land. However, the village headman recently allocated a new area to be built to accommodate 300 more households in their village. Due to the construction of the Tufanbeyli Power Plant, and expected increase in the population size, the village is preparing in order to accommodate any reverse migration.

#### KAYARCIK

Kayarcik village is the most affected village in the power plant area. The village is losing its irrigated land to the Project's power plant area. There are no structural buildings or households that are affected by the project. Kayarcik is the largest village in the project area with a household size of 400 households and a population size of almost 1000 people. During summer times, the population almost doubles. The village also has a hamlet that hosts 20 households. The village hosts a young population of almost 200 people, majority of who are unemployed. The young do try to seize the opportunities in nearby cities such as Adana and Kayseri for work. The village headman is hoping to increase the area for development, and has applied to the local governorship

<sup>22</sup> During Yamanli Village meetings with the headman, the headman stated that the village is losing 95 percent of its arable land to the Project.



for status change of 100 parcels from agrarian land to residential settlement. The major economic activity of the village is agriculture. Potato farming is widespread, majority of villagers rent their land and work on their own land as daily workers. Around 40 percent of the residents are green card holders which illustrates the level of poverty in the village<sup>23</sup>. The village has three cooperatives, which are “Irrigation Cooperative”, “Kayarcik Service and Development Cooperative” and “Transportation Cooperative”. The level of activity of these cooperatives has been limited in the past. However, the village headman aims to revive the existing cooperatives to meet the demand the Project is going to create for transportation and services sectors.

### YESILOVA

As the name suggests, Yesilova<sup>24</sup> village is overlooking the green valley, surrounded by agricultural land. It is a small village with a total population of 266 people comprised of 143 households. The village is located in close proximity to Yamanli village-driving distance between the two villages is almost five minutes- therefore there is no school facility. The children are being transported to Yamanli primary school for eight years of compulsory education. The village is losing its irrigated land to the project mining area for lignite reserves. Being a small village, migration to the nearby cities is common. Therefore, even though the household size affected by the project seems to be more than the total household size in the village, not everybody’s land in Yesilova village is affected.

### TASPINAR

Taspinar village is located on the eastern part of the power plant area, and nearby the mine area including limestone area. The village is tiny with a total household size less than 10<sup>25</sup>. However, during summer, the household size increases to 63. Majority of the population in the village is the elderly as the village is attracting the retired villagers. Once the migrated villagers retire from their jobs in the city, they return back to their old village. Therefore, there is an increase in the elderly population of the village. The village lacks access to basic infrastructure especially water supply and sanitation. Lack of access to safe drinking water is the leading problem of the village. The main access for the construction site will by-pass Taspinar village. In order to avoid disruption to daily life, Enerjisa has proposed building a new road that will bypass the village rather than using the current road that is passing through the village.

### PINARLAR

Pinarlar is the least affected village in the project area. Only two parcels are in the lignite mine area, and because the village is located on the northern border of the project, the parcels belonging to Pinarlar village will be impacted in the following twenty years. The overall village life will not be directly affected by the project. Nevertheless, the economic livelihood and increased economic activity will have a positive impact on the village. There is already one woman engineer employed from the village for Enerjisa operations. The employment opportunities will also positively contribute to this village.

<sup>23</sup> Green card is the public health card given to the poor to enable free access to medical services. The application for green card holders require the green card holder to be free from any other government or private insurance and the income of the green card holder should be one third the minimum wage amount (discarding the taxes). It is a sign of poverty in the villages.

<sup>24</sup> Yesil means green, and ova means plain lowland in Turkish

<sup>25</sup> In TUIK reports, among all villages information, only information on Taspinar was not available due to low number of household size.

### 3.2 SURVEY METHODOLOGY

In order depict the socio economic situation quantitatively; a socio-economic survey<sup>26</sup> was undertaken from October 17<sup>th</sup> - October 29<sup>th</sup> 2011. Due to the high number of parcels affected by the Project, a sampling needed to be done to understand the household characteristics. Thus, a random sampling of the affected household list was prepared that would include the following criteria:

- 35 percent sampling from the affected households whose lands acquired by EMRA are located on the Power Plant area<sup>27</sup>,
- 20 percent sampling from the affected households whose lands are located on lignite mine area

In addition to quantitative surveys, qualitative focus group meetings and discussions were held with village women in Kayarcik and Yesilova Villages and the youth in Kayarcik Village. The village headmen of Yamanli, Yesilova, Taspinar and Kayarcik villages were also interviewed. General public discussions were held with PAPs at Yamanli and Kayarcik villages to assess the perceptions about the Project. Majority of the surveys were done for the mine area as it causes the highest impact of the Project (Table 3.2).

Table 3.2: Survey Distribution

	Number of Project Affected Households	Number of Interviewed PAHs	Number of Affected Parcels	Number of Interviewed Parcels <sup>28</sup>	% Interviewed HHs
Power Plant Area	191	70	215	287	37
Mine Area	824	177	1755	912	21
<b>Total</b>	<b>1015</b>	<b>247</b>	<b>1970</b>	<b>1199</b>	<b>24</b>

Source: Enerjisa and HH Survey

The survey was conducted in all of the highly affected villages. Yet, due to the sugar beet harvest season, the percentage of households interviewed in Yamanli Village was lower than that of Kayarcik village. Kayarcik village was willing to cooperate, as their land was the first to be expropriated and information sessions were held to explain the process (Table 3.3).

Table 3.3 : Survey Distribution according to Villages

Village Name	# of Surveys
Kayarcik	148
Yesilova	37
Taspinar	11
Yamanli	51
<b>Total</b>	<b>247</b>

Source: HH Survey 2011

<sup>26</sup> Please see Annex I for the copy of the Household Questionnaire.

<sup>27</sup> A higher percentage of households were interviewed from the mine area because the sample size was smaller.

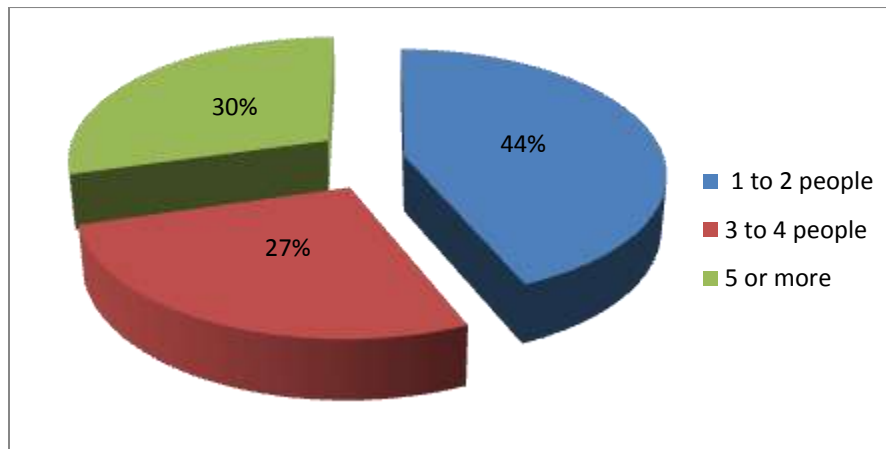
<sup>28</sup> The questionnaires were household based. Each household was asked the total number of parcels that were to be affected by the Project acquisitions. Thus, the number of interviewed parcels illustrates the response of each household on the total number of owned parcels that were to be acquired. Since majority of the parcels acquired for the project are owned by more than one person (78 percent according to survey results), the multiple responses on ownership has led to higher number of parcel ownership.

### 3.3 CHARACTERISTICS OF THE PROJECT AFFECTED PERSONS (PAPs)

#### 3.3.1 Household demographic composition

The household survey included questions to describe general demographic information of the project affected populations. The average household size in the project area is 3.51, meaning that on average households are composed of 3 to 4 people. Usually in rural Turkey, household sizes are high, since the families live together under one roof. The reason why the household sizes are low is because majority of households comprise of elderly couples. Due to the migration of the youth from the area, the elderly are left on their own during winter months. The younger generation usually comes for a visit during summer months when the overall population of the project area almost triples. Hence, almost one third of the population has a household size higher than 5, which is the usual pattern in Turkey's rural settlements (Figure 3.1).

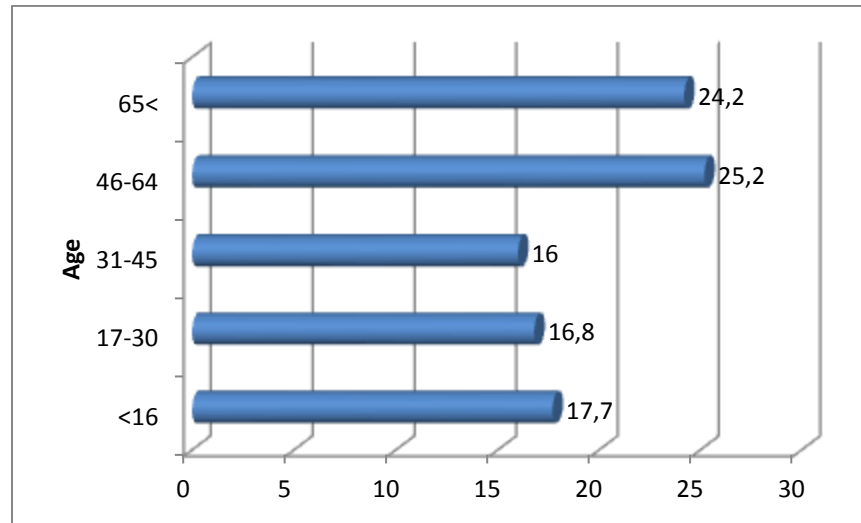
Figure 3.1: Household size In the Project Area



Source: HH Survey 2011

The aging population is evident when the population's age composition is analysed. Half of the population is over age 45, and "elderly" comprise almost a quarter of the total population. The average age for the male population is 44.66 and for the female population 42.43. At the same time children make up almost 18 percent of the population. The active working age group is only one third of the total project area (Figure 3.2).

Figure 3.2: Age distribution of the Project Affected Population



Source: HH Survey 2011

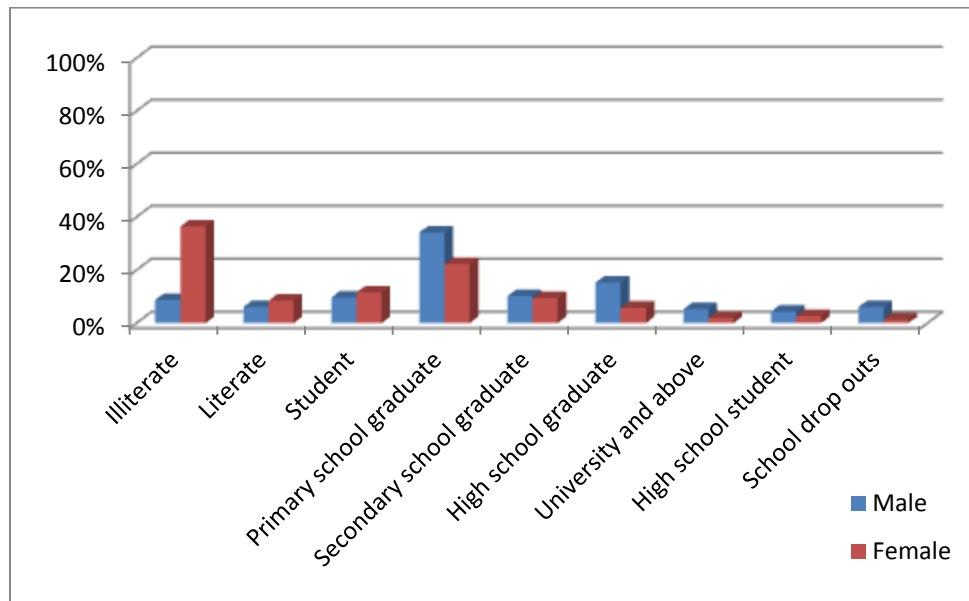
### 3.3.1.1 Education

The education level of the population depends on the age. According to UN demographic indicators the adult literacy rate in Turkey is 89 percent as of 2009<sup>29</sup>. Yet, the adult literacy in the area is low, especially for the older population in the Project area. Around 23 percent of the PAPs are illiterate. The illiterate population is predominantly elderly women- women aged 65 and above make up 81 percent of the illiterate population. Age and gender are two important contributing factors to low literacy. However, among the younger generations gender is not a contributing factor. All of the children<sup>30</sup> in the survey are attending school. Even though there are no high school facilities within the villages, of the student population, 10 percent of the population have graduated from high school which illustrates the importance families attach to higher education. Both girls and boys are sent to school. Dropping out of school rates are much lower in women than men in education (Figure 3.3).

<sup>29</sup> [http://www.unicef.org/infobycountry/Turkey\\_statistics.html](http://www.unicef.org/infobycountry/Turkey_statistics.html)

<sup>30</sup> According to the Turkish Ministry for National Education "Primary education involves the education and training of children in the age group of 6 to 13. Primary education is compulsory for all male and female citizens and is free at State schools. The objective of primary education is to ensure that every Turkish child acquires the necessary knowledge, skills, behaviour and habits to become a good citizen and is raised in accordance with the concept of national morals and that he/she is prepared for life and for the next level of education in accordance with his/her interests, talents and capabilities. Primary education institutions consist of eight year schools where continuous education is provided and primary education diplomas are awarded to the graduating students". National Education Statistics Formal Education 2010-2011, Ministry of National Education, A Publication of Official Statistics Programme, 2011

Figure 3.3. Education levels according to gender (% PAPs)



Source: HH Survey 2011

Education by settlement type depicts that illiteracy is highest in Taspinar Village<sup>31</sup> followed by Kayarcik village. 40 percent of the population of Yamanli village is primary school graduate. The percent of population furthering their studies to university is limited across the settlements. In Yesilova and Taspinar villages almost one fifth of the population is high school graduate (Table 3.4).

Table 3.4: Education Levels According to Settlement (% Population)

Education Levels	Kayarcik	Yesilova	Taspinar	Yamanli
Illiterate	25	16	32	20
Literate	5	9	4	2
Student	11	12	0	10
Primary school graduate	27	22	20	40
Secondary school graduate	11	7	12	9
High school graduate	9	20	20	7
University and above	2	6	8	4
High school student	4	3	0	3
School drop outs	5	5	4	5

Source: HH Survey 2011

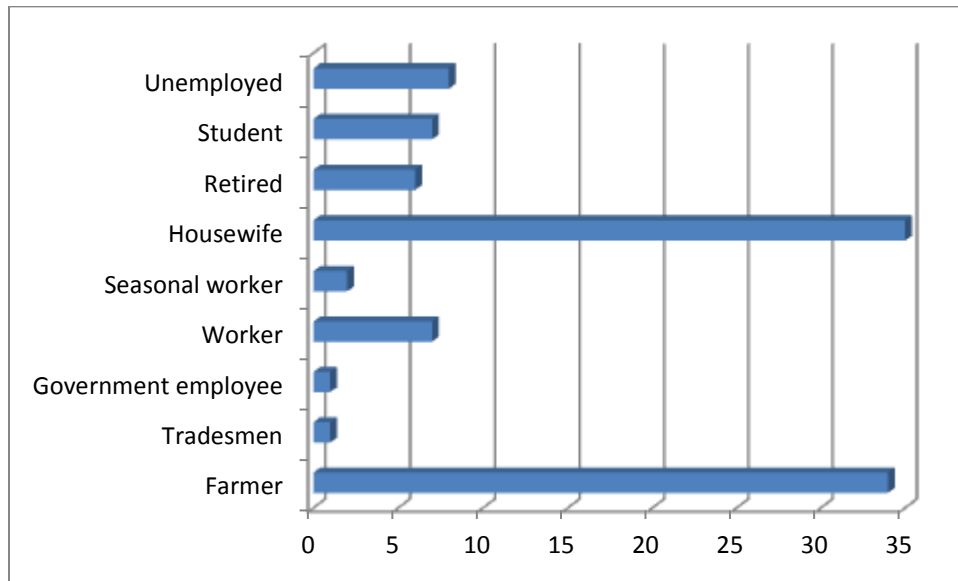
<sup>31</sup> Taspinar is a small village and due to few numbers of households when analysed in percentages the data may be distorted.

### 3.3.1.2 Employment

The economic activities in the Project are based on a rural economy. The employment pattern of the population varies according to gender. All women included in the survey who were married were automatically categorized as housewives even though they engage in agricultural activities and they are responsible for keeping livestock. Only 19 percent of the women identified themselves as agricultural workers.

Meetings with the villagers and village headmen depicted that major source of economic activity is agriculture in the area. One third of the working age population (aged 16-64) is involved in agriculture, and agriculture is the only employment opportunity for the population (Figure 3.4). The figure is much higher when it is analysed according to head of households. Among the head of households, 60 percent is involved with agriculture, 20 percent is retired and only 4.5 percent has a full time employment as a worker.

Figure: 3.4 Employment patterns (% Project Population)



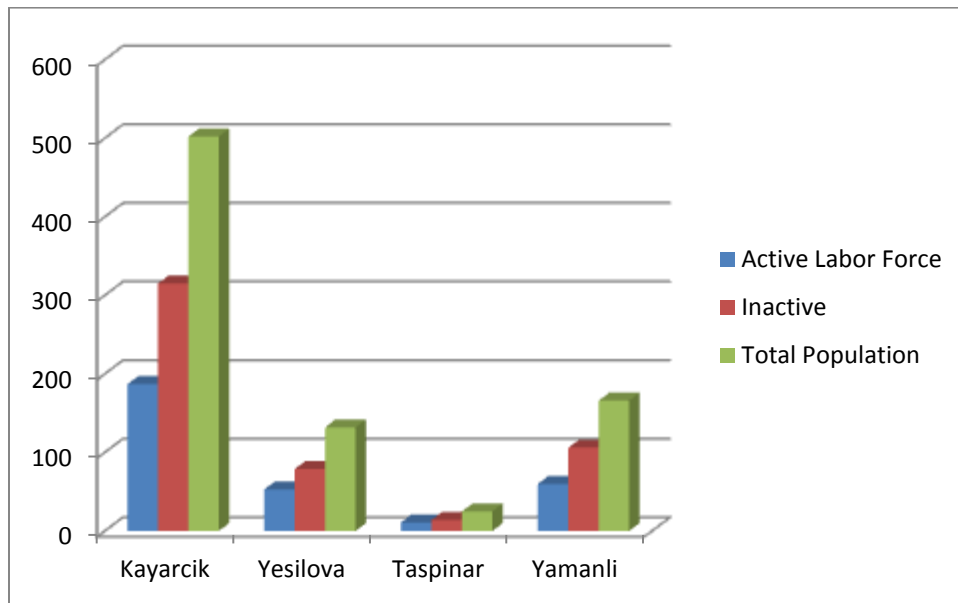
Source: HH Survey 2011

One of the striking outcomes of the survey was that more than two thirds of the total population is not involved in any economically active production (Figure 3.5). The retired, students and unemployed and housewives make up a significant part of the labour force. Almost half of the retired population is at an official working age<sup>32</sup>. Among the women, however, being a housewife does not connote inactive economic status. During the interviews, all of the respondents stated that women actively participate in agricultural production. However, their daily wage is half of what a man earns. Entrepreneurial skills of the population are very limited. Less than two percent of the population is involved in trades. This area will require attention as the project will pose a lot economic opportunities in trade sector.

<sup>32</sup> The old pension schemes would allow retirement upon fulfilment of 20 years of work for women and 25 years for men with the lowest age limits set at 38 for women and 43 for men.

<http://www.turkhukusitesi.com/showthread.php?t=5377>

Figure 3.5: Labour force Participation (Number of Individuals)



Source: HH Survey 2011

The survey had included a separate question on seasonal employment<sup>33</sup>. About 9 percent of the households engage in seasonal employment. The seasonal employment ranges from agricultural work, construction work to any unskilled work available for the individual. Due to the outmigration in the region, the survey also asked if the households had any relative working abroad. One in five households has a relative working abroad which illustrate the economic limitations in the project area.

Table 3.5: Employment away from Village

	N of Interviewed Households	%
Seasonal Employment	22	9
Relative Working abroad	50	20

Source: HH Survey 2011

### 3.3.1.3 Land use

The land in the Project area is fertile and mostly composed of plane terrains. Therefore, almost all of the land households own are utilized for farming. Land use depends on irrigation and the quality of land. During the interviews, the households emphasized the quality of land lost to the Project area. The land lost for the Project area is irrigated naturally by the flow of river and use of gravity, however, other land owned by the households is not irrigated. The households utilize their land regardless of irrigation (Table 3.5). The irrigated land creates higher incomes and therefore is more lucrative for agricultural production whereas rain fed farming supports the subsistence farming for the households. The households produce the grains they consume throughout the

<sup>33</sup> The question asked "Did anyone in your household left your household for employment purposes for more than one month?"

year from their rain-fed land. The highest amount of agricultural land is owned in Taspinar. Yamanli and Yesilova on average have 7.5 hectares of land. Yamanli village is losing majority of its agricultural land for the project.

Table 3.6: Land Use (Land in Hectares)

Villages	Total Owned Agricultural Land	Land suitable for Agricultural Production	Irrigated Land	Land lost for Project	Land available for Agriculture after project <sup>34</sup>
Kayarcik	5.683	5.605	2.118	2.724	2.703
Yesilova	7.609	7.530	4.078	3.262	3.084
Taspinar	10.205	10.205	1.482	4.695	2.773
Yamanli	7.569	7.225	3.304	6.547	0.890

Source: HH Survey 2011

### 3.3.2 Economic Profile of the Households

Household economic capacity differs according to the sources of income. Agricultural income is the most important source of income for the households. 87 percent of the households derive their income from agricultural production (Table 3.7). On average annual income from agricultural production is almost 37,000 TL (\$20,555<sup>35</sup>). Pensions prove to be significant source of income for more than half of the project affected households. Annual income from sale of garden produce is twice as much as income from a steady employment, yet only 10 households out of 247 engage in garden produce. Livestock production is also an important element in rural life. More than one third of the households keep livestock and are involved in agricultural production. Because majority of the population (95 percent) is unskilled, income gained from regular employment (e.g. monthly salaries are between minimum wage and 1000TL (\$555.5 a month) is also low. Income from employment is supported by the income from agriculture in majority of the households.

<sup>34</sup> The households were asked the amount of land remaining in their hands for agriculture once the acquisitions are completed as a separate question

<sup>35</sup> Throughout the report \$1 = 1.80 TL conversion rate is applied



Table 3.7: Sources of Annual Income for Households

Sources of Annual Income	%	N	Mean (TL)	Mean (\$)
<b>Government employee</b>	1	3	20,000	11111.1
<b>Worker</b>	8	19	11,747	6526.1
<b>Tradesman</b>	4	11	11,982	6656.7
<b>Pension</b>	56	138	9,118	5065.6
<b>Disability/ elderly benefit</b>	17	42	2,624	1457.8
<b>Seasonal wage</b>	3	7	4,943	2746.1
<b>Poverty aid</b>	1	1	1,800	1000.0
<b>Remittances</b>	4	11	5,536	3075.6
<b>Income from sale of livestock</b>	36	89	10,178	5654.4
<b>Income from sale of livestock by produce</b>	20	50	6,166	3425.6
<b>Agricultural income</b>	87	214	36,828	20460.0
<b>Income from sale of garden produce and byproducts</b>	4	10	24,208	13448.9
<b>Income from transportation services</b>	1	2	9,500	5277.8
<b>Rental Income</b>	7	18	7,449	4138.3

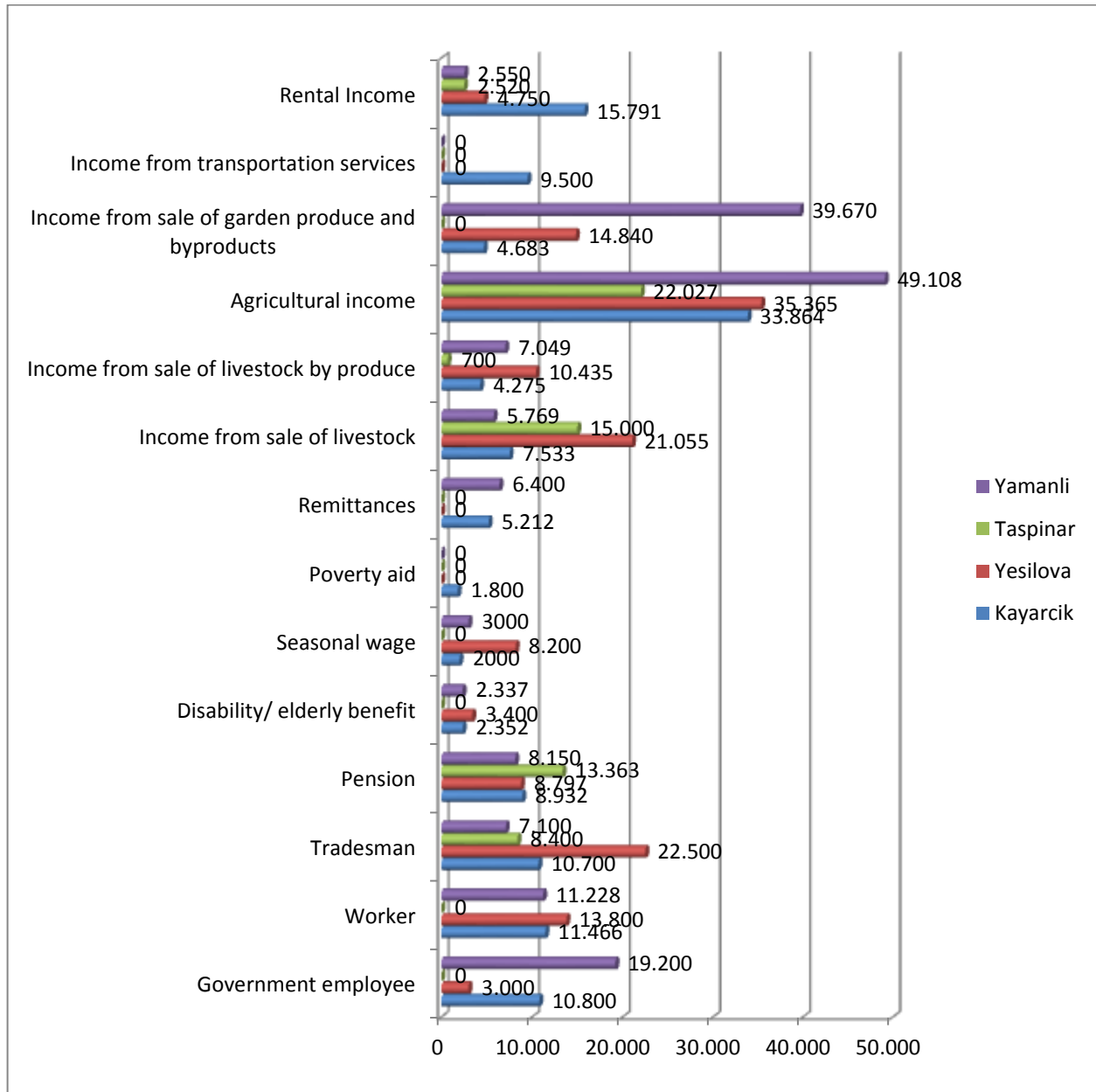
Source: HH Survey 2011

Remittances are not a significant source of support, only 4 percent of the households receive remittances even though 20 percent have a relative living abroad. Among the interviewed households there was only one family on income support due to poverty. 17 percent of the total households receive disability or elderly benefit<sup>36</sup>.

In depth analysis of the sources of income according to settlement type illustrates the importance of agricultural income for Yamanli Village. Yamanli derives the highest income from agriculture related economic activities. Transportation income is only earned in Kayarcik village. Income from livestock production is highest in Yesilova village followed by Taspinar village (Figure 3.6).

<sup>36</sup> Households that have social insurance and have a member of the household above the age of 65 receive an elderly pension, which is 540 TL (\$300) every three months.

Figure 3.6: Mean Income levels according to Settlement Type (in TL)



Source: HH Survey 2011

### 3.3.2.1 Livestock Production

In the Project area, half of the households keep livestock. Among the households that keep livestock, cattle are the most common type of livestock. Other than cattle, small ruminant Livestock such as sheep or goats is kept by only a handful of households. For economic income generation purposes cattle is the only type of livestock the households keep. One third of the households (42 HHs) keep the cattle to meet household demand in dairy products. The rest of the households either sell the milk or sell the livestock during the religious holiday to

generate income. Poultry is consumed within household. In rural settings it is common for households to own poultry only for their own consumption<sup>37</sup>.

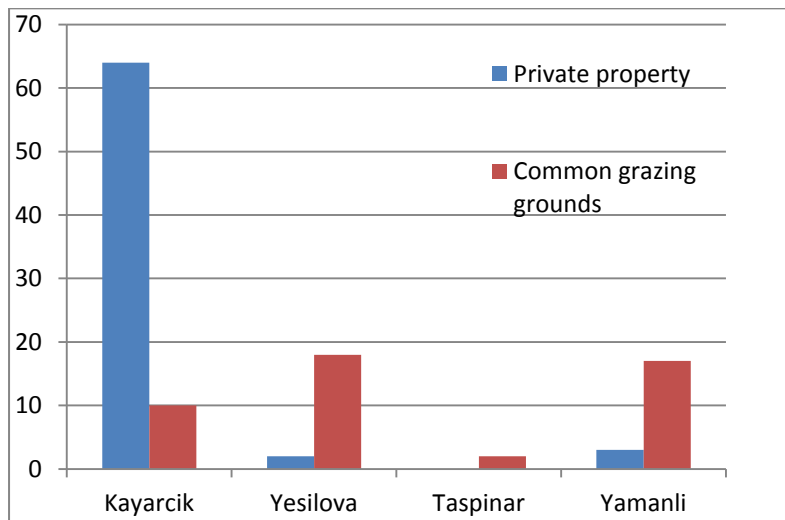
Table 3.8: Cattle ownership (Number of Cattle per household)

Cattle Ownerships	Number of the HHs
1 to 2	39
3 to 5	41
5+	47
<b>Total HHs in cattle production</b>	<b>127</b>

Source: HH Survey 2011

The questionnaire also addressed grazing opportunities for the livestock producers. According to survey results other than Kayarcik village, majority of the PAHs prefer use of village common grazing grounds. In Kayarcik village the reason why the PAHs cannot tap into village grazing grounds is lack of access path. One of the key requests from the PAHs during interviews was constructing an access path to the village grazing grounds that would allow PAHs to engage in more efficient livestock production. It is evident from the survey result that Kayarcik village cannot fully utilize their available grazing grounds (Figure 3.7).

Figure 3.7: Feeding habits for Livestock (Number of HH)



Source: HH Survey 2011

### 3.3.2.2 Land Cultivation

The Project area is characterized by irrigated land that is fertile and suitable for cultivation. Therefore, the households involved in farming prefer to cultivate high income generating products in their irrigated land. For dry land, where irrigation is not feasible, classic cash crops are cultivated. Among the cash crops, wheat and common vetch is cultivated on rain fed land. Common vetch is predominantly used as livestock feed.

<sup>37</sup> During the interviews, the majority of the respondents do not even claim ownership of poultry. They do not know how many chicken or chicks they own, since it is a part of daily life. None of the respondents sold poultry and only one household declared marginal income from sale of eggs.

On irrigated land, the most popular products for cultivation are sugar beet and potato. Sugar beet is a high income generating crop<sup>38</sup>. Sugar beet production is regulated by the annual government quota, as sugar is mainly purchased by the state. In 2011, the price per ton for sugar beet was around 1,350 TL (\$750). Sugar beet is predominantly produced in Kayarcik and Yamanli villages. In Kayarcik village, sugarbeet and potato production comprise almost all of household agricultural income. The land is also widely used for potato production. The headman of Kayarcik village is one of the leading investors and entrepreneurs on potato seed production. For those PAHs that cultivate potato in Kayarcik, 51 percent of their agricultural income is derived from potato cultivation. Likewise in Yamanli, 53 percent of the agricultural production depends on potato farming for the PAHs that engage in potato farming. The villagers rent their land for large scale potato seed production. In addition to generating seed, potato is also planted and sold in the markets

Table 3.9: Income from Potato and Sugar beet cultivation

	Number of HH Producing Potato	Number of HH Producing Sugar beet	Income from Potato (TL)	Income from Sugar beet (TL)	Income from Potato (\$)	Income from Sugar beet (\$)	% Sugarbeet income in total agricultural income*	% Potato income in Agricultural income*
<b>Kayarcik</b>	42	56	33,715	21,430	18730	11906	42%	51%
<b>Yesilova</b>	14	26	18,817	17,906	10454	9948	45%	37%
<b>Taspinar</b>	2	0	18,355	0	10197	0	0%	37%
<b>Yamanli</b>	22	34	49,161	12,591	27312	6995	24%	53%

\*This figure is valid for those households that engage in potato production or sugar beet production. Comparison is with their agricultural income.

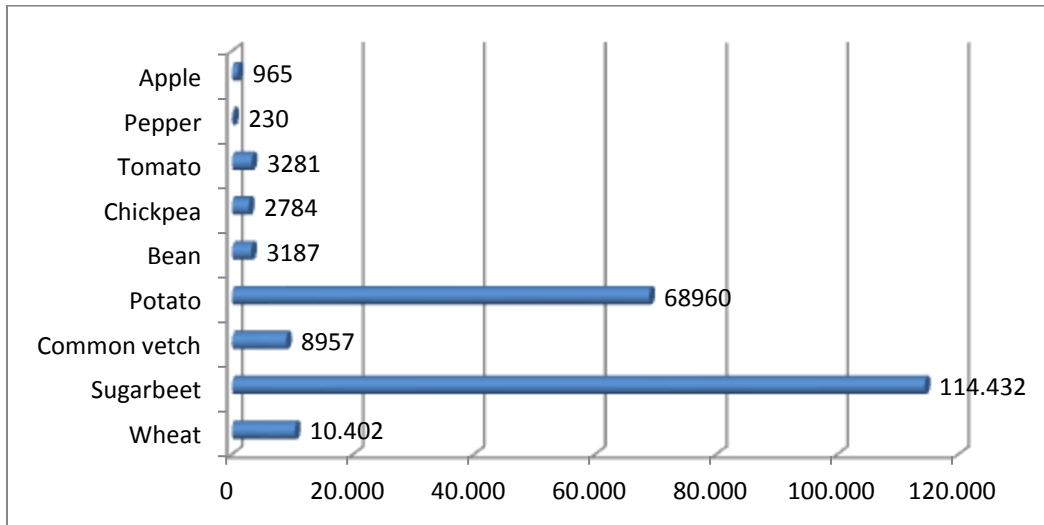
Source: HH Survey 2011

Among the vegetables, tomato and bean are the most cultivated products. Dried products such as chick peas are also cultivated by almost one third of the households. The farmers usually plant an array of products. In their small home gardens they cultivate garden produce for household consumption. The irrigated fields are utilized for sugar beet, or potato production and dry land is used for wheat or common vetch. Therefore, households optimize their land for agricultural production and try to exploit all of their agricultural production capacity (Figure 3.8 and 3.9).

<sup>38</sup> The "Sugar Law" passed on 4/4/2001 and declared annual quotas for sugar produced from sugar beet and starch based produce. The government has the legal right to alter the quotas annually up to 50 percent, either increasing the quota for starch based sugar or sugar beet. Since 2001, the governments have used their quota alteration rights towards starch based produce which has put additional economic pressure on sugar beet planting farmers.

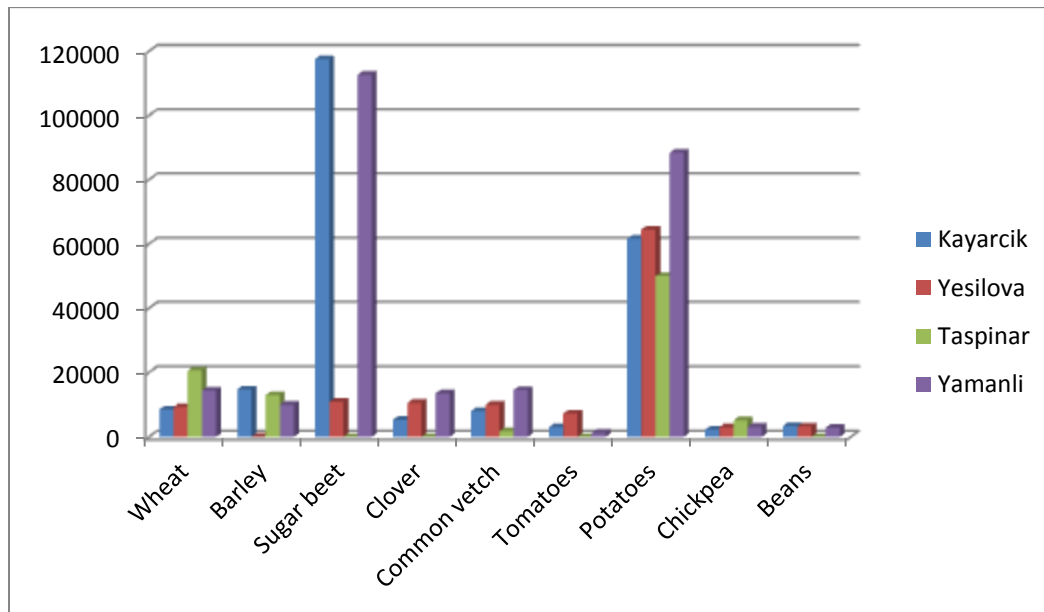
<http://www2.bianet.org/bianet/ekonomi/131235-seker-pancari-kotasi-yoksullugun-rotasi>

Figure 3.8: Annual Mean Agricultural Production according to Product type (In KG)



Source: HH Survey 2011

Figure 3.9: Mean Agricultural Production according to Settlement Type (in KG)

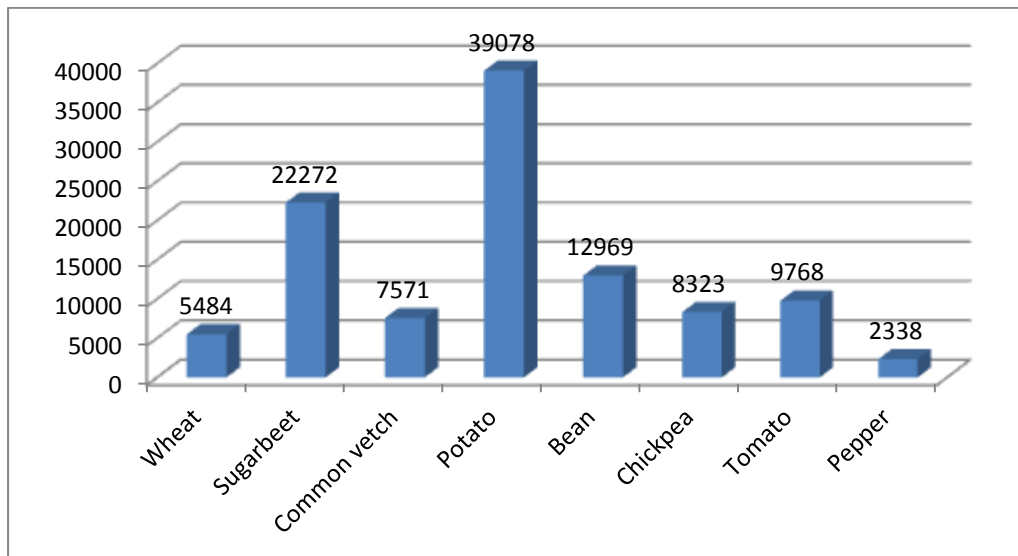


Source: HH Survey 2011

The fruit production in the area is limited. The mild weather of the area allows for apple, peach, pear and cherry orchards. Almost 10 percent of the households stated that they produce fruits. Yet, this production is limited for household consumption as well. The households have a couple of trees planted in their gardens. Only 4 households out of 247 stated that they had orchards and were selling their fruits.

Income generated from agriculture depends heavily on the type of product cultivated. In the Project area potato and sugar beet are both high income generating products (Figure 3.10). Income generated from potato is the highest, on average households gained 39,078 TL (\$21,710) from cultivating potatoes. The second most profitable product is sugar beet. Annual income from sugar beet was 22,272 TL (\$12,373). Income from rain-fed farming such as wheat production is limited even though wheat production is widespread. Households usually keep half of their wheat production for their home consumption and sell the rest in the market. Wheat is consumed as flour, bulgur for household use and fodder for livestock feed. Having irrigated fertile land, contributes significantly to overall household income. The Project area derives critical income from sugar beet and potato cultivation.

Figure 3.10: Income from Agricultural Products (TL)



Source: HH Survey 2011

The land is used by the households for cultivation purposes. In addition to utilizing their own land, some of the households rent their land predominantly for potato production. One third of the overall household rent their land (30 percent). After renting the land, they work as daily waged farmers on their own land. The daily employment in agriculture on their own land or on nearby land is widespread in the Project area. On average man gain 50TL (\$27.78) daily from potato farming and woman gain only 25TL (\$13.88), hence men earn twice as much as women when employed in daily potato farming. Some of the households rent additional land to increase their production capacity (Table 3.10). Yesilova village rents the largest size of additional land and their income from additional land rental is the highest. On average in Yesilova village households earn 14,704 TL (\$8,169) annually from rented land. The households in Taspinar do not rent any additional land. In Yamanli village a higher number of households rent their own land when compared to the households that rent additional land<sup>39</sup>. Land owned by Yesilova village is very fertile, therefore it is expected that the incomes they generate from rental land is higher than other villages.

<sup>39</sup> The sample size from Yamanli village is relatively small when compared to the other villages. Therefore, the survey results may not be a solid indicator of the actual practice.

Table 3.10 Use of Additional Land

	Number of HH that Rent additional Land (n)	Size of rented land (ha)	Income from rented land (TL)	Number of HH that Let their land (n)	Size of Land let (ha)	Income from let land (TL)
Kayarcik	9	3.7	4,417	44	1.67	2,329
Yesilova	14	4.4	14,704	12	3.15	5,167
Taspinar	0	0	0	3	3.0	2,333
Yamanli	4	1.3	4,690	13	1.39	1,665

Source: HH Survey 2011

### 3.3.2.3 Income and Expenditures

Households have different income sources. The survey posed questions regarding household cash income sources and in-kind expenditure sources. In-kind sources are the subsistence mechanism utilized by households. All of the PAHs who are currently living in the project affected villages use in-kind sources such as eggs from their chicken, vegetables from their gardens and milk from their cows for household consumption.

The major source of cash income for the project area population is agriculture. Agricultural income comprises almost 90 percent of the total household income in Kayarcik and Yamanli Villages, and 72 percent of the total income in Yesilova village according to survey results. There is a broad difference between the mean and median income levels (Table 3.11). For the purpose of this analysis, median incomes are more explanatory for household income status as high earning households distort the mean value for the population. In Kayarcik village for example, the income of the village headman who engages in large scale potato seed production increases the mean value. Among the villages, Yamanli village has the highest level of income with 37,380TL (\$20,767) annually.

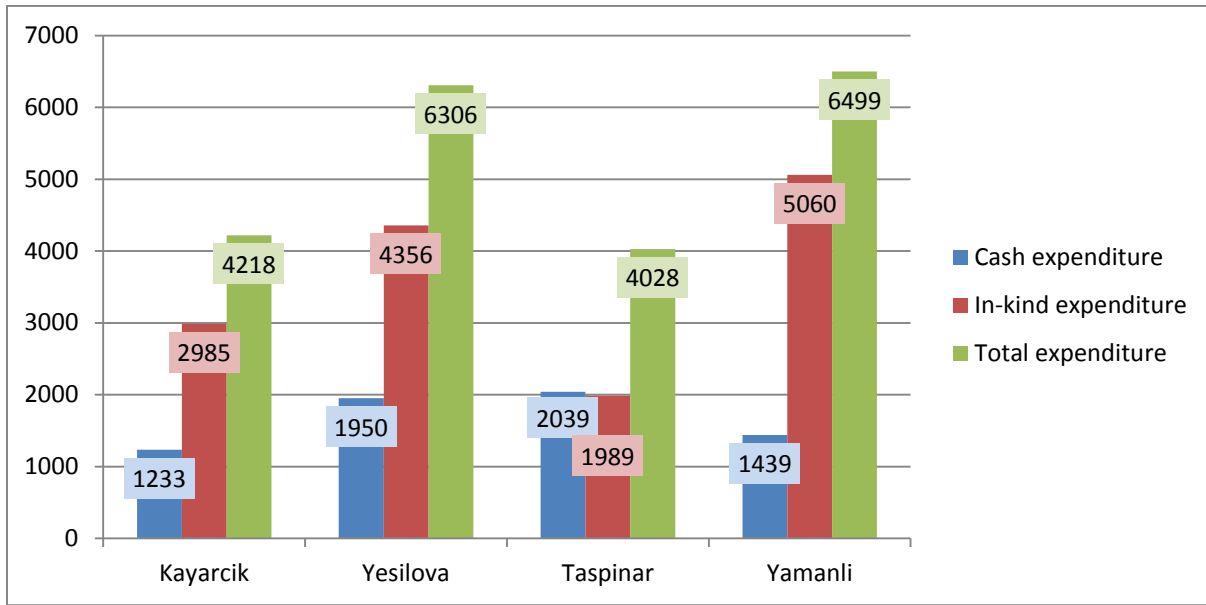
Table 3.11: Total Cash income of the households (Mean and Median)

Village	# of Household	Mean Income	Mean Income	Median Income	Median Income	Minimum Average Income TL	Minimum Average Income \$	Maximum Average Income TL	Maximum Average Income \$
		In TL	\$	In TL	\$				
Kayarcik	148	35,478	19,710	16,605	9,225	4,600	2,556	475,100	263,944.4
Yesilova	37	50,383	27,991	27,500	15,278	15,260	8,478	167,380	92,988.89
Taspinar	11	35,073	19,485	25,000	13,889	41,200	22,889	116,930	64,961.11
Yamanli	51	57,755	32,086	37,380	20,767	630	350	244,480	135,822.2

Source: HH Survey 2011

The household cash expenditures are very low. Majority of the households utilize their own production, they grow their garden crops and consume at the household. In rural life, the expenditures of food related items consequently are not as high as urban settlements. Therefore, their in-kind expenditures are much higher than their cash expenditures. This finding is significant because due to the Project households in Yamanli are going to lose almost all of their land. As can be seen from Figure 3.11, in-kind expenditures are the major expenditure item. These households will need to spend cash to compensate for the lack of production.

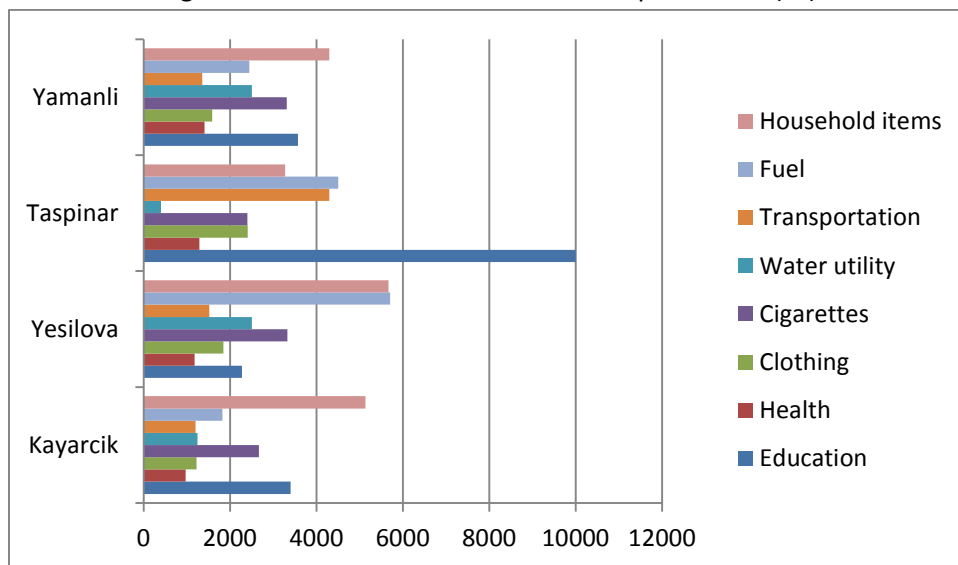
Figure 3.11: Household Expenditures (TL)



Source: HH Survey 2011

Household items are the major source of cash expenditure in Yamanli and Kayarcik villages, these items include food related household expenses. Education is also an important expenditure for households that have children. Even though the first eight years of education is free, if the children would like to continue to high school, costs of education increases. None of the villages have high school facilities. The costs of boarding or transportation to town centre are significant costs for the households. In Taspinar village for example, one of the households have students on boarding which explains the high education expenditures for the village (Figure 3.11).

Figure 3.11 Distribution of household expenditures (TL)



Source: HH Survey 2011

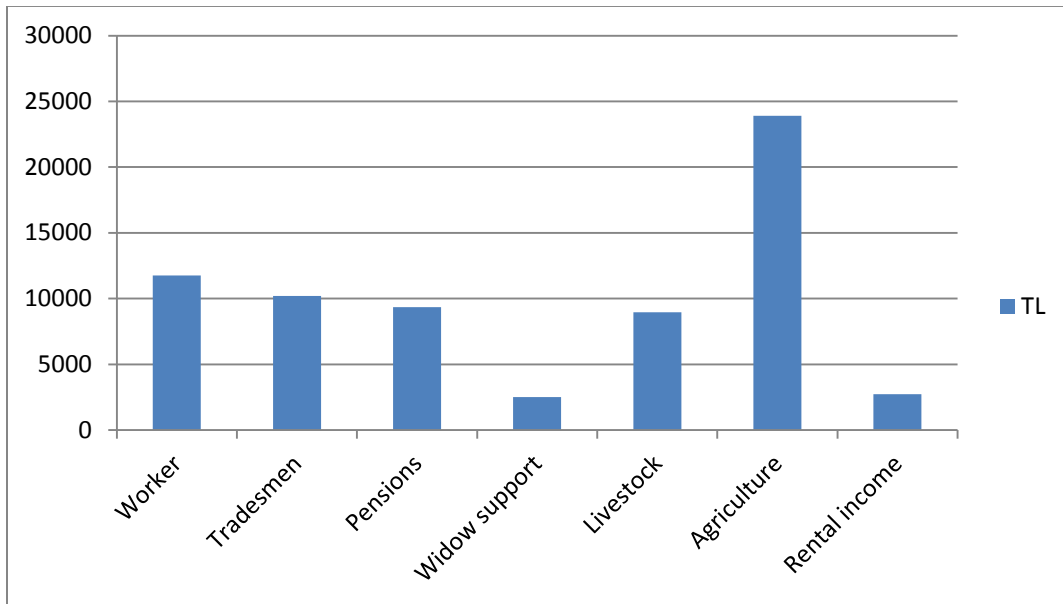


### 3.3.2.4 Vulnerable Groups

#### Age based vulnerable groups

In the Project area around 25 percent of the overall population are elderly (aged 65 and above). Usually in rural Turkey, due to the composition of the families, the elderly live together with their children. In terms of expropriations and project related issues, they have the support of their children and their grandchildren to explain the process. The elderly populations are at home; daily care of the elderly is usually undertaken by the family members. In the Project area however, around 40 percent of the households are composed of two people. The elderly whose children have already migrated to the cities, and are losing their land for the Project area are vulnerable. For 77 percent of the elderly population the only source of income is agricultural income. 88 percent of the elderly overall is engaged in agricultural production. Agricultural income also comprises the highest source of income for the elderly with an annual mean income of 23,912 TL (\$13,285) (Figure 3.12). They do not have the capacity to involve in any other economic activity and they are regarded as too old to be employed in any of job opportunities.

Figure 3.12: Sources of Income for Elderly Population



Source: HH Survey 2011

#### Gender based vulnerable groups

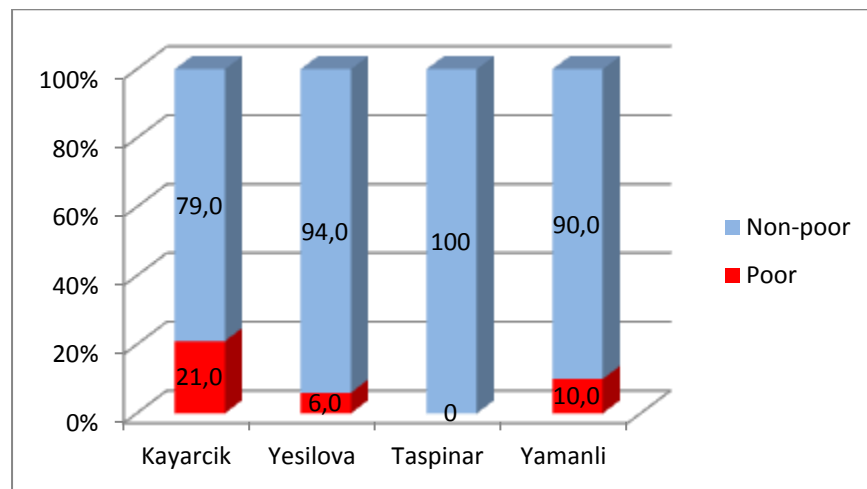
The numbers of land titles owned by women are very low; in most cases they are shared titles with siblings. According to the household survey only 36 women were head of households. This is mostly due to the fact that land is inherited from parents. Among the interviewed households only 14 percent of the respondents were women. The project demographic study illustrates that women make up around 51 percent of the total population. The titleholders will be compensated, as by law, regardless of gender; each titleholder is compensated as long as his/her name is in the title documents. Throughout the focus group meetings with women held in Kayarcik and Yamani villages, they were very vocal about their desire to contribute financially to the household. The economic support they create by the agricultural work they undertake is not viewed as

income generation. A couple years ago, women were involved in carpet weaving, however it was not sustainable. The company that had brought in the carpet weaving boards has gone bankrupt and the women could not access any other marketing channels to sell their products. As the women are actively involved both in agricultural production and within the household, they have time constraint for doing additional jobs. During winter months, women are confined in their homes. Since women are more involved with production and well-being of the family, they do worry about the health and environmental impact of the thermal power plant; however, they would like the power plant to be a source of employment in order to minimize the possible adverse impact on agricultural production.

**Poverty- based Vulnerable Groups:**

Rural poverty affects the Project area. According to the results of the TurkStat Poverty Analysis, the official minimum cost of living index (poverty threshold) for a family with 4 members is 896 TL (\$498) per month. Accordingly, a family with 4 members earning 10,752 TL (\$3,319) of annual income lives below the minimum cost of living and is officially defined as “poor”<sup>40</sup>. Since the data collected from the field does not accurately match the official statics gathered to measure poverty, it is very difficult to pinpoint a specialized group as “poor”. The results of the survey illustrate that poverty is highest in Kayarcik village (Figure 3.13). Lack of poverty in Taspinar is not an indicator of high income, but rather illustrates that the households can keep on their own via subsistence.

Figure 3.13: Poverty in Project Area (% hh)



Source: HH Survey 2011

Having access to social insurance is critical for overall wellbeing of the population. In the Turkish social security system, the poorest households are assigned green cards in order to compensate for health related expenses.

<sup>40</sup> It is important to point out that this official definition and calculation cover both families living in rural and urban areas. There is no officially separate calculation on minimum cost of living for families living in rural area. Thus, identification of officially defined poor families living in rural area doesn't mean that they cannot survive or they have great difficulties in making a living compared to families living in urban area.

The green card<sup>41</sup> is only given to households that are categorized as poor and that do not have any member of the household employed under any social security system (Table 3.12).

**Table 3-12** Distribution of Population covered by Social Insurance

Social Security	Female		Male		Total	
	N	%	N	%	N	%
No Social Security	5	13,9	16	8,6	21	9,46
Retirement fund of civil servants	0	0	4	2,1	4	1,8
SSK (Social Insurance Institution)	8	22,2	50	26,9	58	26,13
Bağ-Kur (Pension Fund for the Self Employed)	16	44,4	76	40,9	92	41,4
Green card (Health card for uninsured people in Turkey)	7	19,4	40	21,5	47	21,2
<b>Total</b>	<b>36</b>	<b>100</b>	<b>186</b>	<b>100</b>	<b>222</b>	<b>100</b>

In the Project area overall almost 21 percent of the population have green cards. The green card holders also designate the number of population that are poor in the Project area. Two thirds of the population have social security, meaning they have at least health benefits and coverage. Around 10 percent of the population does not have any social security measures.

#### Land-based Vulnerable Groups

One of the characteristics of the Project area is the high number of title owners for each parcel. Even though the suggested compensation amounts are beyond the market value, because the amount is shared amongst all titleholders, the amount of compensation money received per household is not enough to create a sound alternative investment. Furthermore, the Project area is marked by high migration and most of the titleholders are not permanent residents in the villages yet they bear the right to title because they have inherited the land from their mothers or fathers. In cases, those who have migrated have left their land to their siblings or relatives to cultivate and have not asked any compensation for their land since migration. However, once the land is in the market for expropriation or willing buyer/seller negotiations, the interest in the land increases and all title owners want their share of the compensation money since it is their entitlement. This could lead to interfamily disputes. The relative/sibling that used to cultivate the whole land is left with a minor compensation since the compensation is equally shared. Moreover, there is no more land available for cultivation, and with the compensation they are not able to replace the amount of land they used to cultivate. Hence, the most vulnerable group is the *households that lose their access to land for cultivation*. Special

<sup>41</sup> Eligibility criteria for Green Card applicants are: (i) the applicant's monthly income or their share in household's monthly income must not exceed one third of the net monthly minimum wage, (ii) the applicant must prove that she does not collect social security benefits. Calculation of the household's or individual's income takes into account in-kind and cash income earned in return for services, agricultural income in cash, rents, interests, transfers and grants. The implementation of the program is carried out by the local Administration Councils, which are required to make all inquiries in addition to the applicant's declaration, in order to determine the real income level of the applicant. Decisions are made by the Administration Councils, and Green Cards are distributed by the Provincial Governorships.

attention should be given to these households; the exact number of households in such a position should be analysed with the support of village headmen and the elderly to ensure that those who are compensated are fairly compensated.

The second land based vulnerable group is *the households that will lose majority of their land*. Especially Yamanli village is going to lose almost 90 percent of the arable land at the initial plan of mine area. Even though the mine area is going to be rehabilitated and can be hypothetically available for farming once the mine sources are exploited, it is going to be years before the land is suitable for cultivation once again. But more important than that, lands which are previously used for cultivation and legally divided into different parcels will be combine into one piece of land; only a part of which are acquired by Enerjisa might be available for re-cultivation, because the other parts of the land in the mine area can be re-used by farmers if they will be expropriated by EMRA and become public lands. Furthermore, topographical structure of these lands, either they are acquired by Enerjisa or EMRA, will change after the mine sources are exploited. Therefore, it is difficult to restructure these lands which will be available for farming same as before. So, alternative ways of using these lands should be developed and alternative income generation activities need to be planned for the concerning farmers. Considering lack of skills of the project affected population, those households that are losing all of their land to the Project will be vulnerable. They may not be able to replace the land that was expropriated with nearby land for cultivation or invest in livestock. Enerjisa is going to pay particular attention to these households and devise policies to mitigate their loss of income.

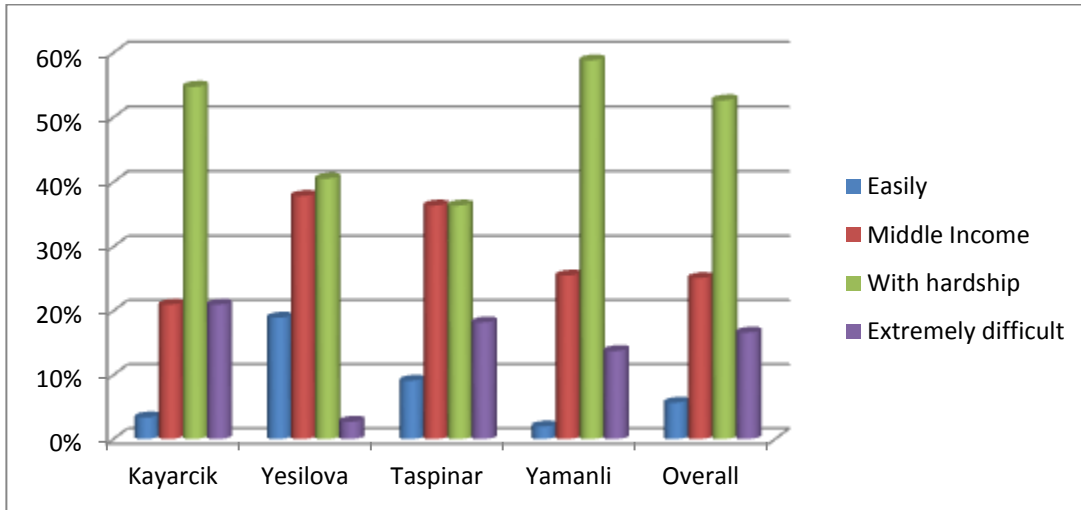
The third land based vulnerable group is *households whose names were not registered in the title deeds*. There is a mismatch between the actual owners of the land and the official registered list. When the department of titles and cadastre visited the area, they have registered villagers names under different parcels due to miscommunication between the villagers and officials. This issue was not handled timely as the parcels rarely exchange hands. However, acquisitions by Enerjisa revealed the discrepancy between the actual owner and registered owners. The first acquisitions which were completed through willing buyer seller have led to disappointed project affected populations who did not know that they had lacked the titles. Such discrepancy has led to hostility among the actual owners and title holders. Compensation of actual owners is critical for their income restoration. Enerjisa is going to identify the households that have lost their arable land but have not received compensation due to technical faults and firstly attempt to take role in negotiator between the actual owner and the officially registered owner so that the compensation can be received by the actual owner.

### 3.3.3. People's Perceptions and Daily Life

Daily life in the Project area is predominantly agrarian. People's lives revolve around farming and livestock production. The focus groups with the women and youth showed that the life in the village is sleepish where the major activity in the area is farming. During the focus group meetings with the youth, the youth was asked the range of activities they do for during leisure time. The only fun activity is a walk to the neighbouring village and back, and picking up apples from fruit trees on the way. The young complain about lack of any activity or technology. The ones that work seasonally outside the village say that they miss the urban life. The only social gathering place is the cafe house which is male dominated. There is no internet cafe in the villages; the young have to commute to Tufanbeyli for internet access. The young do find the village life a little boring but nonetheless they love their village and attach a special value to their land. For both men and women, ancestral tie to land is vital. They regard land ownership as an asset that passes from older to younger generations.

Majority of the households live in economic hardship. When asked if they can make a decent basic living with their current income, more than two thirds of the households said they are finding it difficult to make a living (Figure 3.14). The PAHs in Yesilova village seems to have a better living standard as the village hosts lowest number of households that face extreme difficulty and highest number of households that can manage their life easily.

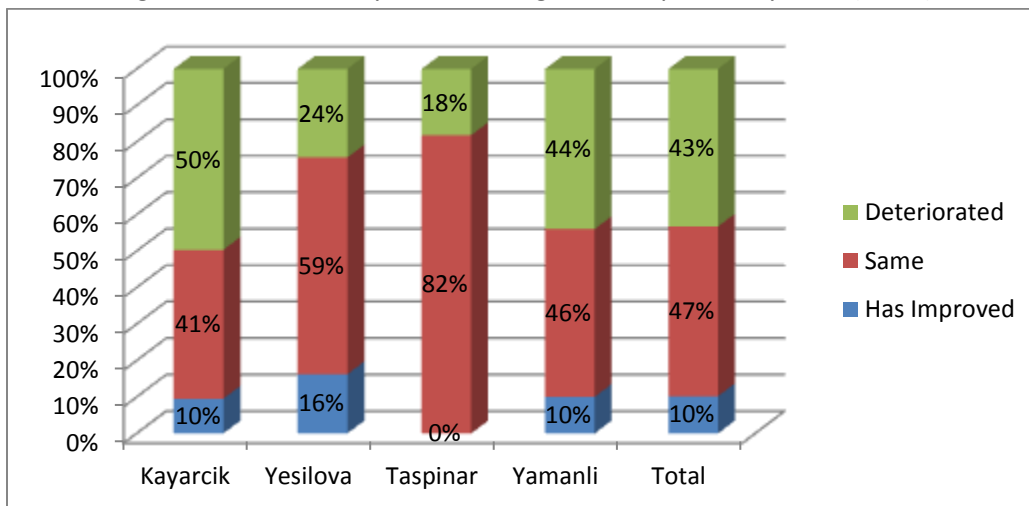
Figure 3.14: Can you afford a decent living? (% HH)



Source: HH Survey 2011

Majority of the households believe that their socio-economic status is not improving. Around 40 percent of the households said their socioeconomic well-being has deteriorated over the past five years. Less than 10 percent has seen progress. Hence even though Turkey has made an economic leap over the past five years, this has not triggered down to the villages of Tufanbeyli. The rural economy has not improved, and most of the Project affected households do not see any positive developments in their lives. Especially in Kayarcik village half of the PAHs believe their economic situation has deteriorated over the past five years (Figure 3.15).

Figure 3.15: How has your life changed in the past five years? (% HH)

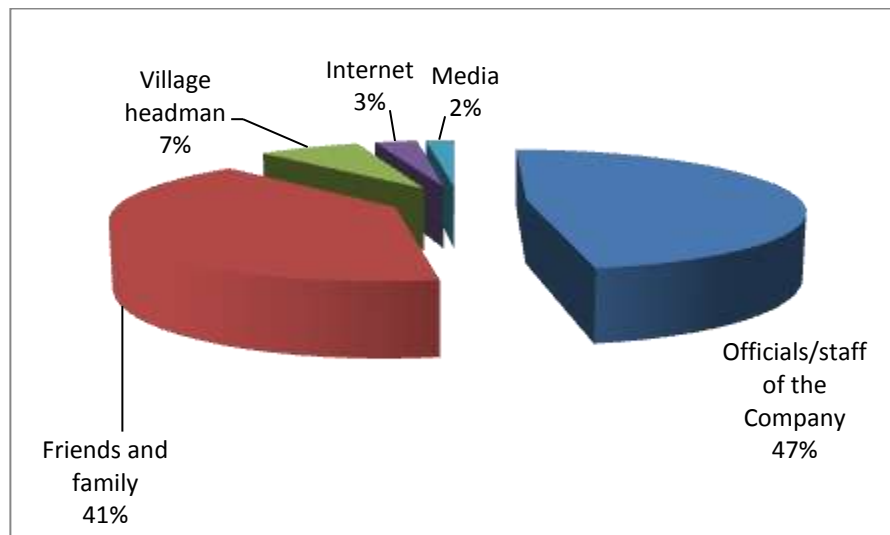


Source: HH Survey 2011

### Perceptions about the Project

The project affected populations have been informed about the Project by Enerjisa staff or word of mouth through family and friends. Re-starting with the public information meetings in January 2011 following the investment decision taken in November 2010, Enerjisa has conducted several public meetings with PAPs and has an ongoing relationship. 95 percent of the interviewed households stated that they have already heard about the Project. The initial response of the households towards the project was unconstructive. Previous information on potential adverse impacts of thermal power plants had led to a misperception about the structure of the project and what the project entails such as deterioration of health, air pollution, decrease in crop productivity and migration due to lack of suitable rural living conditions (See Annex II Focus Group Meetings). Nevertheless, the PAHs have a strong sense of communal benefit and respect for the State. Therefore, they believe it is necessary to build power plants to meet the increasing demand in electricity. The major source of information for the interviewed households was Enerjisa officials and staff. Word of mouth is also significant source of information as 40 percent of households have heard about the Project from their friends and family. Even though during site visits, village headmen were the key information channels to the households, according to the survey results only 7 percent of the households had heard about the Project from village headmen (Figure 3.16).

Figure 3.16: How did you hear about the project? (% HH)

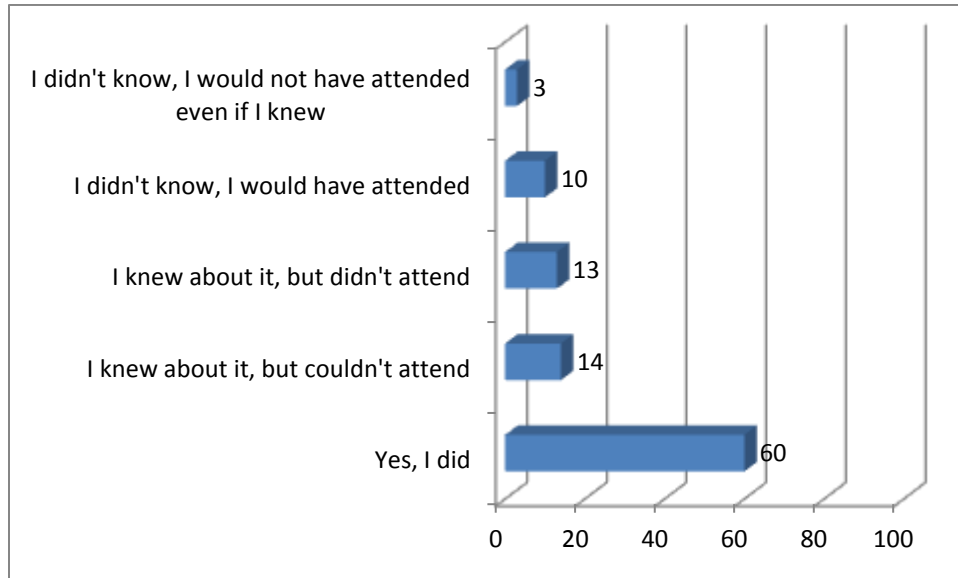


Source: HH Survey 2011

There were a number of public information sessions organized by Enerjisa prior to commencement of construction works. PAPs were asked whether they attended these information sessions, and whether the level of information was sufficient at these sessions (Figure 3.17). Almost 87 percent of the interviewed households knew about the information sessions, which illustrates that the information channels to attract PAPs are readily in place. Two thirds of the interviewed households stated that they have attended the information sessions, 14 percent wanted to attend but could not on the day due to personal reasons. Only 13 percent of the interviewed households were not interested in attending meetings and gaining further information about the project. Of those that attended the public consultations meetings only 16 percent were content with the level of information provided. Majority of the attendees requested further information on Project (83.8 percent).

Considering this request, Enerjisa prepares an information brochure which will cover some information about Enerjisa, location and technical details of the Tufanbeyli Project, potential impacts and benefits of the Project, communication channels and contact info for local people.

Figure 3.17: Did you attend Public Consultation Meetings? (% hh)

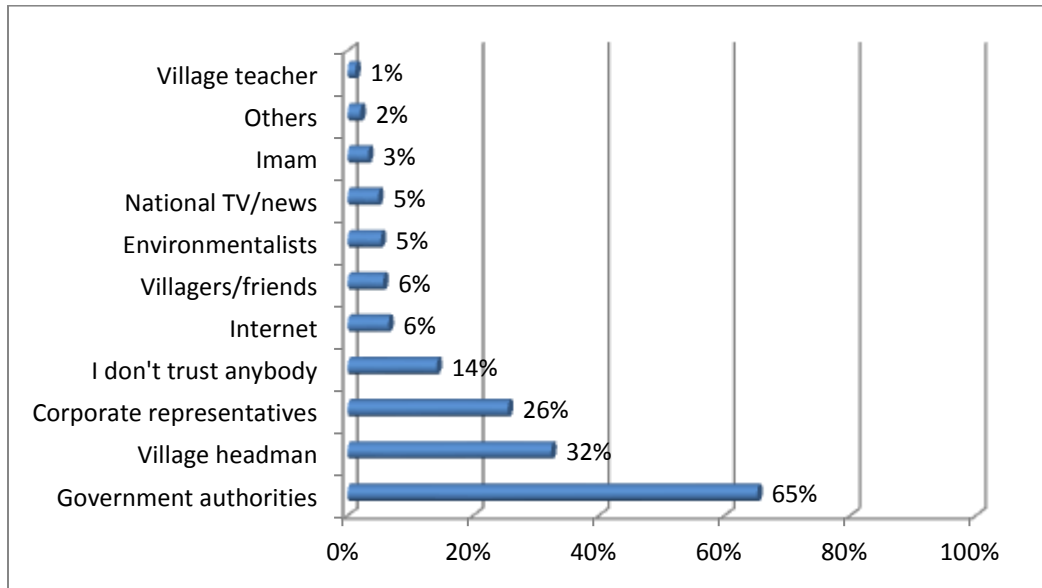


Source: HH Surveys 2011

The willingness to cooperate is also apparent regarding information flow for the Project. An overwhelming 85 percent of the interviewed households stated that they would like to receive more information about the Project. When asked about which areas they are interested in the most, the PAPs are eager to learn more in depth information on how their village life will be impacted by the Project, compensation figures, employment opportunities and health impact of the Project. Therefore, it is essential to keep the communication links open with the villagers and continue to have regular information sessions with them.

The source for information is also critical for enlightening the public and gaining their trust. The PAPs were asked who they would trust as a reliable source of information about the Project. Majority of the PAPs have a solid trust in government, and information disseminated via Government authorities is regarded as accurate (Figure 3.18). Village headmen and corporate representatives are also viewed as significant sources for reliable information. It is important to show that local government gives full support to the Project by involving the government authorities in information dissemination. Meetings in October were attended by the local government authorities and were highly regarded by the PAPs. Hence, engaging local government authorities will enhance the perception of PAPs that Enerjisa is cooperating with the local authorities, and abiding by local and international procedures in order to protect people’s livelihoods.

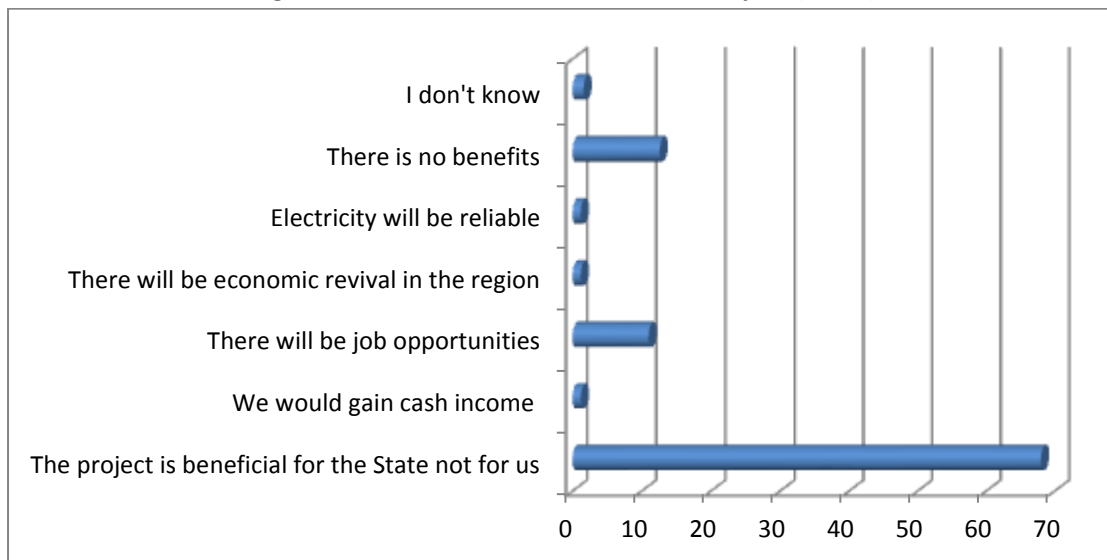
Figure 3.18: Who would you trust for Project information<sup>42</sup>?



Source: HH Survey 2011

When asked about the benefits of the Project, majority of the respondents said the Project benefits the overall country and does not have an immediate benefit for them (Figure 3.19). The most voiced benefit of the Project is recruitment. The households expect job creation and employment as a direct benefit of the Project.

Figure 3.19: Perceived Benefits of the Project (% HH)



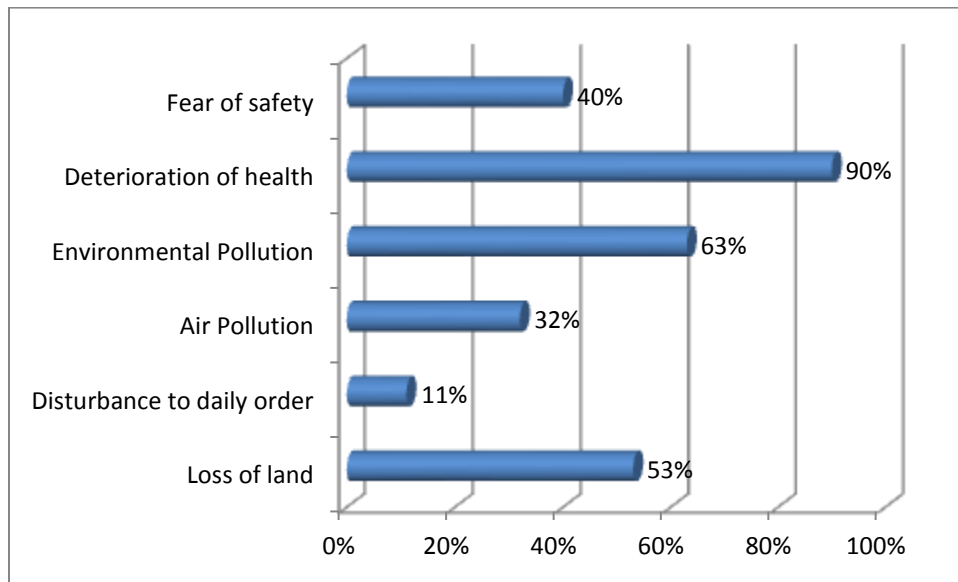
Source: HH Survey 2011

<sup>42</sup> This was a multiple response question; the PAPs were allowed to choose two answers.



In addition to the expected benefits of the Project, there are some perceived adverse impacts likely to be occurred due to the Project. Majority of the households worry about the deterioration of health that would be triggered by the project (Figure 3.20). At the Project area currently, there are no major health issues. During focus group meetings with women, they emphasized the importance of child health and bringing up children in a healthy environment that has clean air. Rural living conditions in the Project area have been associated with long life, clean air and consumption of naturally organic produce. Introducing a thermal power plan has raised concerns as the PAPs worry about the changes in the rural environment that could lead to deterioration of public health. As Enerjisa is well aware of the sensitivity of this issue for the local people, several appropriate measures like more advanced technology in the plant, strict health and safety regulations defined in detail in the HSE Plan of the Project by considering Enerjisa's OHS Policy will be taken promptly, and regular health check-ups with the community upon the results of the first check-up as baseline survey is planning for the operation phase of the Project, and all these measures will be explained to the public through information sessions. Thus, it is aimed that the Project is not going to cause any adverse health impact. Therefore, any concerns the population may have regarding health issues should be explained thoroughly. The second most important adverse effect is environmental pollution. The project area is agrarian, and they pride themselves with clean natural resources. The project affected population is suspicious about the environmental impact of the project and how it would affect the agrarian production in the project area. As the economy relies heavily on agriculture, any detrimental impact would hurt the overall regional income. Hence, Enerjisa is going to monitor the environmental impact of the Project especially on the local produce. Enerjisa ensures that the damage to the produce will be minimal. Loss of land is another major concern since the PAHs predominantly engage in agriculture. In order to mitigate income from loss of land, Enerjisa has devised a wide array of strategies ranging from investments in trainings for alternative farming strategies to focus on livestock production, which is discussed in depth at Chapter 5. Moreover, fear of life safety in Project area has revealed as another concern by the local people. Villagers are afraid of explosions of the mine area and feel that living in a construction zone would threaten their safety. Enerjisa is very strict on the implementation of safety measures for its employees and the entire project affected populations. Enerjisa ensures life safety for all PAPs and is going to undertake the measures to explain the safety measures in compliance with EIA requirements.

Figure 3.20: Perceived adverse Impact of the Project (% HH)



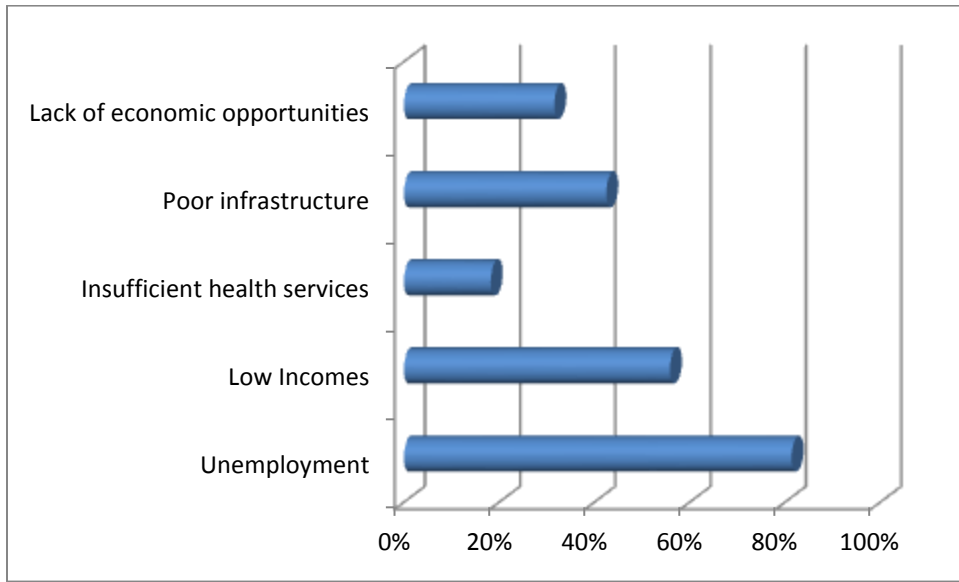
Source: HH Survey 2011

Enerjisa staff is striving to enlighten the public on potential environmental impact of the Project. Most of the population is comparing the thermal power plant with the already operational power plants in Afsin Elbistan and Yatagan. Having seen the environmental impact of the previous thermal power plants that were built before the Kyoto protocol, they are expecting similar environmental damage that the hosting cities suffered. However, the technology used at TPP Power Plant is far advanced and abides by international standards to keep the air pollution to a minimum. The project affected populations should be informed in more detail as to how the power plant is going to function and the necessary steps Enerjisa has taken to reduce any potential adverse environmental impact.

There are already problems faced in rural life (Figure 3.21). According to results of the survey<sup>43</sup> unemployment was seen the ultimate problem in the Project area. Unemployment is followed by low incomes and poor infrastructure. Infrastructure related problems include poor water supply and sanitation, limited transportation links and lack of apt refuse collection and disposal system. Insufficient health services are also voiced as a key concern in the Project area.

<sup>43</sup> The question asked the PAHs to select three utmost important problems in daily life. The figures represent the mostly selected responses in multi-response question.

Figure 3.21: Problems in Daily rural life (% hh)



Source: HH Survey 2011

## CHAPTER 4: LAND ACQUISITION PROCEDURES FOLLOWED BY THE PROJECT

### 4. GENERAL

The land acquisition process for the TPP includes valuation of affected assets, clarification of the valuation procedures, payment of compensation and consultation with PAPs in accordance with Turkish Expropriation Law at the national level and World Bank/IFC Standards at the international level. In this chapter, the procedures that Enerjisa followed for acquisition of land and immovable assets on publicly and privately owned lands are described.

#### 4.1. LAND ACQUISITION REQUIREMENTS

In order to build the Tufanbeyli Thermal Power Plant, acquisition of both privately and publically-owned lands was required. The project encompasses a total area of 1,632.7 hectares, the majority of which is under private ownership – 91%. The land belonging to Treasury comprises about one tenth of the total project area (Table 4.1). There are also three parcels belonging to Village Legal entity.

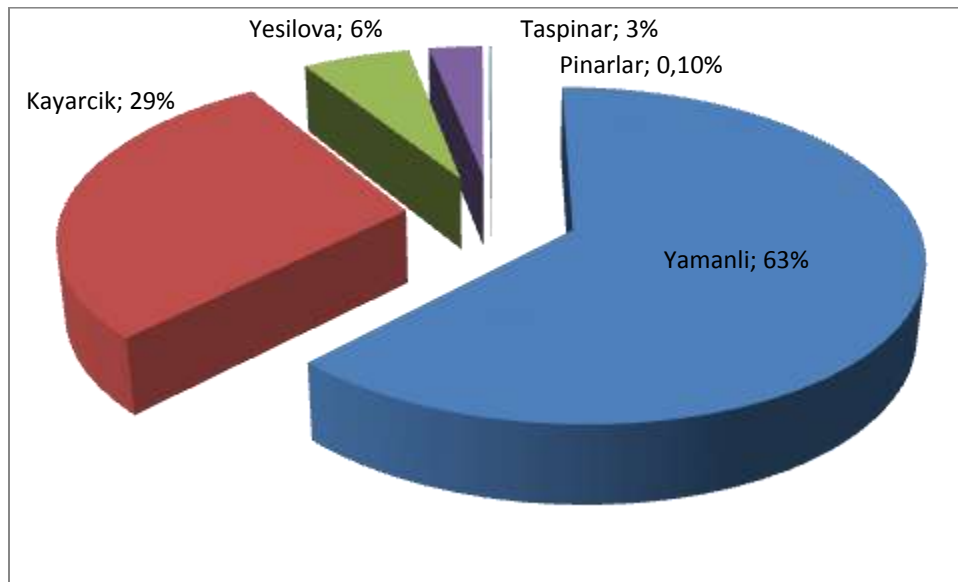
Table 4.1. Distribution of the Project Land

	Number of parcels	Land size in ha	Percentage
Privately owned land	1,970	1,484.5	91%
Treasury	51	145.1	9%
Village Legal Entity	3	3.1	0%
<b>Total</b>	<b>2,024</b>	<b>1,632.7</b>	<b>100%</b>

Source: Enerjisa

The land acquisitions undertaken for the project has affected the villages of Kayarcik, Yamanli, Yesilova, Taspinar and Pinarlar. The project comprises of two sites, the power plant area and the mine area including limestone quarries respectively. As 91 percent of the land is in the hands of private owners, the land will be acquired from individual owners. Among the privately owned parcels, Yamanli village is being affected the most. 63 percent of the project area is lying in the borders of Yamanli Village. Kayarcik village is the second most affected village, followed by Yesilova. Kayarcik village is predominantly affected by the power plant site, whereas Yamanli village is impacted by the mine area. There are no immovable assets in the Project area; hence the Project does not entail any physical resettlement. All of the Project area consists of farm land; therefore the Project is expected to cause economic displacement.

Figure 4.1: Allocation of the Project Area



Source: Enerjisa

## 4.2. LAND ACQUISITION PROCEDURES

The acquisition of the lands needed for energy projects can be undertaken within the framework of an active management policy for the immovable assets adopted by the State. On behalf of the State, the Energy Market Regulatory Authority (EMRA) is the ultimate public authority which is responsible for land acquisition through expropriation. However, IFC encourages investors (companies) to prefer acquiring privately-owned lands through the willing buyer/willing seller model rather than expropriation. In line with this principle of IFC for the land acquisition process, Enerjisa has also preferred this model in cases where land owners are accessible and both parties (buyer and seller) can reach an agreement by negotiation. Nevertheless, Enerjisa had to apply to EMRA for acquiring some of the lands through expropriation. The main reasons for this second model of acquiring land vary because, for example, land owners might be inaccessible, or shareholders of the lands cannot come to agreement with each other, or parties (buyer and seller) cannot compromise on the sale price of the land, or the required land had to be acquired via subdivision as only a small part of the land were needed

### 4.2.1. Usage of Publicly Owned Land

The TPP Project requires 145.1 hectares of publicly owned land. These lands are composed of registered lands under the Treasury. Since Tufanbeyli project is an energy project aiming at public benefit, in accordance with the related laws, forestry and Treasury lands are allocated for use by the project owner company in return for payment for the production license period (25 years).

Energy companies in Turkey have been granted rights of use of Treasury land provided that an energy project is declared to be in the public interest by EMRA. In line with the Law, Enerjisa applied to EMRA for the right to use of the Treasury owned lands. After the use permit is given, the project owner company signs a contract for constitution of easement for the Treasury lands on which there are fixed structures and rental contract for

those on which there is no structure, makes payments on amounts determined and initiates the works. In accordance with the Law numbered 5784 and the 8<sup>th</sup> Article of the Law numbered 5346, the amounts in question can be reduced for projects in which energy resources are used.

For lands under the village legal entity, on the other hand, in accordance with the 30<sup>th</sup> Article of the Expropriation Law numbered 2942, a decision is taken for the transfer of such lands to the Treasury. This decision taken by EMRA is implemented after the village legal entity gives consent in relation to the transfer and the transfer amount determined. For these lands transferred to the Treasury, the company which is the owner of the Project makes the payment signing easement or rental contract depending on whether there is a structure on the land or not, and starts using them, as is the case for the supply of Treasury lands. There were three parcels under this category in the TPP Project.

#### 4.2.2. Privately Owned Lands

Privately owned lands are acquired through either willing seller/buyer arrangement or through expropriation carried out by a public agency; EMRA. Accordingly, privately owned lands to be acquired through different methods of acquisition can be grouped as follows:

- *Land purchased by Enerjisa; and*
- *Land expropriated by EMRA*

##### 4.2.2.1. Land Purchased by Enerjisa for the Project

Land acquisition of the privately owned lands for the TPP Project is undertaken with reference to both the Turkish Expropriation Law and the World Bank/IFC Performance Standards. IFC PS 5 states that where resettlement cannot be avoided, negotiated settlements should be implemented by providing fair compensation. This is the primary objective of Enerjisa when purchasing land together with the other immovable assets on it. The asset acquisition process has been managed by the Enerjisa Land Acquisition Team. They use the following steps to purchase immovable assets:

- Identification of owners of each of the affected parcels;
- Disclosure meetings to inform PAPs about the project and the valuation method;
- Inventory and valuation of the immovable affected assets by an independent agency;
- Meetings and/or face-to-face interviews with the land owners to negotiate the valuation amount stated by the independent agency;
- Completion of follow-up site visits to address issues raised by the land owners;
- Revision of the valuation amount of affected assets and determination of a premium over the stated valuation price;
- Calculation of final offers and disclosure of those offers to the land owners;
- Negotiation and agreement on purchase prices between buyer and sellers;
- Establishment of a bank account in the name of each land owner (all costs are covered by Enerjisa);
- Transfer of the purchase price to the account of the seller; and
- Finalizing the land deed transfer formalities in the Deed Offices (all transaction costs are covered by Enerjisa as well as the transportation, refreshments and accommodation of owners when necessary).

All title deed registration, administration and transport/subsistence costs are covered by Enerjisa. Similar to cash compensation for lands, standing crops and trees, project-affected people who lose any buildings receive cash compensation above the valuation prices set by the responsible agency, if any.

In TPP Project there are 1755 parcels in the mine area that need to be acquired fully for the Project area. Enerjisa aims to buy all of these parcels through willing buyer seller negotiations; till the end of 2011, Enerjisa has acquired 221 parcels (Table 4.2). Enerjisa is continuing the negotiations to increase the number of parcels bought through mutual agreement. However, in cases where a mutual agreement cannot be reached, EMRA handles the expropriation process. The parcels in the mine area that are acquired through mutual agreement will be acquired fully by the end of 2014. Enerjisa is in tendency of acquiring all the land required by the Project throughout the Project cycle regardless of the fact that some of the parcels may be utilized in the next 10 years or more.

Table 4.2: Land acquired through Mutual Agreement (as of 26.12.2011)

Village name	Number of Parcels	Number of Titleholders	Total area m <sup>2</sup>	Total Paid TL
Yamanli	131	133	818,992.07	5,205,160.00 TL
Yesilova	15	11	44,308.09	265,300.00 TL
Kayarcik	58	116	278,028.31	1,806,580.00 TL
Taspinar	7	10	141,753.18	858,900.00 TL
<b>Total</b>	<b>221</b>	<b>270</b>	<b>1,283,081.65</b>	<b>8,135,940.00 TL</b>

The parcels belonging to mine area will be utilized gradually. In the initial phase of the Project, the mining activities will commence from the Yamanli- Yesilova village side of the land. Once the area allocated for phase one is fully exploited, it will be covered and converted to reclaimed land and mining activities will shift north to the next phase of the acquired land. During the initial phase of acquisition, the number of required parcels is 955. Of these 955 parcels, 97 parcels (10 percent) are acquired through mutual agreement till the end of 2011. The PAPs that own parcels to be needed in the following phases will be able to gain steady income from their farming activities, since Enerjisa is not going to intervene in their agricultural activities despite the fact that Enerjisa has acquired the land title and paid the owners. Hence, the PAPs will be able to invest the compensation money, and will have the advantage of receiving early payments for land that they will be able to use for the next 10 years.

#### 4.2.2.2. Lands expropriated by EMRA

There are 215 privately-owned parcels which had to be acquired through expropriation for Tufanbeyli Project on the power plant area. These lands had to be expropriated by EMRA due to Law 27 Public interest declaration. The construction in the plant area had to commence, and even though Enerjisa had led participatory meetings, they could not reach mutual agreement for the acquisition of lands in the power plant area. In order to expedite the construction, the expropriations had to be channelled to EMRA.

Enerjisa confers to EMRA also because of inaccessibility of some of the shareholders or disagreement among the shareholders, or the need for sub-division of the required lands. In order to acquire these lands, Enerjisa prepares and submits an Expropriation Plan to EMRA that includes details of the above mentioned parcels and an asset inventory and valuation<sup>44</sup>. After the submission of the Plan, urgent expropriation decisions are taken by EMRA, an expropriation lawsuit are brought and an expert charged by the court prepares land appraisal reports for the affected assets. The expropriation values of these assets are given in a written notice to the landowners. If there is no objection, the lands with its supplementary assets are acquired through expropriation. If there is any objection, additional lawsuits are opened for revaluation of the assets; the expropriation process continues during these lawsuits. Finally, the determined expropriation amount and relevant costs (i.e. all court fees, lawyer expenses) are paid by Enerjisa. Payment are made by depositing the expropriation amounts in the court cash account in a related bank in the name of the concerning persons (titleholders). Thus, Enerjisa obtains the right to use these lands.

Moreover, some of the parcels are partially affected by the Project, if only a small section of the parcel is impacted by the Project, Enerjisa has to utilize EMRA. For these parcels, because Enerjisa does not have the legal right to divide land, Enerjisa will be conducting acquisitions through EMRA. Furthermore, whenever there mutual agreement fails, Enerjisa has to act via EMRA for acquisitions. The main reason behind lack of mutual agreement is the large number of title owners and the lack of ability amongst title owners to make decisions. The second reason is outdated title owner lists. In some of the parcels among the title owners there may be one or more deceased people and titles have not been updated to reflect the recent title owners who have inherited the land. In some cases, the titles go as far back as two generations, but the heirs may not have seen the need to update the titles since everybody knows the owners of the land in such a small environment. Therefore, even though some of the title owners do want to sell and agree with Enerjisa, because they cannot bring the documents of all title owners, negotiations cannot be completed. Enerjisa can only fulfil mutual agreements if all title owners are present and agree to the sale. Moreover, in some cases title owners have migrated to the cities, and have left their land without any information on their whereabouts. In such cases, it is very difficult to reach the owners, hence acquisitions has to be done by EMRA. In total there are 215 parcels that had to be acquired through EMRA (Table 4.2) and 5,412,150.20 TL was paid for the acquisition of these lands to EMRA

Table 4.2 Parcels acquired through EMRA

VILLAGE	NUMBER OF PARCELS	AREA Ha	NUMBER OF TITLEHOLDERS
KAYARCIK	193	134.57	172
YAMANLI	22	14.50	19
<b>TOTAL</b>	<b>215</b>	<b>149.07</b>	<b>191</b>

Source: Enerjisa 2011

<sup>44</sup>

At first, the valuation was carried out by an independent agency assigned by Enerjisa. For details, Section 4.4



### 4.3. ASSET INVENTORY AND LAND APPRAISAL

Enerjisa determined the compensation amounts with reference to principles described in the World Bank's operational policy, OP 4.12. The methodology, which was used for determining the replacement costs for agricultural lands including crops, trees and orchards as well as structures, is explained in the following sections.

During the valuation process, an independent consulting company determining the values for assets considered the following criteria:

- The nature of the land and/or building;
- The size of the land and/or building;
- The characteristics and elements affecting the value of the land and/or building;;
- Any taxes paid or to be paid on the land and/or building;
- The current market value of lands determined as a result of previous land transactions;
- The net income that could be obtained from the asset and/or the resource;
- For the house plots (if any), the sale value of the equivalent lands to be used for the same purposes; and
- For buildings (if any), official unit prices at the date of purchase, estimates of the cost of rebuilding and depreciation<sup>45</sup> for wear and tear.

#### 4.3.1. Appraisal Methodology for Lands

Lands to be used for the Project can vary such as *agricultural lands* where sugar beet, sunflowers and wheat are cultivated as a general pattern and *orchards* where fruit trees, grape vines and vegetables are cultivated. The appraisal for land value depends on the location of the land used for the project. There are price fluctuations among villages pertaining to m<sup>2</sup> cost due to availability of land, the productivity of land and the number of trees on the land. Enerjisa hires 3<sup>rd</sup> party consultants to carry out land surveys and assess the prices for the area. As a result of the surveys, Enerjisa has an inventory of trees, products and land size per parcel. The parcels have a base price depending on the location, slope and terrain. Once the final value is calculated, Enerjisa starts willing buyer/willing seller negotiations.

The value of lands is calculated by using the net income approach<sup>46</sup>. Net income is calculated by subtracting total costs from Gross Production Value (GPV). The appraisal of the lands is based on the capitalization of net income from the land to be purchased<sup>47</sup>. The use of this criterion ensures the saving of all the income assumed

<sup>45</sup> Although depreciation rate for the assets is calculated as a requirement of domestic Law, depreciation for the calculation of assets' value is considered whereas WB Policy OP 4.12, in determining the replacement cost, excludes depreciation of the asset and the value of salvage materials. Enerjisa disregards depreciation and assists affected households to salvage materials. By so doing, Enerjisa offers prices over full replacement cost.

<sup>46</sup> The net income is the income that the land would generate if it continued to be used without any change, taking into account the location and conditions of the land and resources at the land acquisition date. Firstly, the yearly average net income from agricultural land in the area is determined through consultations and market research. Then the actual market prices of these lands are determined through market research and investigation of the title deeds. The ratio of this annual average net income to the average market-selling price will give the capitalization rate (Yusufeli Dam and HEPP Project RAP, 2006, Chp4, p.7).

<sup>47</sup> The formula used for assessing the value of lands is simply  $K=R/f$  which mean;

to be gained in the future via the lands in the period during which valuation is carried out. The basic determining factor in this calculation is the capitalization interest rate. The capitalization interest rate is defined as the right to use the capital invested in the land (CIR)<sup>48</sup> which is determined via the proportion of the average annual net income earned from the land to the average sale price of the land. What is important is to have a low capitalization interest rate because as this rate decreases, based on the calculation method, the value of the land increases. This is to the advantage of the land owner/ producer. For TPP Project a low capitalization rate of 6 percent was used.

Enerjisa hired an independent consulting company for land evaluations. According to the analysis conducted by the company, land is valued per decare between 1600 TL (\$889) to 5530 TL (\$3,072) depending on the produce, land type and productivity. This valuation was assessed in 2008; hence Enerjisa has increased the prices per decare at an annual rate of 10 percent to bring the values to 2011 prices.

#### 4.3.2. Valuation Methodology for Trees

For valuation of fruit or fruitless trees, the age of each tree is considered in calculating the present value of income to be generated from it based on market values of produce (including timber) expected from the trees for the rest of their lives if they were not cut as a result of the Project.

#### 4.4. SITUATIONS AND RELATED STRATEGIES FOR ACQUISITION OF LANDS

Enerjisa has established a team for the land acquisition process including one representative from each of the following teams: Survey and Expropriation, Financial Affairs and Construction. Enerjisa paid on the valuation for the affected assets compared with the values calculated by the independent agency. The values determined by the agency are used as the primary reference point for the negotiation process. Following national legislation and IFC's international standards, different strategies have been adopted for acquisition of these lands. These strategies are summarized in the Figure 4-2.

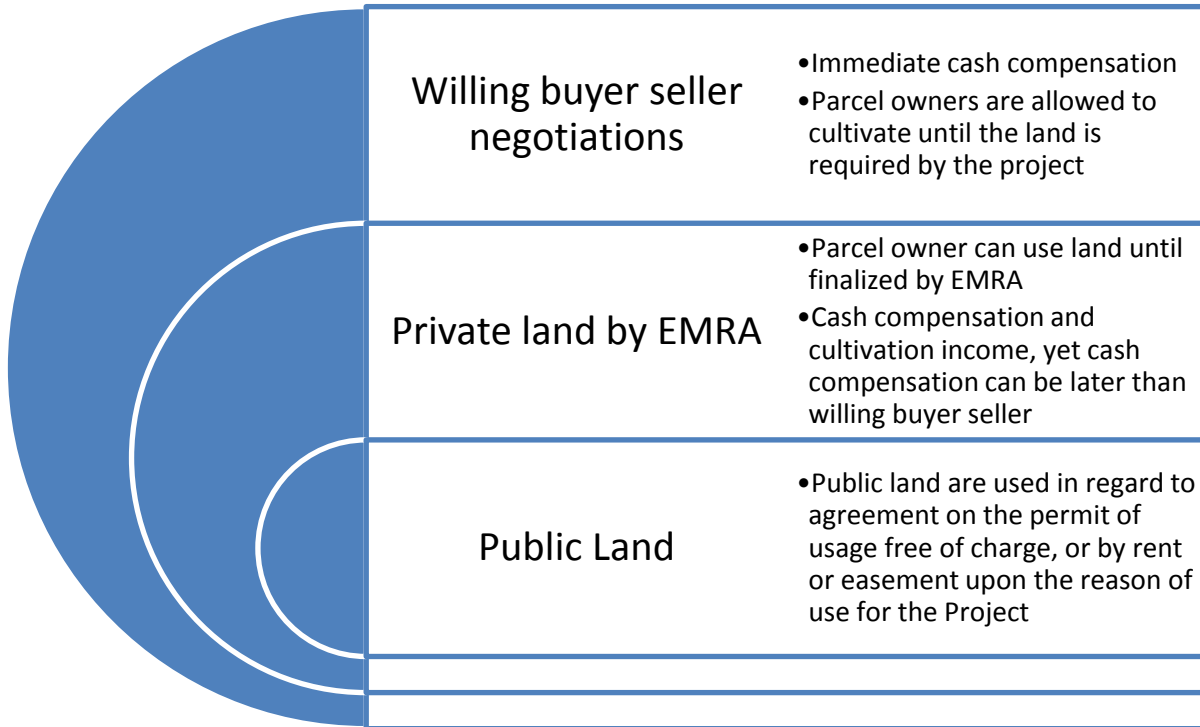
K = Value

R = Net income (GPV – production cost)

f = Capitalization rate (a type of risk related to the capital invested in agricultural land)

<sup>48</sup> As capitalization interest rate is calculated based on current market prices in the region where expropriation/land acquisition is to be done, this rate gives the full replacement cost of the agricultural lands to be purchased (Yusufeli Dam and HEPP Project RAP, 2006, Chapter 4, p.7).

Figure 4.2: Strategies for Acquisitions



**4.5. ROLES AND RESPONSIBILITIES FOR LAND ACQUISITION AND COMPENSATION**

The land/asset appraisal was conducted by HAPA as an independent consulting company recruited by Enerjisa. HAPA valued privately-owned lands located surrounding villages of the Project. Appraisal of immovable assets was conducted on the basis of the following principles:

- Land is classified based on its physical, and agricultural characteristics (i.e. clay soil, agricultural soil, dry soil etc);
- Value of existing crops and trees are determined;
- The data collected during valuation process is kept in a standard format and photographs of all affected assets are kept in file; and
- All transaction costs are paid by Enerjisa.

Enerjisa Land Acquisition Team consists of members from the Survey and Expropriation Team, a financial expert and one person from the construction site (usually the site manager or the administrative officer who also acts as the community liaison).

The roles and responsibilities for the Land Acquisition team are as follows:

- Land Acquisition Team conducted disclosure meetings, informing the public first about the project and the project affected areas. Then the valuation methods and the amount each affected person was to receive under this method were explained to PAPs particularly if people had concerns regarding the Project or the valuation method. The contact numbers of the team and construction site were also provided in case they need to be contacted after these meetings;
- These meetings were usually carried out over several visits to ensure everybody was contacted and informed;
- Depending on the concerns of the land owners, an additional trip to the site was conducted for revising the determined values of the assets and investigating both requests and objections of the titleholders;
- All the valuation results and outcomes of disclosure meetings were considered in an internal executive meeting;
- Measures were taken to ensure that all land owners were treated in the same manner and their land valuation was consistent and equitable. If a modification / revision in the prices or valuation method becomes necessary, Enerjisa made sure that it was applied to every land owner;
- In cases where the affected part of the parcel was larger than the remaining part and where agricultural production would no longer sustain the household or allow effective/profitable cultivation, the entire plot was purchased;
- The final offers on compensation for the lands to be sold were calculated and disclosed to the land owners through face-to-face interviews; and
- Once an agreement was reached, a bank account was established in the name of each land owner (all costs were covered by Enerjisa), the purchase price was transferred to the account. Then, the land owner was taken to "Title Deed Office" to finalize land deed transfer formalities. All official expenses for the land deed transfer were also covered by Enerjisa as well as the transportation, refreshments and accommodation when necessary. Moreover, costs of taking photocopy and photographs were also paid by Enerjisa for the people whose lands were registered. Due to the fact that cadastral works of these villages were finalized recently, title deed registration was done by Enerjisa and all costs (such as cadastral fees, tax returns) were also paid by Enerjisa. After registration and transfer works, land prices were paid to private owners' bank accounts and the deeds were given and registered to Enerjisa.

## CHAPTER 5: PROJECT BENEFITS AND INCOME RESTORATION

Potential benefits and adverse impacts of the Project and the measures that can be taken in order to mitigate these impacts are discussed in detail in this chapter.

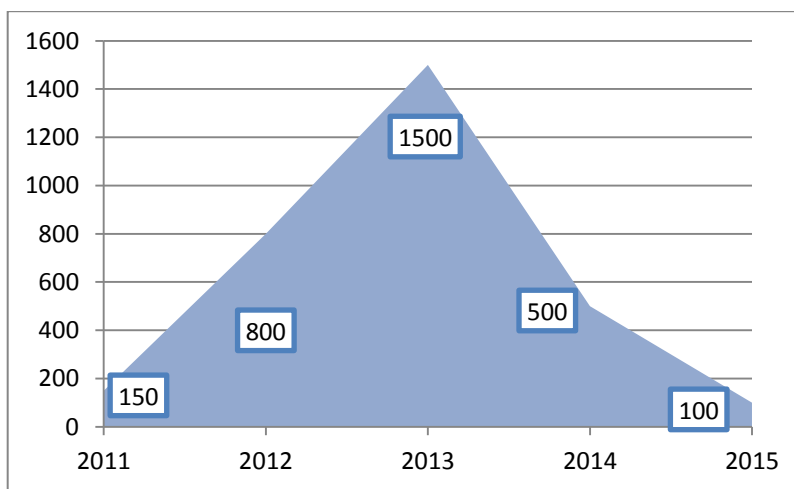
### 5.1 BENEFITS OF THE PROJECT

It is expected that TPP Project which will be carried out in the villages of Kayarcik, Yesilova, Yamanli, Taspinar and Pinarlar will have direct positive impact on the project affected areas. These benefits can be employment opportunities, training opportunities, cash money for the local people, improvement of physical and social infrastructure and revival in the local economy. While the sum of cash money to be received by the landowners whose lands are to be acquired will provide a short-term benefit for them, other benefits listed will be experienced in the medium term since they will spread over the entire construction process. These potential benefits are discussed below.

#### 5.1.1. Work Opportunities for the Local People

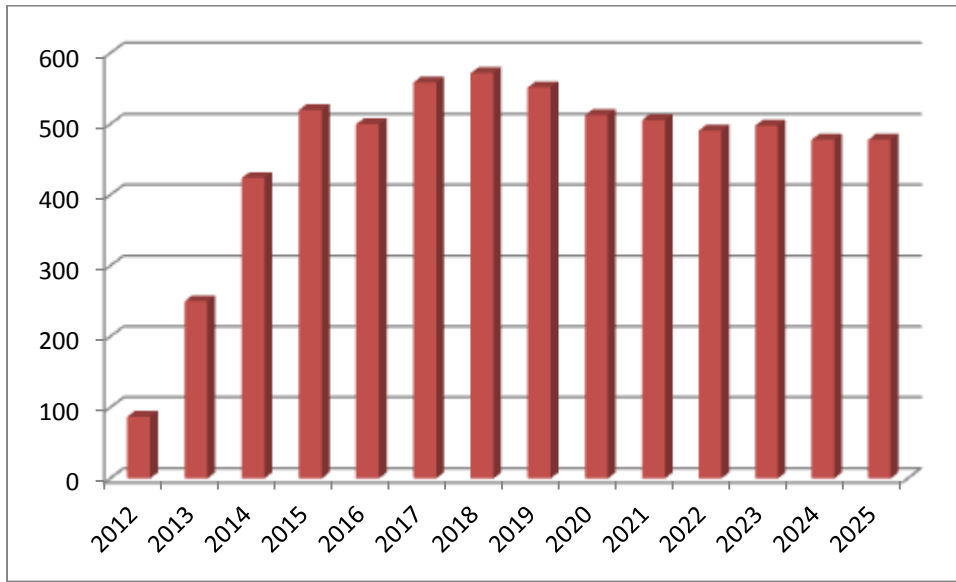
Economic opportunities and job creation are the most important benefits of the Project during the implementation period. All of the villages in the Project area suffer from lack of employment opportunities. At the meetings with village headman, the first expectation from the Project was to provide job opportunities for project affected villages. During public meetings, employment was the most voiced request from the Project. The preparatory works for the construction of the power plant area commenced in August 2011 and during the set up phase only a small number of skilled personnel were required. Enerjisa staff is currently staying in a residence in Tufanbeyli because the lodgings at the construction site are not built yet. Once the Project gains momentum, it is expected to employ 1,500 people by 2013 at the construction area, and 500 people by 2015 at the mine area (Figures 5.1 and 5.2). The job opportunities created by the Project is expected to surpass the existing potential job force in the area, and the region is expected to receive migration from surrounding areas.

Figure 5.1: Employment Opportunities in the Power Plant Construction Area (Number of People Employed)



Source: Enerjisa

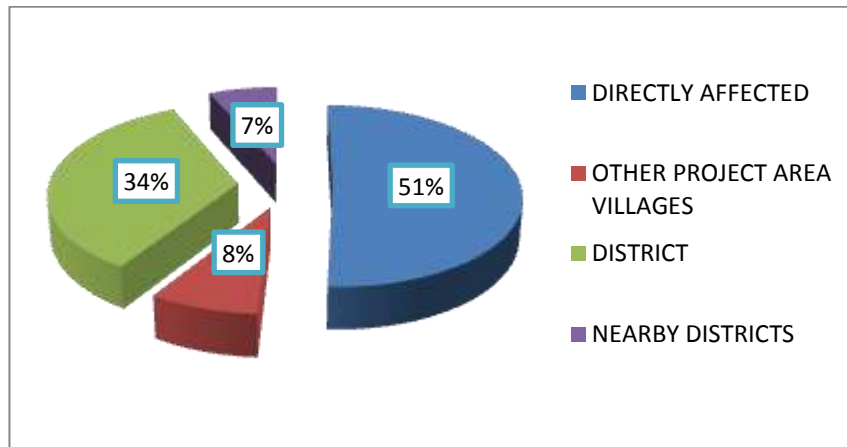
Figure 5.2: Planned Employment Opportunities in the Mine Area (Number of People)



Source: Enerjisa

61 workers are currently employed at the Project site at the subcontractors. The distribution of the workforce illustrates that around half of the current labour force is recruited from directly affected populations (Figure 5.3). All of the employees are hired from the region.

Figure 5.3 Distribution of workforce (% employed)



Source: Enerjisa 2011

One of the concerns on employment opportunities in the construction site is the lack of skilled labour force. Even though there are young available labour force in the area, majority of them are unskilled. The project will require especially skilled construction workers. Therefore, Enerjisa is planning to start certified training programs in order to create a skilled labour force in the Project area. The possible training program will be primarily on machine operators which might be determined with the collaboration of the concerning local

authorities at Tufanbeyli district. It is critical to give preferential treatment to those who have been certified locally over the migrant workforce; however, it primarily depends on the needs of subcontractors and capability of the certified local work force.

Furthermore, *Enerjisa is going to ensure that locals with certificates will get top priority in recruitment.* In order to achieve this, Enerjisa is going to collaborate with the village headmen and Tufanbeyli Directorate of Public Education to create a database of the existing skilled workforce in the villages. There are a limited number of skilled certified labour forces in the Project area such as machine operators. It is vital to assess the local know how and capacity. Upon receiving the lists of skilled labour force from the village headman, Enerjisa is going to share the available local workforce with the contractors and will encourage the contractors to employ the Project affected skilled labour force in the project area. Enerjisa has a binding contract with the Project main contractor that outlines the requirements for Project employment. By signing the contract and its one of the annexes; Environment and Social Statement of Requirements, the contractors acknowledge Enerjisa's emphasis on utilizing local labour force in the Project<sup>49</sup>.

Work opportunities are not only limited to employment at the construction area. In nearby villages, there are some active cooperatives dealing with for irrigation, transportation (truck association), and services and development which may take opportunity to generate income through providing some services needed in the construction. However, this opportunity depends on appropriateness of the cooperatives with regards to meeting requirements of the contractors. The survey revealed that the individual entrepreneurial skill is very limited in the area; however, there is a reluctance to invest in an area where there is no prior experience. The Project area is predominantly agrarian and the only job majority of the population have vast knowledge is farming. Instead of focusing on individual skills, through their cooperatives, the villagers would like to take part in the employment opportunities in transportation services and services sector. Enerjisa is advising the village headmen on the technical requirements for trucks to be used in the mine area or somewhere else needed. The existing cooperatives of Kayarcik village on transportation and services can be utilized to meet the construction material needs and trucks can be supplied locally for the construction area, if they satisfy the requirements of the contractors with regard to health and safety regulations. It is known the essential of nourishing the local cooperatives and advising them on apt investment strategies. Related to that, Enerjisa is planning to give support to these cooperatives for capacity building. The cooperatives could be instrumental in paving the way for local economic development of the Project area.

### **5.1.2. Improvements in Physical Infrastructure and Roads**

Enerjisa invests heavily on improving the physical infrastructure in the Project area. For TPP Project, Enerjisa is going to build a new road to by-pass the town of Taspinar. The newly built and expanded road will be used to access the Project construction sites. In addition to that, during the meetings with village headmen, they provided urgent items that could be addressed by Enerjisa. These are as follows:

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<sup>49</sup> Enerjisa has "Environmental and Social Statement of Requirements" that discusses in detail the procedures the Contractor needs to follow in environmental and social issues. The contractor hence is responsible for giving priority to semi-skilled or unskilled local labour force.

- **Roads:** At Kayarcik village, Enerjisa will build an access path to the grazing grounds provided that Kayarcik village has gained the legal land titles for the road<sup>50</sup>. At present, the villagers walk 8 km to the grazing grounds. The grounds are well known for their nurturing fodder, due to the long commute, the villagers cannot utilize the grounds efficiently. Building an access path would also support the local livestock production. As the villagers will have enough space to expand their livestock during summer months, they could increase the number of livestock. Enhanced livestock production would increase the household incomes significantly. Inter-village roads in Yamanli, Kayarcik and Yesilova villages will also be improved to boost the living standards of the project affected households.
- **Waste collection and disposal:** All of the project affected villages suffer from lack of a proper waste disposal system. Uncultivated lands at the entrance or exit of the villages are being used as open dumping grounds by all the villagers. Enerjisa is going to collaborate with the village headmen and local authorities in Tufanbeyli district to devise an apt solution for garbage disposal. Related to that, Enerjisa is planning to purchase waste bins for the project affected villages. Proper waste collection will be a critical contributor for sound public health.
- **Irrigation:** The land acquired for the Project is naturally irrigated by utilizing the river flow. However, the remaining land for Kayarcik, Yesilova and Yamanli villages is dry. There is a vast income difference from cultivating dry land versus irrigated land. Enerjisa is going to analyse drip irrigation opportunities for intensive farming in the above three villages in order to avoid income loss due to land loss.
- **Public communal facilities:** In the Project area the villages lack children’s playgrounds or community rooms/libraries/room for village headman. Enerjisa is going to collaborate with the village headman to prioritize the urgent communal infrastructural needs.
- **Water supply:** Taspinar village needs a borehole for drinking water, and watering the livestock. Enerjisa is going to drill a borehole to meet the village’s clean water demands.

### 5.1.3. Enhancement of Schools and Support for Education

Enerjisa’s Corporate Social Responsibility (CSR) Department gives priority to education related social investments in any project area. The school facilities in the Project area are outdated. Kayarcik village headman has renovated the old school externally. The village has designated a new site; they would like to have a new school that could accommodate years 1-8 in a single building. Enerjisa is exploring the possibilities for building new schools in Yamanli and Kayarcik villages.



<sup>50</sup> Enerjisa is willing to construct a road, provided that Kayarcik village acquires the land required for the access road.



- In 2011 Enerjisa has distributed school bags in the project affected villages and vicinity covering all of the students in Yamanlı, Kayarcık, Kirazlıyurt, Pınarlar and Bozgüney Primary schools.
- Enerjisa distributed school uniforms to directly affected villages, Yamanli and Kayarcik villages<sup>51</sup>
- Enerjisa purchased winter coats for all of the students in Yamanli and Kayarcik schools
- Enerjisa donated photocopiers to Yamanli and Kayarcik schools.



#### 5.1.4. Support for Local Economy

The Project will provide job opportunity for nearly 2,000 people<sup>52</sup> at the peak time of the construction for the Project. There will be an increased demand for local produce and local services. These services will range from technical machinery components, tire repairs to restaurants, cleaning and maintenance. The area is expected to develop at a fast pace in the upcoming years. Livestock production is not efficiently implemented in the Project area. The region will be expected to provide milk, cheese and yogurt for the construction area. Especially yogurt is used as a staple food item in construction areas. If local dairy produce potential is sufficient for establishing a sustainable dairy processing plant, Enerjisa will be willing to support the local efforts. The Tufanbeyli Power Plant is the first large scale investment ever implemented in Tufanbeyli. Therefore, the economic revival in the project area will be immense.

Furthermore, any economic boom in the area might allow opportunities for local cooperatives to revive and take part in entrepreneurial activities. The demand from the construction sites for trucks and transportation services has already caught the attention of villagers and they are willing to invest in resources and participate in these sectors. The demand in services sector such as cleaning and cooking, is expected to employ especially women from the project area which will increase women's income and support women's participation in workforce. All these job opportunities can be provided for the local people if health and safety regulations can be fulfilled, and appropriate labour force is available.

#### 5.1.5. Support for Local Community

Enerjisa has been the key sponsor for the Tufanbeyli Festival. Through supporting community wide activities, Enerjisa is nurturing the cultural activities in the area.

<sup>51</sup> Yesilova village sends their school children to Yamanli via mobile education program; therefore students in Yesilova were also included.

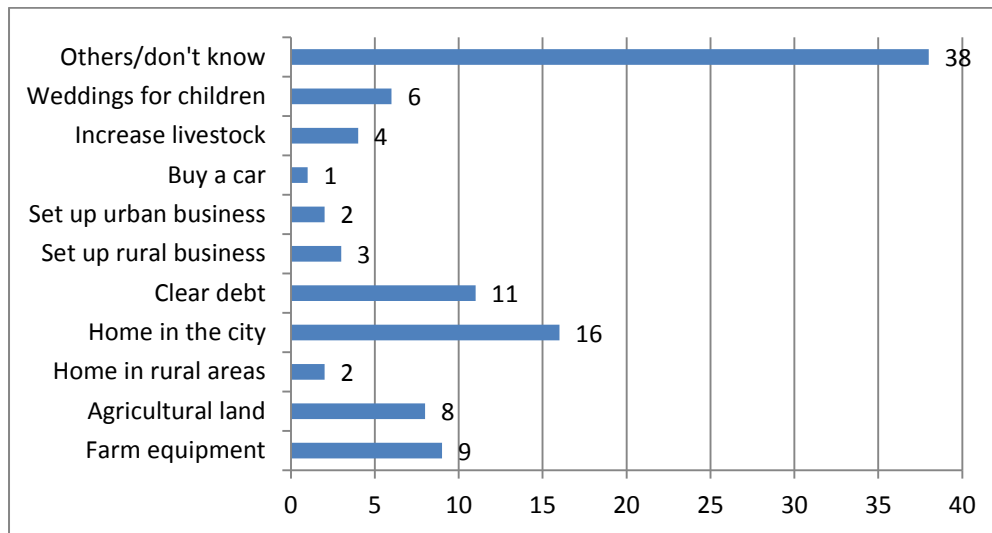
<sup>52</sup> 1,500 of them will be recruited in the power plant area while 500 in the mine area. Majority of these 2000 people to be employed for the Project will be the outcomers; whereas only small part of it will be locally employed.

### 5.1.6. Distribution of Money

One of the benefits of the Project is going to be access to large sums of cash due to land acquisitions. The Project area engages in active agricultural farming. Those that have large scale irrigated land generate high cash incomes annually. However, those households with dry land or limited land size have low income levels and do not have a regular cash income source. The acquisitions completed for the Project allows the households to make investments that they could not have done so previously due to limited cash flow.

The households were asked how they would like to spend the income from land sales. Majority of the households do not have a concrete plan on what they would like to do with the compensation money. For households that have received higher amounts of compensation due to land size, there are a number of investment alternatives such as purchasing real estate in nearby towns or cities, buying land nearby, increasing livestock or establishing green houses for intensive farming. However, for households that share the compensations with a high number of shareholders, investment opportunities are limited. According to the results of the survey, for those that can afford to do so, purchasing a house in an urban setting is the first investment option. It is followed by clearing existing debts. Investments in rural areas are predominantly buying land in a nearby area, purchasing agricultural equipment and increasing the size of the livestock (Figure 5.4).

Figure 5.4: How would you spend compensation money? (% HH)



Source: HH Survey 2011

It is important to inform the project affected households on how to invest their money in an area that would bring an annual return similar to their lost land. Once the households gain cash, the first response is to spend it. Household investment alternatives depend on how much cash the households gain for investment. It is important that households focus on at least two investment items in order to hedge possible losses due to a poor agricultural season, or illness with livestock. Any income lower than 10,000 TL (\$5,555) would not produce a fruitful investment expect for a minor investment in livestock or clearing off existing debt. The households

that gain between 10,000- 50,000 (\$5,555-\$27,800) could invest in increasing their livestock capacity, building a tree orchard, or buying additional plot in vicinity depending on the size of the plot. The households that gain between 50,000 TL-100,000 TL (\$27,800- \$55,555) would have the opportunity to invest in wider sectors, including transportation, purchasing land or agricultural equipment for agriculture and boosting livestock size. Any households that earn 100,000 TL (\$55,555) and above could invest in land replacement, if they could find sizable land, real estate- for a regular rental income-, increase livestock capacity, and transportation. Households will be guided on an array of investments and land replacement options in the project area to avoid the risk of falling into poverty trap.

## **5.2. IMPACTS OF THE PROJECT AND APPROPRIATE MITIGATION MEASURES**

The TPP Project does not entail any physical resettlement. The land acquisitions are ongoing and majority of the land acquisitions will follow mutual agreement strategy. Nevertheless, the investment scale is the largest in Tufanbeyli region and a project of this size does have potential adverse impacts. Below is the discussion of the potential negative impacts and measures to mitigate these impacts.

### **5.2.1. Loss of Land and Income Restoration**

The Project area is dependent on agriculture. The loss of land was seen as the Project's greatest negative impact. The land utilized by villagers is not only plane land, but is also irrigated. The crops cultivated are high cash income generating products such as sugar beet, potatoes and beans. The villages have land both in irrigated areas and dry areas, however, the villagers plant predominantly the irrigated areas and do not fully utilize the dry land because incomes derived from dry land is limited. The land acquired for the Project area is fully irrigated leaving the villagers with only dry land to cultivate. The loss of fertile and high income generating land is the prime adverse impact of the Project. However, there are strategies to overcome this adverse effect and retain the existing income levels from alternative sources via apt compensation schemes.

Yamanli village is losing almost all of its arable land for the project (Table 5.1). The land lost will be used for the mining grounds and once the all the coal is exploited it is expected to be recovered as arable land once again. However, the time frame for reclaiming the arable land is yet to be scheduled and titles for re-ownership would be problematic as the titles are passed to the State or Enerjisa depending on the expropriation and acquisition procedures. Therefore, restoration of income for Yamanli village cannot be founded on use of reclaimed land as an additional income source. Due to proximity of the village to mine site, it is expected that dust from the mine works which could lead to a decrease in agricultural productivity is a potential impact of the Project. In addition, heavy traffic of trucks on roads nearby villages may lead to the same impact, as well. Therefore, income restoration strategies for primarily Yamanli village and the others, in any, should be built on alternative economic opportunities such as livestock production. A second strategy could focus on purchasing land in nearby villages to compensate for the lost land. It is evident that the total size of the land cannot be replaced as irrigated land of such high scale is not available in the region. Consequently, more intensive farming techniques can be introduced in the newly acquired land to compensate for the lost land. Agricultural production could be shifted from crop cultivation to establishing apple tree orchards, and fruit production.

Table 5.1 Land Lost due to project (In Hectares)

Village	Total mean land ownership	Mean Land suitable for cultivation	Mean Land lost	Mean Land remaining for cultivation	% Land lost
Kayarcik	5.683	5.605	2.724	2.703	49%
Yesilova	7.609	7.53	3.262	3.084	43%
Taspinar	10.205	10.205	4.695	2.773	46%
Yamanli	7.569	7.225	6.547	0.89	91%
<b>Overall</b>	<b>6.566</b>	<b>6.436</b>	<b>3.686</b>	<b>2.386</b>	<b>57%</b>

Source: HH Survey 2011

On average almost half of the project affected households lose more than half of their land. Only 5 percent of the overall households lose less than 10 percent of their total land holdings (Table 5.2).

Table 5.2 : Loss of Land for All Project Affected Households

Distribution of lost land	Loss in Agricultural land	
	Number of HH	(%)
Those that have lost more than 50% of their land	127	51,4
Those that have lost 31%- 49%	58	23,5
Those that have lost 11%- 31%	46	18,6
Those that have lost less than 10 percent	12	4,8
<b>Total</b>	<b>243</b>	<b>100</b>

Source: HH Survey 2011

Kayarcik village is also losing half of its total land for the Project area. The remaining land is dry. Likewise, Yesilova is losing its vital land for production. Nevertheless, both of the villages have spare dry land that they had not utilized previously. Through an irrigation cooperative and support from Enerjisa in collaboration with local authorities, dry land could be irrigated. Throughout the public consultations, majority of the households agreed that if their dry land is irrigated, they would not lose significant income. However, any other scheme would destroy their existing income sources. Therefore it is essential to analyse the remaining land, and devise an irrigation strategy in line with the local development agencies, District Agricultural Directorship and Village Support (KOYDES) agencies.

Another outcome of the survey is to show that land ownership and inheritance has caused *small scale land ownership*. Even though some of the households own more than one parcel, because the parcels are shared, land ownerships are intertwined. Nevertheless, some households used to cultivate the whole land belonging to the family because the family members had migrated and abandoned the land (see box 1). The ones that were

*Box 1*

*I was managing the land belonging to 5 families cultivating 250 decares. They all sold their share, and I am left with my part. The amount I am compensated for is not enough to make ends meet. I am worse off...*

*Villager Kayarcik Village*

left in the village were able to cultivate the land without any formal payments (cash or in-kind) to any other family members. The sale of the land (or expropriation) is leading to a double burden for those households that are affected by a vast discrepancy between the size of cultivated land and actual owned land. In order to avoid economic displacement, these households need to be identified and compensated according to the IFC Performance 5 criterion<sup>53</sup>.

In order to fully explore the income loss due to sale of land, the LRP combined the data from the household questionnaires with the actual payment data from Enerjisa. The household data analysed income generated per m<sup>2</sup> from agricultural land according to the villages<sup>54</sup>. In order to restore income, the household compensations should be able to generate an income of similar value or greater. If the value of the compensation is less than the income generated annually from land, the households would not be able to recover their lost income. In such cases, additional compensation schemes should be put in practice. These schemes should be in line with the overall income restoration strategies and development goals of the project affected villages. Targeted interventions must be devised to for households that are vulnerable. Enerjisa has included in the LRP budget spare section for targeted interventions to ensure sound income recovery for the households and to minimize any potential adverse impact.

In order to understand if the PAHs can restore income, it is essential to understand annual income generated from 1 m<sup>2</sup> of land. If the households are to restore income, they should be able to derive the same level of economic benefit from their investments in order to sustain their livelihood. This theory has assumptions that PAHs are going to invest their money using sound investment tools. In practice they may prefer to spend it on daily needs or cover their existing debts. Such actions would deprive them of financial resources for sustained

<sup>53</sup> IFC Performance Standard 5 “This Performance Standard applies to physical and/or economic displacement resulting from the following types of land-related transactions:

- Land rights or land use rights acquired through expropriation or other compulsory procedures in accordance with the legal system of the host country;
- Land rights or land use rights acquired through negotiated settlements with property owners or those with legal rights to the land if failure to reach settlement would have resulted in expropriation or other compulsory procedures;<sup>6</sup>
- Project situations where involuntary restrictions on land use and access to natural resources cause a community or groups within a community to lose access to resource usage where they have traditional or recognizable usage rights;<sup>7</sup>
- Certain project situations requiring evictions of people occupying land without formal, traditional, or recognizable usage rights; or.....

While some people do not have rights over the land they occupy, *this Performance Standard requires that non-land assets be retained, replaced, or compensated for; relocation take place with security of tenure; and lost livelihoods be restored.*”

<sup>54</sup> The income restoration depicts income gained by the household from cultivating 1 m<sup>2</sup> of land annually. The household data had in detailed asked questions about agricultural production and land lost by the project. The analysis illustrates net income from land production.

income. According to the income restoration table (Table 5.3), income could be barely restored for Taspınar village if all of the compensation is deposited in a bank account with an annual 10 percent yield. However, in order to restore income in Kayarcık, Yesilova and Yamanlı villages further resources need to be deployed. These resources could be financial credits for intensive farming, livestock production, and transportation services. Another way to restore income is to increase the land value used for compensation. The willing buyer seller negotiation with Yesilova is ongoing and m<sup>2</sup> prices offered for Yesilova is expected to be higher due to high income generation. Enerjisa will focus on land productivity while heading the negotiations as with current land valuations it is not possible for the households to restore their income. Moreover, because land is segregated, average compensation per household is less than 40,000TL (\$22,222) in these three villages. On average compensation received in Kayarcık village is 13,914TL (\$7,730). It is impossible for the households to make a sound investment and create an annual return with such small compensation amounts. Considering households in Yamanlı are losing all of their arable land, it seems that 38,000TL (\$21,111) will not be adequate to replace the existing land; but on the other hand there is an opportunity for replacing their lands from the surrounding settlements where majority of population have already migrated and left their lands. So, there might be a cheaper land market in the region, contrary to expectations. If this is not the case, it seems that the compensations will not be sufficient for sound investments. Even though compensation figures have been calculated by third parties and they are above the existing market values, due to fragmented land ownership, multiple heirs to land, the received amounts are not enough to sustain a decent a living. IFC Performance 5 para 28 states that

“In addition to compensation for lost assets, if any, as required under paragraph 27, economically displaced persons whose livelihoods or income levels are adversely affected will also be provided opportunities to improve, or at least restore, their means of income-earning capacity, production levels, and standards of living.

- For persons whose livelihoods are land-based, replacement land that has a combination of productive potential, locational advantages, and other factors at least equivalent to that being lost should be offered as a matter of priority.
- For persons whose livelihoods are natural resource-based and where project-related restrictions on access envisaged in paragraph 5 apply, implementation of measures will be made to either allow continued access to affected resources or provide access to alternative resources with equivalent livelihood-earning potential and accessibility. Where appropriate, benefits and compensation associated with natural resource usage may be collective in nature rather than directly oriented towards individuals or households.
- If circumstances prevent the client from providing land or similar resources as described above, alternative income earning opportunities may be provided, such as credit facilities, training, cash, or employment opportunities. Cash compensation alone, however, is frequently insufficient to restore livelihoods.”

Therefore, Enerjisa is focusing on developing alternative schemes to boost the local income such as employment, trainings and support to agriculture and livestock production.

Table 5.3: Income lost due to project

	Kayarcik	Yesilova	Taspinar	Yamanli
<b>calculated income lost</b>	1.09	1.12	0.52	0.75
<b>Average m<sup>2</sup> price paid in TL</b>	6.51	6.51	6.06	6.35
<b>Average m<sup>2</sup> land* lost</b>	2,137	2,710	15,455	6,074
<b>% income lost to price paid</b>	17%	17%	9%	12%
<b>Cash compensation TL (average)</b>	13,914	17,640	93,690	38,563
<b>*Land size and compensation data from Enerjisa</b>				

### 5.2.2. Health

The project affected households have voiced their concerns about the health impact of the Project. The utmost benefit of rural lifestyle is access to clean air, natural resources and good health. Health and environment are interlinked. The project affected populations do worry about the potential adverse health impact of the project. In order to reassure that the project is environmentally friendly and will not lead to air pollution and hence health related issues, Enerjisa is planning to monitor the public health regularly. Enerjisa is going to organize a health checks as a baseline for the project affected communities to ensure its commitment to a health and wellbeing before the operation phase of the Plant and then, upon the expert views, regular health check-ups will be planned.

### 5.2.3. Air Pollution and Environment

The project will be environmentally friendly. Even though coal mines will be utilized, the gas emissions are kept at a minimum, and will be monitored regularly throughout the Project. The results of the monitoring for environmental impact, air pollution analysis, land analysis and impact on crops should be shared with the overall public. The results are going to be disseminated to the public, in the villages where the village headman have office; they will be publicized on the bulletin board. Any complaints rising from pollution will be kept under the project grievances mechanisms and will be dealt promptly. Enerjisa is committed to clean energy and environmental monitoring. The public should be informed about the regular assessments Enerjisa is conducting in order to depict changes in the level of pollution.

### 5.2.4. Disturbance to daily life, damages to crops and roads

Living close to a construction site will affect the daily life of the PAPs even though Enerjisa commits to minimal disturbance. Enerjisa ensures environmental health and safety and places utmost importance on the well-being of the PAPs. Hence, Enerjisa will try to keep the disruptions to daily village life to a minimum. However, in cases where there are damages to village infrastructure such as roads, Enerjisa will ensure that damages are compensated. If it is roads, they will be repaired. If crops are damaged due to high levels of dust, the lost crops will also be compensated either by Enerjisa or contractor. The LRP budget includes a section for dust



compensation. The mine area is located in close proximity to Yamanli village. The closest house is 300m away from the mine. Enerjisa is going to monitor the dust impact of the mine on these households and is going to compensate them accordingly. If the households do get damaged due to works in the mine, Enerjisa may consider compensating the households for structural damage and relocating the closest buildings. Enerjisa staffs on the field are very approachable and are willing to compensate for lost by taking prompt measurements.

**5.3. ACTION PLAN TO MITIGATE ADVERSE IMPACTS:**

Below is the summary of the outlined recommendations to avoid potential adverse impacts.

Issues	Actions	Goal
Lack of skilled labour force	<ul style="list-style-type: none"> <li>- Enerjisa is planning to introduce certified training programs on a range of skills with collaboration with local authorities, such as machine operators.</li> <li>- Enerjisa will be preparing a schedule for trainings as soon as the training areas have been assessed according to local skill sets, and demands for specialization areas.</li> </ul> <p><b>ACTIVITY:</b> Certified training course for machine operators etc.</p>	To create a skilled labour force in the local communities nearby the Project area that could be locally employed in any construction related projects in the future.
Lack of employment opportunities in the project area	<ul style="list-style-type: none"> <li>- The constructions area will offer work opportunities for 1,500 people at its peak time, and mine area is expected to employ 500 people by 2014. However, the area lacks skilled labour, and the region will attract migrant skilled workforce to meet the skilled labour force demand during construction. Due to existing lack of skilled labour, the local impact of the project for employment creation is expected to be limited. Despite that, construction contractor shall be encouraged by Enerjisa to meet the unskilled labour needs from PAPs.</li> </ul> <p><b>ACTIVITY:</b> Identification of local workforce to be employed for the construction works according to their skill levels through village headmen.</p>	Offer employment opportunities in the region for unskilled labour force and skilled labour force, if available.
Dormant economy with no economic opportunities for development	<ul style="list-style-type: none"> <li>- Enerjisa will provide technical guidance and support for capacity building to existing cooperatives in the Project area should they request such support. There are already two existing cooperatives in Kayarcik village on transportation and services</li> </ul>	Foster entrepreneurial activities and pave the way to encourage income generation from non-agricultural sectors



Issues	Actions	Goal
	<p>sectors. These two cooperatives could be instrumental in creating employment opportunities for all PAPs to involve in services sector such as food, accommodation and cleaning; and transportation sector.</p> <ul style="list-style-type: none"> <li>- Enerjisa is going to share with the local transportation cooperative the corporate requirements for truck specifications if the cooperative decides to invest in the proper equipment for the project.</li> <li>- Additional services will be required that will attract a range of investors of small and medium size enterprises to support the construction such as technical machinery components and repairs.</li> <li>- During the construction phase of the Project, population of the Project area is expected employ 1500 people. Therefore, there will be an increased demand for garden products, potatoes, dairy products and fruits which might be met from local growers and producers. There will be sizable market to sell the produce for the local producers.</li> </ul> <p><b>ACTIVITY:</b></p> <ol style="list-style-type: none"> <li>1- Encouraging contractor to give priority to procure some food need and services from the local communities, if appropriate.</li> <li>2- Providing consultancy service for improving technical and financial capacity of the existing cooperatives</li> </ol>	<p>which is unfamiliar to the PAPs.</p>
<p><b>Loss of land, and loss of agricultural income</b></p>	<ul style="list-style-type: none"> <li>- Enerjisa is going to identify land based vulnerable groups. LRP has pinpointed three types of land based vulnerable. <ul style="list-style-type: none"> <li>o The first group is the households that have lost all or most of their arable land and had to share the compensation with a large group of titleholders, even though in practice they were the only cultivators.</li> <li>o The second group is the households that lose all or most of their arable and there is no additional land to replace their land loss.</li> <li>o The third group is those whose names were not registered in the title deeds. These</li> </ul> </li> </ul>	<p>To minimize the adverse impact of land loss, and to create alternative mechanism to ensure sustainable agricultural income for PAPs.</p>

Issues	Actions	Goal
	<p>households do not have the legal titles and therefore are “landless” officially, even though they cultivate the land and their income is based on agriculture.</p> <ul style="list-style-type: none"> <li>○ Enerjisa is planning to identify these groups and create a database to assess their exact losses and devise mechanism to compensate for their losses and restoration of their livelihoods according to IFC Performance 5 during monitoring process.</li> <li>- Enerjisa is also planning to hold information sessions on alternative income generation activities in the Project area. Enerjisa is also planning to arrange trainings with experts on animal husbandry on subjects such as “how to reach efficiency in livestock production” and “accessing markets for livestock products”, with the project affected villagers as well as on crop production, greenhouse production, and intensive farming.</li> <li>- Enerjisa is also planning to provide advice on the availability of arable land in the Project vicinity.</li> </ul> <p><b>ACTIVITY:</b></p> <ol style="list-style-type: none"> <li>1- Providing advice on alternative income generation activity (i.e. intensive farming) or improved farming and livestock techniques through trainings with the help of concerning experts</li> <li>2- Providing advice on the availability of arable land in the Project vicinity</li> <li>3- Detail identification of PAPs for assessing the exact losses and devising compensation and income restoration mechanism during monitoring process.</li> </ol>	
<p>Loss of fertile, irrigated land</p>	<ul style="list-style-type: none"> <li>- The land acquiring on the mine area for the Project is naturally irrigated, and the remaining land under PAPs ownership is of lower quality and rain fed only. In order to ensure the PAPs are not adversely affected by decreasing incomes from loss of lucrative agricultural produce, Enerjisa is planning to consult with local authorities on the possibility of using drip irrigation mechanism to facilitate intensive farming techniques. Should there be a local interest, Enerjisa could kick-start a trial</li> </ul>	<p>To assess the local potential for drip irrigation and intensive farming to compensate for the loss of naturally irrigated land to avoid loss of PAPs income.</p>

Issues	Actions	Goal
	<p>program with a couple of farmers who are willing to fulfil the requirements for drip irrigation based intensive farming techniques.</p> <p><b>ACTIVITY:</b></p> <ol style="list-style-type: none"> <li>1. Soil analysis</li> <li>2. Providing advices on alternative irrigation systems and monitoring the implementation in the following 3 years</li> <li>3. Additional support program for a larger number of volunteer affected farmers in the following 2 years after the implementation of trial program, and monitoring these farmers for the following 2 years</li> </ol>	
Livestock production	<ul style="list-style-type: none"> <li>- Enerjisa is planning to open an access path to the grazing grounds of Kayarcik village which will enhance livestock production in the area provided that Kayarcik village acquires the landtitles required for the road.</li> <li>- Enerjisa is going to bring experts to assess the local know how and ability, and address the livestock development professionally.</li> <li>- Establishment of a dairy production facility was a voiced request from all village headmen, Enerjisa is going to devise a strategy to assess the local capacity for milk production and cooperate on assisting foundation dairy production facility should there be local ownership and support.</li> </ul> <p><b>ACTIVITY:</b></p> <ol style="list-style-type: none"> <li>1- Opening an access path to the grazing grounds of Kayarcik village</li> <li>2- Technical support for improving livestock activity</li> <li>3- Technical support for build a strategy to assess the local capacity for milk production and cooperate on assisting foundation dairy production facility</li> </ol>	To devise alternative income generation schemes via support for livestock production.
Lack of knowledge on cash investment	<ul style="list-style-type: none"> <li>- LRP illustrated that majority of Project affected households do not know how they would like to invest their compensation from land acquisitions. Enerjisa is going to arrange public information sessions on investment opportunities and inform the PAPs on alternative investments according to compensation amounts received.</li> </ul> <p><b>ACTIVITY:</b></p>	To advise PAPs on investing cash to gain a return similar to agricultural income from land in order to avoid falling into poverty.

Issues	Actions	Goal
	Arrangement of public information session on investment opportunities	
Discontent due to cash compensations	<ul style="list-style-type: none"> <li>- The power plant area was expropriated by EMRA. The pricing for EMRA was lower than the price scheme negotiated by Enerjisa during willing buyer seller meetings<sup>55</sup>. In order to minimize discontent of the public due to the offered expropriation price, Enerjisa will pay the difference between the land values of EMRA and Enerjisa offered.</li> </ul> <p><b>ACTIVITY:</b> Compensating the difference between the land values of EMRA and Enerjisa.</p>	To assure fair compensation
Poor waste collection and lack of disposal facilities	<ul style="list-style-type: none"> <li>- Enerjisa is planning to purchase waste bins in order to ensure clean and hygienic environment in collaboration with the local municipality responsible for garbage collection and disposal.</li> <li>- Enerjisa is planning to organize awareness raising activities in the project nearby settlements on importance of better garbage collection implementations.</li> </ul> <p><b>ACTIVITY:</b> Purchasing waste bins and organizing awareness raising activity</p>	To support public health
Lack of potable water	<ul style="list-style-type: none"> <li>- Enerjisa is planning to restore the borehole in Taspinar Village in order to improve public access to potable water supply.</li> </ul> <p><b>ACTIVITY:</b> Improvement of the existing borehole to meet water for Taspinar village</p>	To support public health
Noise and dust	<ul style="list-style-type: none"> <li>- Enerjisa ensures that dust levels are kept at minimum by watering the roads and construction areas regularly (See EIA for details). However, in summer, watering alone may not be sufficient for avoiding any possible damage due to dust emission</li> </ul>	To enhance PAPs ownership and satisfaction

<sup>55</sup> The value determined during the Urgent Expropriation Period for the lands are 0.90 TL/m<sup>2</sup>, 2.01 TL/m<sup>2</sup> and 6.15 TL/m<sup>2</sup> respectively whereas Enerjisa compensated the irrigated land up to 6.15TL/m<sup>2</sup>. Some of the lower quality lands received higher compensations, and high quality fertile land received low compensations. EMRA has promised to visit the land, re-evaluate and correct any miscalculations.

Issues	Actions	Goal
	<p>during the construction activities. If any damage on the crops occurs, then it will be compensated by construction contractor or Enerjisa, in line with the national legal requirements.</p> <ul style="list-style-type: none"> <li>- Enerjisa will inform the affected villages before major explosions for the construction site or limestone quarries and monitor the impact of explosions on the households (See EIA for details)</li> </ul> <p><b>ACTIVITY:</b></p> <ol style="list-style-type: none"> <li>1- Compensating crop-based income loss, if any, due to dust during construction phase of the Project</li> <li>2- Regular announcement before major explosion</li> </ol>	
Deterioration of health	<ul style="list-style-type: none"> <li>- Enerjisa will closely monitor public health and will organize a health check-up to ensure its commitment to public health before the operation phase of the Plant and then, upon the expert views, regular health check-ups will be planned.</li> <li>- Enerjisa will clarify with the PAPs any health related concerns they would have, and explain thoroughly that the Project is not expected to cause any adverse health impact due to its latest technology and high environmental standards.</li> </ul> <p><b>ACTIVITY:</b></p> <ol style="list-style-type: none"> <li>1- Organizing a health check-up as baseline data</li> <li>2- Sharing the results of the health check-up</li> </ol>	To support public health
Air pollution and environment	<ul style="list-style-type: none"> <li>- Enerjisa will closely monitor the environmental impact of the project (See EIA for details) and will be transparent during information dissemination.</li> <li>- Results of the air pollution analysis, land analysis and crops will be shared with the public to avoid any misperceptions.</li> </ul> <p><b>ACTIVITY:</b></p> <ol style="list-style-type: none"> <li>1- Air pollution and land analysis</li> <li>2- Regular informing (sharing the results)</li> </ol>	To enlighten public on environmental impact of the project
Fear of safety	<ul style="list-style-type: none"> <li>- The PAPs had shared concerns for safety for living close to construction site. Enerjisa abides for international safety measures and places utmost importance on public safety (See EIA and HSE Plan for details). The construction area is fenced and</li> </ul>	To encourage safe environment

Issues	Actions	Goal
	<p>access is only given to personnel working at the construction.</p> <ul style="list-style-type: none"> <li>- All personnel employed by Enerjisa are required to attend routine safety trainings.</li> </ul> <p><b>ACTIVITY:</b></p> <ol style="list-style-type: none"> <li>1- Fencing the construction area and informing local people on the accessibility rules.</li> <li>2- Safety training for employees undertaken by the subcontractor (See HSE Plan for details).</li> </ol>	
Education	<ul style="list-style-type: none"> <li>- Enerjisa supports education through its CSR policy. Enerjisa will be checking the possibility of constructing new primary schools in Kayarcik and Yamanli villages.</li> <li>- Enerjisa will continue to distribute school bags and support equipment needs of the schools in the Project area and vicinity.</li> </ul> <p><b>ACTIVITY:</b></p> <ol style="list-style-type: none"> <li>1- Supporting (building) new school in Kayarcik &amp; Yamanli</li> <li>2- Distribution of school bags</li> </ol>	To foster education
Community building	<ul style="list-style-type: none"> <li>- Enerjisa values community building and engagement, and therefore has supported Tufanbeyli festival and will continue to support local cultural activities.</li> <li>- Enerjisa will also support establishment of areas that could foster community building such as children’s playgrounds, parks for elderly or libraries depending on the needs of the villages.</li> </ul> <p><b>ACTIVITY:</b></p> <ol style="list-style-type: none"> <li>1- Supporting local cultural activities</li> <li>2- Establishment of communal social areas</li> </ol>	To enhance community building
Inadequate Road Infrastructure	<ul style="list-style-type: none"> <li>- Enerjisa is going to construct a new road to bypass Taspinar village in order to minimize the impact of construction on the village. The new road will reduce the already existing traffic passing through the village.</li> <li>- Should there be any damage to the existing roads; the subcontractor is responsible for road repairs.</li> <li>- Enerjisa is planning to improve the existing road infrastructure between Yamanli, Yesilova and Kayarcik Villages.</li> </ul>	

## CHAPTER 6: PUBLIC CONSULTATIONS AND DISCLOSURE

The Project's potential stakeholders include the affected local people, local public authorities, NGOs, and other representatives of the affected population. Consultation and public disclosure conducted in a transparent manner is an indispensable component of the public involvement process in the preparation and implementation of a LRP.

Enerjisa has launched its public involvement process by providing information to village leaders and other residents, including PAPs. Enerjisa shared information on the outcome of land valuation and met with the villagers both collectively and individually until a consensus was reached. During this process, disclosure meetings with the local authorities, stakeholder consultation meetings and interviews were held.

### 6.1 PUBLIC CONSULTATION

Enerjisa has a Stakeholder Engagement Plan (SEP) (Enerjisa, 2009). This Plan was prepared in 2009 in order to guide the Enerjisa's Project Directorate for each new investment on how to engage all potential stakeholders into project management process in a continuous and constructive manner. Ensuring stakeholder engagement is a requirement of national EIA procedure as well as the requirement of both Equator Principles and IFC Performance Standards. Considering all national and international requirements, Enerjisa have designed this Plan with the aim of;

- Defining all potential stakeholders<sup>56</sup> (e.g. project-affected persons, national and local governmental authorities, CSOs, media, and universities);
- Providing an interactive system that provides potentially impacted communities with appropriate information on the nature of the proposed action (the planned project), receive feedback at a local and national level during the planning, construction, and operation phases;
- Providing opportunities with other project affected groups especially CSOs to voice their opinions about the proposed action throughout the project life cycle; and
- Defining detailed action plans, monitoring and reporting procedures.

To achieve these goals, Enerjisa adhered to the following principles of the consultation processes:

- Written and oral communications in a language understandable to all stakeholders;
- Easy accessibility to both written information and to the consultation process by relevant stakeholders;
- Use of oral or visual methods to explain information to the public; and
- Clear mechanisms to respond to people's concerns, suggestions and grievances.

Thus, Enerjisa ensures transparent and accessible engagement process for everyone through this stakeholder engagement policy.

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<sup>56</sup> Stakeholders of a project were briefly defined as follows in the SEP prepared in 2009: "Persons, groups or institutions that affect or affected by Enerjisa's projects are the primary stakeholders of Enerjisa's Project Directorate."

### 6.1.1 Stakeholder Identification

Primary stakeholders for the TPP Project are grouped as: governmental authorities, local non-governmental organizations (local NGOs) and the PAPs. Each group is discussed in the following sections.

#### 6.1.1.1 Governmental Stakeholders

At different consultation stages, all authorities were visited at national, provincial, district and village level to inform them and to seek feedback.

These authorities can be grouped as governmental authorities and local government authorities for purposes of the LRP and comprise:

Government Authorities:

- Ministry of Environment and Forestry;
- Adana Governorship;
- Adana Special Provincial Administration;
- Adana Provincial Directorate of Agriculture;
- Adana Provincial Directorate of Environment and Forestry;
- Adana Directorate of Culture and Tourism

Local Government Authorities:

- Tufanbeyli Subgovernors
- Tufanbeyli Municipality
- Saimbeyli Directorate of Forestry
- Tufanbeyli Directorates of Agriculture;
- Village headmen of Yamanli, Kayarcik, Yesilova, Pinarlar and Taspinar Villages

#### 6.1.1.2 Local Residents and Communities

People whose assets were affected by the facilities of the Project are the primary stakeholders for all project-related activities (social assessment studies and LRP). From the beginning, locally affected people were involved in the consultation activities through community meetings and/or individual interviews.

Throughout the Project planning and implementation process, the primary stakeholders in the project-affected communities were recognized as those persons/households whose immovable assets were directly affected by the Project.

The number of affected privately-owned parcels in the Project area is 1970. The region has given out migration over the past twenty years. Nevertheless, the population has kept close ties to their village. Majority of the



PAPs live in their villages throughout the year and leave their villages only for seasonal employment. Enerjisa maintains close contact with the PAPs as much as possible.

According to the findings of the field visit, 95 percent of the villagers were informed about the project before the visit. When asked how they first heard about the Project, the majority said they learned about it from the project teams that came to visit them during the land acquisition planning or through word of mouth. Enerjisa has a Project -Office in Tufanbeyli that local people can easily access to get more information about the Project and to express their concerns and expectations. It is located in a central location and accessible to PAPs throughout the day for any inquiries. The office has served as a focal point for information sharing from 1<sup>st</sup> of June 2011. During the site visits, the PAPs shared their eagerness to learn more about the Project; in particular, about the further land acquisition process and land values. Considering this, Enerjisa will regularly engage with the public through community meetings or individual contacts and will also be accessible for any day to day concerns via the local Project office at Tufanbeyli district centre.

#### 6.1.1.3 NGOs, Media and Other Interest Groups

NGOs with an interest in environment, agriculture, animal husbandry or other land-based livelihood issues in Adana Province or nearby districts, villages or affected villages themselves are also potential local stakeholders. Tufanbeyli Chamber of Agriculture is also a stakeholder for assessing the local potential for improved agricultural production. Additionally, media, universities, foundations or associations of the region would be partners of the consultation processes in line with their interest, influence and power.

#### 6.1.1.4 Others

There were also some other institutions relevant to the Project which have been visited at the early stages (during the preliminary consultation and the initial mobilization processes) of the TPP Project. These partners are the Provincial Gendarmerie Command; and the Provincial Directorate of Security.

### 6.1.2 Stakeholder Engagement (Public Participation)

Enerjisa acquired the rights for TPP Project in 2006. From 2006 to date, Enerjisa has led regular visits to the Project site each year for several reasons such as technical studies, hydrogeological studies, land appraisal and acquisition, introducing Enerjisa as the new Project owner and informing local communities on the planned thermal power project in Tufanbeyli, and receiving their concerns about the Project.

**Towards the end of 2006** – The Project was taken over by Enerjisa from the previous licence owner, named as PARK.

**Oct. and Dec. 2006** – Initial site visit of the Project Mine Engineer to Yamanlı and Kayarcık villages as they are the nearest settlements to the mine and power plant areas was held. During this visit, local community were briefly informed about the planned project and Director of the Primary School in Yamanlı Village was also visited to become familiar with the local educational services and their needs so as to plan Enerjisa’s support to education, as well as to introduce Enerjisa and the planned Project.

Similar visit to the Project surrounding settlements was held on December 2006. In addition to that, local branch of Forestry Directorate was also visited and project-related info was given.

**25 Jan 2007** – A site visit of Enerjisa Projects Director Veli Balat, Tufanbeyli Project Mine Engineer Mustafa Yorukoglu and Land Acquisition Team Manager Ömer Özer was held on January 25, 2007 to inform local stakeholders about the Project; and declare the date August 2007 as the planned start date of the Project to the public. This site visit was also appeared at local media (internet-based news portal)<sup>57</sup>. But after this public information, the start date of the construction works for the Project was postponed because the investment decision for TPP Project had not been taken, yet at that time. However, Enerjisa was intent on undertaking this thermal power plant project at Tufanbeyli. Throughout the year of 2007, Enerjisa Project Team made site visits several times in order to inform about the ongoing process of the Project and consult with Tufanbeyli Sub-Governor, Mayor, Gendarmerie Station Commander, Director of Land Registry Local Office, Director of Agriculture Local Office, and headmen of Yamanlı and Kayarcık villages<sup>58</sup>.

**2008** – Even though the investment decision for the Project had not been taken yet, Enerjisa preferred to keep in touch with local community and stakeholders, and carry out some preliminary works at site such as land appraisal and asset inventory on the project-affected lands, pre-evaluation studies for hydrogeological works. While doing this preliminary works, local authorities were regularly visited and update info about the Project was shared with them, and also local communities and village headmen as the major community leaders were informed about the Project and land acquisition procedure as the main concerns of local people by Enerjisa Project Team and its sub-contractors together. During site visits, Enerjisa Project Team preferably stopped by local coffee houses which are common places where male villagers come together to spend their days while talking and/or playing card etc. to give information to the public on the Project and receive their concerns.

On July 02, 2008, Enerjisa conducted meetings with the local government officials, village headmen and villagers that were led by Veli Balat, Enerjisa Project Director, Gerhard Vedam, Verbund representative, and Prof.Koral Goymen from Sabanci University. Then, Enerjisa commissioned Sabanci University to implement a social survey in order to understand the local needs and concerns pertaining to the Project. During the survey, the teams had participatory meetings to understand local social framework and attitudes towards the Thermal Power Plant.

**Jan, Feb, March and May 2009 and 2010**– Throughout the first six months of 2009, Project engineer made many site visits for technical reasons such as pre-evaluation studies for hydrogeological works<sup>59</sup>, and informing local community leaders (village headmen of Yamanli, Kayarcik and Yesilova villages) and

<sup>57</sup> See Annex 3 giving summary of news on local media. To see the news on the local media, please visit this website: <http://www.kenthaber.com/akdeniz/adana/tufanbeyli/Haber/Genel/Normal/tufanbeyliye-termik-santral/14f6cfb0-bd19-4085-bc09-b561acc84fc1>

<sup>58</sup> See Annex 3 giving summary of news on local media. To see the news on the local media, please visit this website: <http://www.kenthaber.com/akdeniz/adana/tufanbeyli/Haber/Genel/Normal/enenjisadan-ziyaret/a9e58ba8-d72e-461f-a8ad-7ca0a3b5dbcf>

<sup>59</sup> For more info and photos on these visits, see Annex 4.

local authorities (including gendarmerie) about the current situation of the Project and receiving concerns of local people about the Project. These visits also continued throughout the year of 2010.

The reason why local authorities were visited more than one time for the same purpose (informing and consulting) was that the authorised persons were frequently changed. The outstanding issues of all these face-to-face interviews held with local authorities; mainly the sub-governor and mayor, and local community leaders were based on potential benefits of the Projects in regard to social, economic, cultural, industrial, and environmental aspects, as well as high unemployment rate at Tufanbeyli. Considering this social concern, Enerjisa has kindly expressed that Enerjisa gave importance to skill development training of local workforce and therefore, planned to give support for training of young unemployed people. Interviews with the Director of Land Registry office at Tufanbeyli were focused on lands to be acquired for the Project; specifically type of land ownership, land register-based problems, and the possible solution to overcome these problems. Moreover, Enerjisa Project Team explained that land owners (producers) will have a chance to continue cultivating their lands until mining works will start, even though their lands were legally acquired for the Project at the early stages of the Project. Furthermore, the Team talked to the Director of Agriculture at Tufanbeyli in order to get detailed information about land use pattern on the lands required for the Project, types of crops, their yields, expenditures and incomes of the producers from these crops on average, types of trees and their values, major problems and difficulties of local farmers and possible handling ways of these difficulties, and policy to be followed without causing conditions of local producers getting worse during land acquisition process, and reinstatement activities such as reclamation, restoration and recreation on the main area. In addition to that, local branch of the Forestry Directorate was contacted so as to get required permits and consult on reclamation and restoration issues on the forestry lands after cutting the trees on the mine area.

In addition, during face-to-face interviews with village headmen or meetings with the affected communities held since 2006, local people were informed about the ongoing activities of the Project, planned works and social supports at Tufanbeyli and gave voice their concerns about the Project. Moreover, local people insistently mentioned about their main social-economic problems (unemployed young population, low level of education and unskilled local work force) and their needs to overcome these problems, and harvesting amount on their arable lands and their income generated from these lands, and accordingly, vital importance of these valuable lands for themselves. In particular, difficulty for land acquisition due to the wrong land register records of the lands in Yamanlı village was also raised another outstanding issue during community meetings. Enerjisa Land Acquisition Team regularly explained how this problem can be overcome to the public. Although land owners and interested local people were informed about the land acquisition procedure; either land purchase (willing buyer/willing seller negotiation) or land expropriation, and land values offered by Enerjisa while comparing with the current land market prices, land owners misinterpreted and expected to be paid more and more for their lands .

**2011** - The decision to invest in TPP Project was taken in November 2010. Therefore, the stakeholder engagement and participatory meetings for TPP project gained pace in January 2011. So, between 2006 and 2011, the Enerjisa team visited the Project area several times and met with local government

authorities, and village headmen to discuss the nature of the Project. During all these visits, Enerjisa team informed these stakeholders on the progress with the project planning.

Upon receiving the decision to invest, public participatory meeting was held on 18-19 January 2011<sup>60</sup> at the Project surrounding villages to share information on the nature of the Project and the land acquisition procedure, and governmental authorities; the sub-governor and the mayor, were re-visited to declare the investment decision and the planned Project. During these meeting held with community land acquisition procedures and land requirements were also discussed with PAPs. The project was defined in detailed to address any questions the PAPs would have regarding the impact of the project. Moreover, one-by-one interviews with village headmen of Yamanlı, Kayarcık and Yeşilova were held to consult on concerns of local communities about the Project in April 2011.

The consultations with the PAPs are an ongoing process. The acquisitions for the Project are still ongoing; hence there is continuous interaction between the PAPs and Enerjisa officials. The second participatory meeting was held in 9-10 May 2011 with Yamanli, Kayarcik and Yesilova Villages in order to discuss land valuations and increased land rates for willing buyer seller negotiations<sup>61</sup>.

On July 5<sup>th</sup> 2011, Enerjisa team met with the village headmen of Yamanli, Kayarcik, Yesilova and Akcal villages in order to discuss Corporate Social Responsibility related activities and to assess the needs of the villages. The headmen discussed the priorities on improving the village infrastructure.

On August 8<sup>th</sup>-10<sup>th</sup> 2011, Enerjisa team met with the project affected populations of Yamanli, Kayarcik and Yesilova to discuss infrastructural needs of the villages and any CSR activities that could be catered to the PAPs. Major areas outlined by the headmen were improvements to educational facilities, support to students, support with water supply systems and garbage collection. As a result of these meetings, Enerjisa prepared school uniforms and coats for all of the students and distributed them on the first day of the new school term.

On September 18<sup>th</sup> 2011, an official participatory meeting was held with the attendance of Adana Vice-Governor Fikret Deniz, Tufanbeyli Governor Ersin Tepeli, and Tufanbeyli District head of Gendarmerie and all the PAPs.

On 6<sup>th</sup> of October there was an information session at Kayarcik village. On 13<sup>th</sup> of October, there was a meeting with the EMRA experts, Tufanbeyli Governor Ersin Tepeli in order to explain EMRA expropriation procedures and land acquisitions. Interviews with local people; either the ones directly affected by the Project or the indirectly affected ones, were held during the social survey to inform them about the purpose of the social survey and receiving local people's concerns and expectations about the Project in October 2011. Moreover, additional information meetings were held with headmen of Taşpınar and Yeşilova villages so as to mention about the progress of the Project and social support activities in 18<sup>th</sup> November of 2011 and 22<sup>th</sup> December of 2011, respectively.

<sup>60</sup> For more info and photos on these visits, see Annex 4.

<sup>61</sup> For more info and photos on these visits, see Annex 4.

**March 2012** - PPMs will be organized by the assigned environmental consulting company on behalf of TEIAS (responsible governmental authority from the transmission lines) on 13-15 March 2012. Enerjisa will participate to these meetings as the observer party.

**May 2012** – Community meetings and interviews with local authorities will be held in May of 2012 to inform local stakeholders about the results of EIA and LRP; potential impacts and planned mitigation measures, and to consult with the public on the results of these two reports. Meanwhile, brochure covering potential impacts and mitigation measures and some benefits of the Project will be delivered.

### 6.1.3 Comments and Recommendations of the Project Affected People

Consultation activities carried out to date revealed that the public have expectations and concerns regarding the Project. Employment opportunity, investments in irrigation schemes, support for dairy production activities and livestock production and receiving fair cash compensation are expected by the PAPs. The main benefit of the Project is expected to be employment and trainings for skilled personnel. During the construction phase of the Project, procurement of job opportunities for the local people, especially for the project affected people, is planned.

Regarding the problems attributable to the Project, environmental and health impact of the project is a voiced concern. Enerjisa is going to emphasize the environmentally friendly nature of the Project and as pointed out earlier monitor the health and environmental pollution regularly. Loss of irrigated land was another area for concern. Enerjisa is giving fair compensations and devising a scheme to compensate for the losses. Enerjisa is planning to invest in infrastructure, support new irrigation schemes and livestock production with a trail implementation program and thus, aims at covering the loss in or damage to crops and agricultural lands.



## 6.2 PUBLIC DISCLOSURE

Disclosure of the Project and associated environmental and social information is an integral part of effective and successful public consultation process. To ensure participation of the public in the Project's planning and implementation processes, Enerjisa provides the PAPs with clear information about the Project, its benefits, its potential adverse impacts and associated mitigation measures as early as possible. In addition to the positive and potential negative aspects of the Project, Enerjisa shared how valuation of the affected assets would be conducted, what criteria would be considered during the asset valuation works, and what the roles and responsibilities of Enerjisa would be during the works associated with asset inventory, valuation and compensation.

Enerjisa carried out the public consultation and disclosure process through the meetings held with the affected groups collectively and individually. The success of willing buyer/willing seller arrangements is one of the best indicators of the effective management of the public consultation and disclosure activities. Enerjisa is preparing a community pamphlet to address all concerns of the public. This community pamphlet presented a general description of the Project and the affected settlements, described Enerjisa's approach to the public participation as the first priority for all their investment projects and also included contact details for grievances and queries.

Enerjisa recognizes that continued accessibility to Project information for all stakeholders should be ensured even though there are relatively few directly affected households. In addition to including the relevant documents on the website, they will be made accessible to the public via liaison offices. Furthermore, roundtable meetings with project affected groups will be conducted during the construction period every six months. These meetings will be open to all project affected groups, including representatives of local governments, the local public, NGOs, and the local media. Enerjisa aims to establish feedback tools which allow all stakeholders to state their comments, concerns and suggestions. All future stakeholder engagements will be undertaken through Enerjisa's Stakeholder Engagement Plan.

### 6.3 GRIEVANCE MECHANISM

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With regard to IFC's requirements, Enerjisa established a grievance mechanism to receive and resolve the project-affected communities' environmental and social concerns and complaints. Enerjisa's grievance mechanism is based on the following principles: proportionality, accessibility, transparency and culturally appropriateness. To make these principles clearer, it can be said that;

- *Proportionality* means scaling the mechanism to the project needs. In a project with low potential adverse impacts, simple and direct mechanisms for problem solving is preferred for addressing and resolving complaints such as public meetings, telephone hotline, existing media, brochures, and a community liaison officer
- *Accessibility* means establishing a mechanism which is clear, free of charge and easy to access for all segments of the affected communities and other potential stakeholders. The best way of achieving this is to localize the point of contact. This is valid both for Enerjisa and its construction contractor. Related to that, staff with the appropriate skills, training and familiarity with community liaison work should be employed in the field as quickly as possible. Accessibility enables Enerjisa to build more constructive relationships with local communities. This will also help intervene quickly in any dispute or social unrest and in an appropriate manner because maintaining a regular presence of a familiar face in the field greatly helps engendering trust and thus, constructive and closer relations.
- *Transparency* means that members of the affected communities know who is responsible for handling the complaints and communicating the outcomes of corrective actions to be taken about the complaints. This will be helpful in that people have confidence in the grievance mechanism to be used both by Enerjisa and the construction contractor.

- *Culturally appropriateness* means having cultural sensitiveness while designing and executing the grievance mechanism

To implement these principles, Enerjisa will be accessible to its stakeholders and respond to their complaints in the shortest possible time. The critical issue for responding to complaints is to ensure that all received complaints are recorded; that the community liaison officer is responsive to complaints; and that corrective actions are mutually acceptable. Thus, responses to complaints will be satisfactory for both parties, actions are followed up, and the complainants will be informed about the outcomes of the corrective actions.

For the Project, on-site staff<sup>62</sup> will be responsible for establishing close relationship with local people, authorities and other interest groups, informing them about the Project progress when needed, listening their concerns about the Project and recording them, receiving demands and complaints, recording them regularly and sharing them with the Project Team in Ankara and İstanbul to overcome them as soon as possible.

In addition to that, mobile phone numbers of Construction Contractor's Site Manager and Project Site Manager of Enerjisa were given to village headmen so that they can directly access to the responsible person of the construction works and Project when needed. Village headmen as the leader of the rural settlements are also responsible of sharing all project-related information with local people when Enerjisa inform them and conveying local people's demands and complaints to Enerjisa on time. Therefore village headmen are defined as the key contact persons for better and quick communication with local people.

#### 6.4 IMPLEMENTATION SCHEDULE FOR PUBLIC CONSULTATION AND BUDGET

The public consultation activities that have already been carried out and will be planned are given in the activity-based schedule table below:

PROJECT PHASE	Public Consultation Activities	Issued Discussed	Responsibility / Participants	Location	Approximate Date
Pre-Construction	Public Participatory Meeting (PPM) required for Turkish EIA procedure	Introducing the planned project to local stakeholders, receiving their concerns about the Project	Consulting company responsible for EIA, the previous Project Owner, the relevant local authorities and local people; particularly village headmen	Tufanbeyli	2004
	Initial site visit for community meetings	Introducing the planned project to the local community	Enerjisa Project Engineer Local people of Yamanlı and Kayarcık villages	Yamanlı and Kayarcık villages	October 2006
	Face-to-face interview with Director of Yamanlı Primary School	Educational needs and Enerjisa's potential support, introducing the Project	Enerjisa Project Engineer Director of the Primary School in Yamanlı village	Yamanlı village	October 2006
	Face-to-face interview with local branch of Forestry Directorate	Introducing the Project	Enerjisa Project Engineer Director of the Forestry Department	Tufanbeyli district	December 2006

<sup>62</sup> In Enerjisa's Corporate Stakeholder Engagement Plan, the personnel is described as Community Liaison Officer. His/her main responsibilities were identified in detail in this Plan.



PROJECT PHASE	Public Consultation Activities	Issued Discussed	Responsibility / Participants	Location	Approximate Date
	Community meetings	Informing local community about the planned project	Enerjisa Project Engineer Local people of Yamanlı and Kayarcık villages	Yamanlı and Kayarcık villages	December 2006
	Public information meeting	Informing local stakeholders about the Project; and declaring the date of August 2007 as the planned start date of the Project	Enerjisa Projects Director Veli Balat, Tufanbeyli Project Mine Engineer Mustafa Yorukoglu and Land Acquisition Team Manager Ömer Özer, Local authorities and the public	Tufanbeyli district	January 2007
	Community meetings	Informing on the ongoing process about the Project to the public	Enerjisa Project Team, Land Acquisition Team	Tufanbeyli district, and the project surrounding villages	April, June, and August 2007
	Community meetings	Informing on the ongoing process about the Project to the public and receiving their concerns	Enerjisa Project Team, Land Acquisition Team	The project surrounding villages	March 2008
	Individual interviews with land owners	Land appraisal and asset inventory	Enerjisa land acquisition team and its contractor	Yamanlı, Kayarcık, Yeşilova, Taşpınar, Pınarlar villages	May 2008
	Face-to-face meetings	Introducing Enerjisa and Sabancı University and giving info about the social survey to be held	Enerjisa CEOs and academican from Sabancı University that held a social survey in Tufanbeyli	Tufanbeyli district	July 2008
	Public informing sessions during site visits for preliminary works	Informing about the current situation of the Project and receiving concerns of local people about the Project	Enerjisa Project Team local community leaders (village headmen of Yamanli, Kayarcik and Yesilova villages) and local authorities (including gendarmerie)	Tufanbeyli Yamanlı, Kayarcık, Yeşilova villages	Throughout the first six months of 2009
	Public informing sessions during site visits for preliminary works	Informing about the current situation of the Project and receiving concerns of local people about the Project	Enerjisa Project Team local community leaders (village headmen of Yamanli, Kayarcik and Yesilova villages) and local authorities (including gendarmerie)	Tufanbeyli Yamanlı, Kayarcık, Yeşilova villages	Throughout 2010
<b>INVESTMENT DECISION WAS TAKEN IN NOVEMBER 2010.</b>					
	Initial contact with governmental authorities after the investment decision was taken.	Introducing the Project to Mayor	Tufanbeyli Mayor Project Team (Ankara) Land Acquisition Team	Tufanbeyli	18 Jan.2011
	Public Participatory Meeting	Introducing of Enerjisa's first land valuations and	Project Team (Ankara), Land Acquisition Team ,	Project surrounding	19 Jan 2011



PROJECT PHASE	Public Consultation Activities	Issued Discussed	Responsibility / Participants	Location	Approximate Date
		land rates	People of each village and Village headmen	villages	
	One-by-one interviews	Land acquisition	Project Team (Ankara), Land Acquisition Team Accessible landowners (directly affected persons) and Village headmen		From January 2011 onwards
	One-by-one interviews	Consulting with Village Headmen on concerns of local communities	Project Team (Ankara), Yamanli, Kayarcik and Yesilova Headmen	Yamanli, Kayarcik and Yesilova Villages	22 Apr 2011
	Public Participatory Meeting	Introducing of Enerjisa's second land valuations and land rates	Project Team (Ankara), Land Acquisition Team , People of each village and Village headmen	Yamanli and Kayarcik Villages	9-10 May 2011
	One-by-one interviews	Land acquisition and Information about Due Diligence visit of Lender's Consultants	Land Acquisition Team Resident landowners Project Team and Yamanli, Kayarcik and Yesilova Villages Headmen	Tufanbeyli	June 2011
	One-by-one interviews	Needs of settlements and possible social outreach activities	Project Team (Ankara), Village headmen of Yamanli, Kayarcik, Yesilova and Ackal villages	Yamanli, Kayarcik, Yesilova and Ackal villages	5 <sup>th</sup> July 2011
	Community meetings	Needs of settlements and possible social outreach activities	Project Team (Ankara), Project affected populations of Yamanli, Kayarcik and Yesilova	Yamanli, Kayarcik and Yesilova villages	8-10 August 2011
	Community meetings	Information about land expropriation process	Adana Vice-Governor Fikret Deniz, Tufanbeyli Sub-Governor Ersin Tepeli, and Tufanbeyli District head of Gendarmerie Enerjisa Site Team and all the PAPs	Kayarcik Village	18 <sup>th</sup> September 2011
	Public information meeting	Information about site works and social activities of Enerjisa	Project Team (Ankara) Residents of Kayarcik villages, Teachers of Yamanli Primary School	Kayarcik and Yamanli villages	6 <sup>th</sup> October 2011
	Public information meeting	Land expropriation procedure	EMRA experts, Tufanbeyli Sub-Governor (Ersin Tepeli), Project Team (Ankara) and all the PAPs	Kayarcik village	13 <sup>th</sup> October 2011
	Depth interviews with accessible landowners (headmen and local governmental authority) for social baseline survey and impact assessment	Informing about the purpose of the social survey and receiving local people's concerns and expectations about the Project	Social Survey Team The interviewed local people	The project surrounding villages	October 2011

PROJECT PHASE	Public Consultation Activities	Issued Discussed	Responsibility / Participants	Location	Approximate Date
	Public meetings with indirectly affected local people for social baseline survey and impact assessment	Informing about the purpose of the social survey and receiving local people's concerns and expectations about the Project	Social Survey Team The interviewed local people	Yamanlı and Kayarcık villages	October 2011
	Information meeting	Introduction of Project and possible social support activities	Project Team and Taşpınar Headmen	Tufanbeyli	18 Nov 2011
	Information meeting	Brief Project information	Project Team and Yeşilova Villagers	Yeşilova village	22 Dec 2011
Construction	Interview with village headmen, local governmental authority	Continuous informing and consultation activity about the progress of the Project	Project Team (Ankara), Project Site Team	Tufanbeyli district and all project surrounding villages	Throughout project cycle
	Public participation meetings	Informing about the transmission lines to the public and local authorities	Consulting company responsible for EIA of Transmission lines, TEIAS as the owner of the lines, and Enerjisa	Kayseri, Adana and K.Maraş provinces	March 2012
	Community meetings and one-by-one interviews with local authorities	Consulting with the public and local stakeholders on the results of EIA and LRP reports	Enerjisa Project Team Village headmen Local communities Local authorities	Tufanbeyli and the project surrounding villages	May 2012
	Regular public meetings, regular visits to local authorities and regular interviews with interest groups	Informing the local people and stakeholders about the ongoing project activities and receiving their concerns and expectations/complaints	Project Team (Ankara), Project Site Team ( <i>Community Liaison Officer</i> ) Construction Contractor	Tufanbeyli and the project surrounding villages	Throughout the construction stage, six monthly period
	Peer-to-peer interviews with local people	Informing the local people and stakeholders about the ongoing project activities and receiving their concerns and expectations/complaints	Project Team (Ankara), Project Site Team ( <i>Community Liaison Officer</i> ) Construction Contractor	Tufanbeyli and the project surrounding villages	Throughout the construction stage, when needed
	Continuous update of Enerjisa's official web page for sharing results of project-specific works via reports, plans etc.	Results of the EIA and LRP Reports	Project Team (Ankara)	website	After completion of each project-specific work (pre-EIA, LRP, expert reports on environmental issues)

PROJECT PHASE	Public Consultation Activities	Issues Discussed	Responsibility / Participants	Location	Approximate Date
Operation	Regular public meetings, regular visits to local authorities and regular interviews with interest groups	Informing the local people and stakeholders about the ongoing project activities and receiving their concerns and expectations/complaints	Project Team (Ankara), Project Site Team <i>(Community Liaison Officer)</i>	Tufanbeyli and the project surrounding villages	Throughout the operation stage, once a year

It is assumed that all these public consultation activities including preparation and usage of communication tools will cost 250,000TL (\$130,000) in total.

## CHAPTER 7: MONITORING AND EVALUATION

This chapter defines the methodology of internal and external monitoring, indicators and responsible groups for the monitoring and evaluation process, frequency of reporting, content of internal and external monitoring and integration of feedback from external monitoring into the Project implementation process.

### 7.1. LRP MONITORING FRAMEWORK

The purpose of resettlement monitoring is to ensure that measures developed for compensating losses due to the Project were effective in restoring PAPs' living standards and income levels. Also the effectiveness of the grievance mechanism provided by Enerjisa will be followed up. As part of the monitoring and evaluation process, changes in LRP procedures will be put into effect as needed.

For the TPP Project, Enerjisa's Environmental and Social Group will undertake the LRP monitoring for the Project.

The monitoring and evaluation framework consists of three elements:

- Internal monitoring carried out by Enerjisa's Environmental and Social Group;
- External monitoring undertaken by an independent consulting company; and
- A LRP Completion Audit.

Either for internal monitoring or external monitoring, IFC emphasizes on the importance of undertaking monitoring activities with a participatory techniques. The following techniques proposed by IFC for achieving participatory monitoring process are considered by Enerjisa while designing its own internal monitoring system and outsourcing the external monitoring activity for the Project:

- Surveys
- Observations
- Group discussions
- Depth interviews

Deciding on which participatory techniques are needed for project specific monitoring and using them require specific expertise. To be able to achieve this, Enerjisa may prefer building its own corporate capacity (i.e. through hiring an experienced consultant inside) or outsourcing this consultancy service under its own supervision to consider objective expert view, as well.

An overview of the LRP monitoring framework is shown in Table 7-1 below.

### 7.2. INTERNAL MONITORING

Internal monitoring also known as monitoring of the project performance, measures the progress of activities, in other words, measures the performance of all the jobs of Enerjisa in the LRP. Enerjisa's Social-Environmental Management Unit will be responsible for this process with support from appointed experts as necessary.

Data collection tools developed for effective and efficient monitoring will be:

- Reports on meetings or interviews held for informing the stakeholders and/or consulting with them;
- Data collected by Enerjisa during the land acquisition process;
- Reports of field visits of the relevant experts; and
- Complaints Log and a Grievance Action Form in the Electronic Information Network System at corporate level

Project monitoring will be initiated in parallel to the construction phase and will be ended up with completion of external monitoring process. Focus points of the internal monitoring activity will be defined as follows:

- To follow-up land acquisition process; *meaning* to ensure all land owners, whose lands are acquired through willing seller/willing buyer negotiations or expropriation, receive compensation for their losses
- To ensure grievance mechanism is transparent and accessible for everyone,
- To deal with social problems by keeping in touch with local people and authorities, as well as the technical problems and to ensure Project Team overcomes the problems appropriately.

### 7.3. EXTERNAL MONITORING

External monitoring activities will verify the process defined in the LRP which is realized by Enerjisa and its implementing partners (e.g., the Contractor). External monitoring will be carried out by independent social expert(s).

Differences in socioeconomic, health, educational and cultural status before and after land acquisition will be identified and compared through defined indicators which include

- Changes occurred in the living standards of affected people;
- The number of skilled and unskilled PAPs engaged in construction workforce;
- Additional support measures provided by Enerjisa;
- A process of grievances and complaints; and
- The Extent of restoration for quality of life and living standards of PAPs.

The aim of the LRP is primarily to avoid damaging the living conditions of local people (whether they are the ones who are directly or indirectly affected by the Project or not), and to restore people's livelihood. External (Impact) Monitoring activity will be undertaken in order to

- monitor regularly whether these mitigation or enhancement measures proposed are considered, and the relevant actions are put into practice or not;
- identify the deficiencies and,
- develop corrective and preventive actions for remedying the deficiencies

It is better to carry out external monitoring via an experienced consultant on land acquisition and livelihood restoration. Data collection tools for this monitoring activity will include semi-annual reports for the first two years formed on the basis of monthly reports prepared by Project Team for internal monitoring, annual reports until the construction phase of the Project is completed, records of interviews held with PAPs.

The data collection tools will include semi-annual reports for the first three years, yearly reports until the TPP Project is completed and records of interviews with PAPs.

Two annual reports of external monitoring are going to be prepared for the LRP implementation for TPP Project from 2012-2014. External monitoring and evaluation is going to take place in the second quarter of 2012 and 4<sup>th</sup> quarter of 2012, and second quarter of 2013 and 4<sup>th</sup> quarter of 2013, second quarter of 2014 and 4<sup>th</sup> quarter of 2014. In 2015, a LRP completion audit in 2<sup>nd</sup> quarter should be prepared. At the end of each external monitoring activity the independent social specialist (consultant) who will be responsible for external monitoring will investigate existence of any change in living conditions of people who will have been affected by the TPP Project, and the effectiveness of actions for mitigating the potential adverse environmental and social impacts attributable to the Project. The respective consultant will present his/her observation and analysis via a report to Enerjisa.

#### 7.4. LRP AUDIT

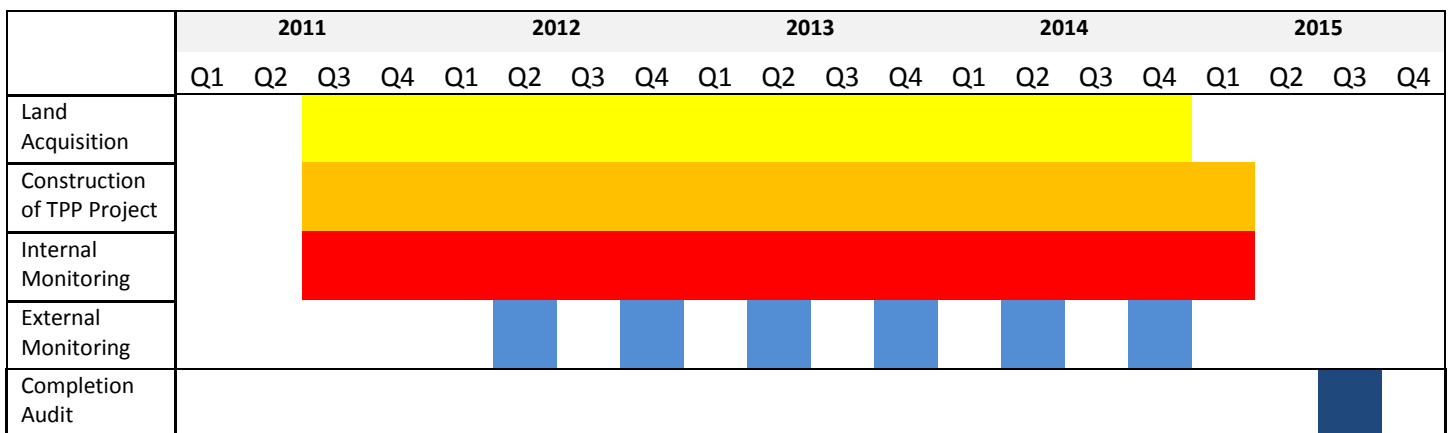
The LRP completion audit, which means the finalizing both internal and external monitoring process of the Project, will be carried out within one year after the completion of construction phase. This audit will be undertaken by Enerjisa with support to be received from an externally free expert, if required. The LRP completion audit will provide final indication that the livelihood restoration is sustainable and no further interventions are required.

Both internal and external monitoring process will be ended up with LRP Completion Audit.

#### 7.5. TIME SCHEDULE FOR MONITORING

The proposed time schedule for both internal and external monitoring is given in Figure 7-1.

Figure 7.1: Monitoring Time Frame



**7.6. STAFF AND RESPONSIBILITIES**

It is planned that there will be one independent expert working together with an assistant for external monitoring and Enerjisa’s team responsible for internal monitoring process. Their roles and responsibilities can be defined in brief as follows:

- Enerjisa’s Environmental and Social Group, will be responsible for regular reporting for internal monitoring and following other actions defined for internal monitoring;
- An independent social expert on behalf of the Lenders will be responsible for reporting for external monitoring; and
- Enerjisa staff will be responsible for evaluating monitoring reports prepared by authorized teams and provide information to the concerned stakeholder.

The Table 7-1 sets out the reporting responsibilities Enerjisa within the context of LRP.

**Table 7-1: Reports of Internal and External Monitoring**

Report	Content
Monthly Reports by Site representative to E&S Group	<ul style="list-style-type: none"> <li>• Community liaison activities carried out.</li> <li>• Community liaison activities planned.</li> <li>• Grievances</li> <li>• Requests</li> </ul>
Annual Reports to Lenders at the corporate level for the first 3 years	<ul style="list-style-type: none"> <li>• Disclosing information regarding economic, social and environmental yearly activities.</li> </ul>
Annual Reports to lenders at the corporate level for the following year	<ul style="list-style-type: none"> <li>• Disclosing information regarding economic, social and environmental yearly activities.</li> </ul>

An overview of the LRP monitoring framework is set out below in Table 7-2.

**Table 7-2: LRP Monitoring Framework**

Monitoring Area	Indicators and Measures	Monitoring Frequency	Duration	Responsible Parties of the Monitoring
<b>Efficiency and Effectiveness of LRP</b>	<ul style="list-style-type: none"> <li>• Progress in signing land acquisition agreements – % complete.</li> <li>• Payment of compensation to right holders - % complete.</li> <li>• Number of title holders and parcels whose title deed transfer were completed by purchasing or expropriating lands- % within the total.</li> <li>• Amount of land acquired for construction - sqm in total.</li> <li>• Title deed registrations of contractor – number, % complete.</li> <li>• Defined and working grievance system– number of grievances lodged/closed out.</li> <li>• Public consultation process defined –log of activities, number of meetings held.</li> <li>• Monitoring process defined –responsible teams appointed.</li> </ul>	Monthly or quarterly	From Land Acquisition to LRPLRP Completion	Enerjisa Field Representatives and Environmental & Social Group

Monitoring Area	Indicators and Measures	Monitoring Frequency	Duration	Responsible Parties of the Monitoring
<b>Restoration of Living Standards</b>	<ul style="list-style-type: none"> <li>• Cash compensation to landowners – amount, number, % complete.</li> <li>• Cash compensation to other users – amount, number, % complete.</li> <li>• Compensation paid in line with agreed rates and time – number of payments, % in total.</li> <li>• Other losses (roads, irrigation channels, drains etc) of right owners compensated/restored – type and number of other compensations, % in total.</li> <li>• Occasions where special needs of vulnerable groups addressed – number and type of aid/support.</li> <li>• Following up health and safety regulations for Enerjisa employees – number of trainings gives, number of grievance about health and safety</li> <li>• Changes occurred in income and expenditure patterns of PAPs before and after the project – amount or % of income increase.</li> </ul>	<p>Biannual (for the first three years in parallel to construction period)</p> <p>Annual (for the following year after the construction period)</p>	<p>From Land Acquisition to Construction Completion</p>	<p>Enerjisa Field Representatives and Environmental &amp; Social Group</p> <p>Panel of Experts</p>
<b>Community Satisfaction</b>	<ul style="list-style-type: none"> <li>• Attitudes of PAPs to the land acquisition process – observation and feedback collected through interviews.</li> <li>• Attitudes of PAPs to the activities living standards restoration - observation and feedback collected through interviews.</li> <li>• Attitudes of PAPs to the activities of livelihood and income restoration - observation and feedback collected through interviews.</li> <li>• Attitudes of stakeholders to public consultation – observation and feedback collected through interviews.</li> </ul>	Ongoing	<p>From Land Acquisition to LRP Completion</p>	<p>Enerjisa Field Representatives and Environmental &amp; Social Group</p> <p>An independent Social Expert</p>
<b>Public Consultation and Grievance</b>	<ul style="list-style-type: none"> <li>• Public consultation process defined –log of activities, number of meetings held, number of participants of public meetings , visits to local authorities or other local stakeholders, frequency of visits to project-affected settlements,</li> <li>• Types of grievances – number of lodged and closed grievances and outcomes.</li> </ul>	Ongoing	<p>From Land Acquisition to LRP Completion</p>	<p>Enerjisa Community Liaisons and Social-Environmental Unit</p> <p>An independent Social Expert</p>



## CHAPTER 8: LRP BUDGET

As IFC states in its *Handbook for Preparing a Resettlement Action Plan*, “the LRP budget must include a justification of all assumptions made in calculating compensation rates and other cost estimates and must take into account both physical and cost contingencies.”

In line with World Bank/IFC’s description, the detailed budget table in this chapter show actual costs for all resettlement activities including development, implementation, monitoring and evaluation of LRP and other contingencies. In addition to a breakdown of total costs for the LRP of the TPP Project, the period of expenditures and sources of funds are also shown in Table 8-1. According to the total cost, the unit cost of LRP per affected household was calculated.

Total cost allocated for LRP development and implementation includes the following items:

- Consultancy services for social LRP survey and public consultation;
- Land acquisition administration costs including expenses for land appraisal and transaction costs for the lands acquired;
- Land acquisition payments for privately-owned lands purchased and expropriated;
- Cash compensation for vulnerable PAPs
- Additional expenses for project-specific activities such as workshops on livestock production, irrigation schemes with some livelihood implications as stated under Chapter 5;
- Additional expenses for social support activities such as repair of local school buildings, rehabilitation of village roads, etc.;
- Additional social issues for monitoring;
- Internal and external monitoring activities;
- A contingency for potential extra land acquisition costs, dust damage to crops, possible repair and maintenance of local structures or other social support activities over the life time of the TPP Project.

All budgeted costs shown in Table 8-1 will be met by Enerjisa. Costs planned for development and implementation of LRP include not only the payments done until now but also planned budget for forthcoming expenses that may occur during construction and operation processes. In addition to these direct costs, LRP budget involves management costs.

All management costs excluding monitoring budget was budgeted as 107,299,577.20 TL (\$59,610,876.22) between 2011 and 2015. Moreover, budget allocated both for cost internal and external monitoring activities from 2012 till 2015 was determined as 513,000 TL (\$285,000) (Table 8-1). Additionally, a rough budget was estimated for social support program as 4.834.000,00 TL (\$2,685,555.56). To sum up, total LRP Budget including contingency (10%) is 108.372.277,20 TL (\$65,885,463.84). The estimated Unit Cost for LRP was calculated as 106,770.72 TL (\$64,911.79) per household (1015 households).

**Table 8-1: Cost Table of LRP Development and Implementation**

ITEMS	TOTAL TL	TOTAL \$*	PERIOD OF EXPENDITURE	SOURCE OF FUNDING
<b>Public consultation costs (Including costs of social surveys)</b>	365,400.00	203,000.00	April 2011-April 2012	Enerjisa
<b>Land Acquisition Administration Costs (Valuation, title deed registration, cadastral fees, stamp tax)</b>	952,562.50	529,201.39	2011	Enerjisa
<b>Privately Owned Lands acquired by Enerjisa (compensation fees for lands)</b>	8,135,940.00	4,519,966.67	2011	Enerjisa
<b>Lands to be acquired by Enerjisa or EMRA including publicly owned lands</b>	87,579,524.50	48,655,291.39	2012-2014	Enerjisa
<b>Land acquisition paid to EMRA</b>	5,412,150.20	3,006,750.11	2012	Enerjisa
<b>Corporate Social Responsibility (2011)</b>	20,000.00	11,111.11	2011	Enerjisa
<b>Corporate Social Responsibility (2012-2015)</b> *training courses for machine operator *school rehabilitation *support for alternative farming techniques, and livestock *Awareness raising activities on good practice on agriculture *road improvement	4.834.000,00	2,685,555.56	2012-2015	Enerjisa
<b>Internal &amp; External Monitoring</b>	513,000.00	285,000.00	2012-2015	Enerjisa
<b>TOTAL</b>	107.812.577,20	59,895,876.22		
<b>Contingency (10%)</b>	559.700,00	5,989,587.62		
<b>TOTAL LRP BUDGET</b>	108.372.277,20	65,885,463.84		

Note: TL/\$ = 1.80 (Nov, 2011)

## CHAPTER 9: LRP IMPLEMENTATION SCHEDULE

Activities mentioned in the Implementation Schedule for the TPP Project were grouped as planning and preparation, LRP implementation including construction, monitoring and evaluation activities. These activities run throughout the periods of pre-construction, construction and operation.

For the TPP Project, the preparation of the LRP started concurrently with the land acquisition process. Although public information and consultation activities was initiated after the Project taken over from its previous owner in 2006 and have continuously undertaken by Enerjisa Project Team in collaboration with the Land Acquisitio Team since 2006 until the official declaration of investment decision was taken in November 2010, Enerjisa officially commenced public consultation and this process gained pace in January 2011 with the great effort of Enerjisa.

**Table 9-1: LRP Implementation Schedule**

	2011	2012	2013	2014	2015
<b>Planning &amp; Preparation</b>					
<i>Public Consultation &amp; Disclosure</i>	■				
<i>Asset inventory and valuation</i>	■	■			
<i>Negotiation on compensation payments</i>		■	■	■	
<i>LRP Preparation &amp; Approval</i>		■			
<i>Acquisition of Lands</i>	■	■	■	■	
<b>Construction Activities</b>					
<i>Nomination of construction contractors</i>	■				
<i>Preparation of construction site</i>		■			
<i>Construction</i>		■	■	■	
<b>Monitoring &amp; Evaluation</b>					
<i>Internal Monitoring</i>		■	■	■	■
<i>External Monitoring</i>		■	■	■	■
<i>RAP Completion Audit</i>					■

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**ANNEX I HOUSEHOLD QUESTION SHEET**

SRM ROW NO:	LOT NO:	VILLAGE:	QUESTIONNAIRE NO: _____
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**TUFANBEYLİ THERMAL POWER PLANT  
HOUSEHOLD QUESTION SHEET**

**INTRODUCTION: PLEASE SHOW YOUR ID CAR AND EXPLAIN THE PURPOSE OF THE RESEARCH) My name is ...../ We work for Tufanbeyli Power Plant project. A Sabancı Holding affiliate, Enerjisa has undertaken the construction of Tufanbeyli Thermal Power Plant. We learned that your land shall be affected from the Project. Our experiences up to now show that we should mutually examine the solutions for the problems that may arise during the project. With this questionnaire we would like to learn your opinions about the construction of thermal power plant project and we aim to develop solutions that will help you.**

<b>Name of the person you interview</b>		
<b>Surname</b>		
<b>Father's name</b>		
<b>Age</b>		
<b>Permanent Residence Address</b>	In the village	01
	Tufanbeyli	02
	Adana	03
	Other (please state)	04
<p>First of all I would like to learn this:</p> <p>S.1 "Do you own the house or the land or both of these which shall be affected from thermal power plant (as registered in title deed registry) or is it someone else's property?"</p> <p><b><u>IF WITH SHARE PASS TO S1.1</u></b></p>	Yes, I own it (even if with share).	01
<b><u>INTERVIEWER: IF THE TITLE DEED DOES NOT BELONG TO THE PERSON YOU ARE INTERVIEWING OR IF THEY MENTION ANY PROBLEMS, WRITE IN S2 THE REAL OWNER OF THE PROPERTY</u></b>	Yes, I live here (or benefit from the land) but it does not belong to me	02
	No, these information are not about my land	03
<b>S.1.1 How many people has shares of the land?</b>		
<b>S.2. Name of the shareholder/s</b>		

	Land	01
	Building	02
	Barn	03
	Storage (hayloft)	04
	Pool	05
	Garden	06
	Other	98



**A. DEMOGRAPHIC PROFILE OF THE HOUSE**

A1. How many people do live in your home?								
Write the number of persons who live in the house								
HOUSE HOLD ROW NO	MEMBERS OF THE HOUSEHOLD	KINSHIP	GENDER	AGE	MARITAL STATUS	LITERATE OR NOT	(FOR AGE OF 6 AND ABOVE) EDUCATION	(FOR AGE OF 15 AND ABOVE) WORK STATUS
	A2. Can you tell me the names of the persons that live in your house?	A3. Kinship with the head of the family?	A4. Gender?	A5. Age?	A6. Marital status?	A7. Literate or not?	A8. Education?	A9. Work status?
	(Members who generally live in the house, but who haven't been in the house for a certain time shall also be included)	USE CODES IN THE LIST	01 MALE 02 FEMALE	(Write age completed)	01 SINGLE 02 MARRIED 03 WIDOW 04 DIVORCED 05 SEPARATED 97 DON'T KNOW	01 YES 02 NO	01 NOT A LITERATE 02 LITERATE 03 PRIMARY SCHOOL DROPOUT 04 PRIMARY SCHOOL STUDENT 05 PRIMARY SCHOOL GRADUATE 06 SECONDARY SCHOOL DROPOUT 07 SECONDARY SCHOOL GRADUATE 08 HIGH SCHOOL DROPOUT 09 HIGH SCHOOL STUDENT 10 HIGH SCHOOL GRADUATE 11 COLLEGE DROPOUT 12 COLLEGE STUDENT 13 COLLEGE GRADUATE 14 UNIVERSITY DROPOUT	(MORE THAN ONE OPTION CAN BE SELECTED. PLACE (—) IF NOT CORRECT) 01 FARMER 02 TRADESMAN 03 CRAFTSMAN 04 PUBLIC SERVANT 05 WORKER 06 DAILY/SEASONAL WORKER 07 HOUSE WIFE 08 RETIRED 09 STUDENT 10 UNEMPLOYED 11 ELDERLY

(01)	(02)	(03)	(04)	(05)	(06)	(07)	(08)	(09)		
							15 UNIVERSITY STUDENT 16 UNIVERSITY GRADUATE 17 MASTER DROPOUT 18 MASTER STUDENT 19 MASTER GRADUATE 97 I DON'T KNOW 98 OTHER.....	12 RETARDED 98 OTHER.....		
01		01								
02										
03										
04										
05										

01 HEAD OF THE FAMILY	02 SPOUSE	03 SON	04 DAUGHTER	05 MOTHER	06 FATHER	07 MOTHER/FATHER IN LAW
08 SISTER/BROTHER	09 BROTHER/SISTER IN LAW	10 NEPHEW	11 GRANDMOTHER/ GRANDFATHER	12 BRIDE/ GROOM	13 GRANDKID	14 OTHER

HOUSE HOLD ROW NO	MEMBERS OF THE HOUSEHOLD	KINSHIP	GENDER	AGE	MARITAL STATUS	LITERATE OR NOT	(FOR AGE OF 6 AND ABOVE) EDUCATION	(FOR AGE OF 15 AND ABOVE) WORK STATUS
	<p><b>A2. Can you tell me the names of the persons that live in your house?</b></p> <p>(Members who generally live in the house, but who haven't been in the house for a certain time shall also be included)</p>	<p><b>A3. Kinship with the head of the family?</b></p> <p>USE CODES IN THE LIST</p>	<p><b>A4. Gender?</b></p> <p>01 MALE 02 FEMALE</p>	<p><b>A5. Age?</b></p> <p>(Write age completed)</p>	<p><b>A6. Marital status?</b></p> <p>01 SINGLE 02 MARRIED 03 WIDOW 04 DIVORCED 05 SEPARATED 97 DON'T KNOW</p>	<p><b>A7. Literate or not?</b></p> <p>01 YES 02 NO</p>	<p><b>A8. Education?</b></p> <p>01 NOT A LITERATE 02 LITERATE 03 PRIMARY SCHOOL DROPOUT 04 PRIMARY SCHOOL STUDENT 05 PRIMARY SCHOOL GRADUATE 06 SECONDARY SCHOOL DROPOUT 07 SECONDARY SCHOOL GRADUATE 08 HIGH SCHOOL DROPOUT 09 HIGH SCHOOL STUDENT 10 HIGH SCHOOL GRADUATE 11 COLLEGE DROPOUT 12 COLLEGE STUDENT 13 COLLEGE GRADUATE 14 UNIVERSITY DROPOUT 15 UNIVERSITY STUDENT 16 UNIVERSITY GRADUATE</p>	<p><b>A9. Work status?</b></p> <p>(MORE THAN ONE OPTION CAN BE SELECTED. PLACE (—) IF NOT CORRECT)</p> <p>01 FARMER 02 TRADESMAN 03 CRAFTSMAN 04 PUBLIC SERVANT 05 WORKER 06 DAILY/SEASONAL WORKER 07 HOUSE WIFE 08 RETIRED 09 STUDENT 10 UNEMPLOYED 11 ELDERLY 12 RETARDED 98 OTHER.....</p>

							17 MASTER DROPOUT 18 MASTER STUDENT 19 MASTER GRADUATE 97 I DON'T KNOW 98 OTHER.....	
<b>(01)</b>	<b>(02)</b>	<b>(03)</b>	<b>(04)</b>	<b>(05)</b>	<b>(06)</b>	<b>(07)</b>	<b>(08)</b>	<b>(09)</b>
06								
07								
08								
09								
10								

<b>01</b> HEAD OF THE FAMILY	<b>02</b> SPOUSE	<b>03</b> SON	<b>04</b> DAUGHTER	<b>05</b> MOTHER	<b>06</b> FATHER	<b>07</b> MOTHER/FATHER IN LAW
<b>08</b> SISTER/BROTHER	<b>09</b> BROTHER/SISTER IN LAW	<b>10</b> NEPHEW	<b>11</b> GRANDMOTHER/ GRANDFATHER	<b>12</b> BRIDE/ GROOM	<b>13</b> GRANDKID	<b>14</b> OTHER

<b>A12. Within this year</b> , did any member of the family live in a different place for minimum <b>1 month</b> for work?	Yes		01
	No (Skip to question <b>A13</b> )		02
<b>A12a.</b> Which members of the family did live outside the house?  (Use household code)  “if son 03; if daughter 04”	1	3	
	2	4	
<b>A12b.</b> Did they send/bring money to the household?	Yes		01
	No		02
<b>A12c.</b> How much money did they bring (annual total)			
<b>A13.</b> Do you have relatives that live abroad?	Yes		01
	No		02
<b>A13a.</b> What is the kinship of your relatives?	Kid		01
	Sister&brother		02
	Mother/Father		03
	Other ( <i>Please state.....</i> )		98
<b>A13b.</b> Do they send you money?	Yes		01
	No		02

**LAND AVAILABILITY and USE**

<p><b>B1. What is the total m2 of the lands you, your HOUSEHOLD own fully or partially?</b></p> <div style="text-align: center;"> <table border="1" style="width: 100px; height: 30px;"> <tr> <td style="width: 33px;"></td> <td style="width: 33px;"></td> <td style="width: 33px;"></td> </tr> </table> </div>				<p><b>B1.1. How much of these is farm land suitable for growing plants (growing, processing)</b></p> <div style="text-align: center;"> <table border="1" style="width: 100px; height: 30px;"> <tr> <td style="width: 33px;"></td> <td style="width: 33px;"></td> <td style="width: 33px;"></td> </tr> </table> </div>					
<p><b>B2. How many m2 of your land is watery?</b></p> <div style="text-align: center;"> <table border="1" style="width: 100px; height: 30px;"> <tr> <td style="width: 33px;"></td> <td style="width: 33px;"></td> <td style="width: 33px;"></td> </tr> </table> </div>				<p><b>B3. How many m2 of your land do you irrigate by pumping water from the river?</b></p> <div style="text-align: center;"> <table border="1" style="width: 100px; height: 30px;"> <tr> <td style="width: 33px;"></td> <td style="width: 33px;"></td> <td style="width: 33px;"></td> </tr> </table> </div>					
<p><b>B4. How many m2 of your land shall be affected from thermal power plant project?</b></p> <div style="text-align: center;"> <table border="1" style="width: 100px; height: 30px;"> <tr> <td style="width: 33px;"></td> <td style="width: 33px;"></td> <td style="width: 33px;"></td> </tr> </table> </div> <p><b><u>INTERVIEWER B4-B10 IS ONLY FOR THE LOT INCLUDED/TO BE INCLUDED FOR THERMAL POWER PLANT</u></b></p>				<p><b>B5. Is the land affected one lot or is it composed of more than one lot?</b></p>					
	<p>One Lot</p>		<p>01</p>						
<div style="text-align: center;"> <table border="1" style="width: 60px; height: 20px;"> <tr> <td style="width: 30px;"></td> <td style="width: 30px;"></td> </tr> </table> <p>Lot</p> </div>				<p>02</p>					
<p><b>B6. Who owns the land/lots?</b></p> <p><b>ATTENTION THESE QUESTIONS ARE ONLY ASKED FOR LOTS THAT ARE EXPROPRIATED OR SOLD FOR THERMAL POWER PLANT PROJECT</b></p> <p><b>If the land use falls under one category place (√) next to "All" box and skip to Question B7. If</b></p>	<p><b>Land used</b></p>	<p><b>All</b></p>	<p><b>Lot</b></p>						
	<p>Owned by a member of the household</p>			<p>01</p>					
	<p>Leased land</p>			<p>02</p>					
	<p>Common land (..... common)</p>			<p>03</p>					
	<p>Belongs to the father/grandfather who passed away but no certificate of inheritance is</p>			<p>04</p>					

<p>the land use falls under more than one category, write the lots to relevant section.</p> <p><b>(MORE THAN ONE ANSWER CAN BE GIVEN)</b></p>	issued			
	Public land			05
	Used without paying rent (property of a relative/acquaintance)			06
	Belongs to the household but property is being shared			07
	Belongs to the household but lent to someone else			08
	Other; please state.			98
<p><b>B7. Does all these lands have title deed?</b></p> <p><b>ATTENTION THESE QUESTIONS ARE ONLY ASKED FOR LOTS THAT ARE EXPROPRIATED OR SOLD FOR THERMAL POWER PLANT PROJECT</b></p>	Yes <b>(SKIP TO B8)</b>			01
	No <b>(ASK QUESTION B7a and B7b)</b>			02

	Land used	Not suitable	
<p><b>B7a. Which lands do not have title deed?</b></p> <p>Place (—) for lands not used. Check codes for answer.</p> <p><b>ATTENTION THESE QUESTIONS ARE ONLY ASKED FOR LOTS THAT ARE EXPROPRIATED OR SOLD FOR THERMAL POWER PLANT PROJECT</b></p>	Owned by a member of the household		01
	Leased land		02
	Common land (..... common)		03
	Belongs to the father/grandfather who passed away but no certificate of inheritance is issued		04
	Public land		05
	Used without paying rent (property of a relative/acquaintance)		06
	Belongs to the household but property is being shared		07

	Belongs to the household but lent to someone else		98
<b>B7b. How do you use lands without title deed?</b>	Possession		01
	Adequate pay		02
	Other, please state		98
<b>B8. How many m2 of this land has irrigation?</b>	..... m2		01
	All		02
	No irrigation in the land		03
<b>ATTENTION THESE QUESTIONS ARE ONLY ASKED FOR LOTS THAT ARE EXPROPRIATED OR SOLD FOR THERMAL POWER PLANT PROJECT</b>			
	<b>B9. Which farm products do you grow in this land?</b>	Wheat/ Barley	01
		Cantaloupe/Water melon	02
		Corn	03
		Sugar Beet	04
		Beans/Chickpea	05
		Tomato	06
		Potato	07
		Cabbage	08
		Strawberry	09
		Trefoil/ Tare/Sainfoin	10
		Courgette/Aubergine	11
		Pepper	12
		Other (Please state.....)	98a
	Other (Please state.....)	98b	
<b>B9a. Products and approximate amounts grown in this land in one year:</b>	<b>Type</b>	<b>Amount (kg)</b>	



<p>(1 ton: 1000 kg)</p>					
<p><b>B9b.</b> Approximate amount of the product you sell <u>in this land in one year</u>:</p> <p>(1 ton: 1000 kg)</p>	<p style="text-align: center;"><b>Type</b></p>	<p style="text-align: center;"><b>Amount (kg)</b></p>			
<p><b>B10.</b> What is the income from this land?</p> <p><b>ATTENTION! WHEN YOU USE DIFFERENT SCALES, PLEASE NOTE NAME OF THE SCALE AND TO HOW MANY KGs IT CORRESPONDS TO!!!</b></p> <p><b>FOR EXAMPLE: 1 bag of flour = 50 kg bag price =50TL</b></p> <p><b>Bag of feed = 50 kg Bag price = like 30TL,</b></p> <p><b>Bin etc. different units.</b></p> <p><b>Also scales like bin etc. and pricing over this is common. It will be helpful to warn interviewers in this regard. For example kg and TL price of the bag etc. should be noted.</b></p>	<p style="text-align: center;"><b>(INTERVIEWER SHALL CALCULATE THE TOTAL ANNUAL BY MULTIPLYING THE AMOUNT BY SALE PRICE EVEN IF IT IS THE WHEAT AND BARLEY IT CONSUMES)</b></p>				
<p><b>B.11</b> How many m2 of your land you shall continue</p>	<table border="1" style="width: 100%; height: 30px;"> <tr> <td style="width: 33%;"></td> <td style="width: 33%;"></td> <td style="width: 33%;"></td> </tr> </table>				

to use for farming after the Project is completed?			
<b>B12.</b> Is there irrigation in this land?	Yes		01
	No		02
<b>B13.</b> Do you tame any land in addition to your land with title deed?	Yes		01
	No ( <b>Skip to B14</b> )		02
<b>B13.1</b> How many m2 of land do you tame in addition to your land with title deed?			
<b>B13.2</b> What is the income you get from these lands?			
<b>B13.3.</b> What is the ownership status of the lands you use other than your own land?		<b>B13.4 How many m2?</b>	
	Treasury land		01
	Belongs to a member of the household		02
	Belongs to a relative/spouse/friend and I don't pay rent		03
	Belongs to someone else, I pay rent ( <b>Skip to question B13.3.1.</b> )		04
	Other, Please state?		05

B13.3.1 How do you pay the rent (lease)?	01 As product	B13.3.2 Volume of product?
	02 As fee	B13.3.3 What TL for one m2?
B14. How much of your land do you rent out or lease?		
B14.1 What is the income you earn from this?		
B15. Other than your land affected from thermal plant, is there a barn, cot, pool, storage etc. on your land?	None (Question B16)	01
	Barn	02
	Cot	03
	Pool	04
	Storage	05
	Hayloft	06
	Other ( <i>Please state.....</i> )	98
B15a. What will be the cost if you want to rebuild these immovable?		<b>Cost</b>
	Barn	01
	Cot	02
	Pool	03
	Storage	04
	Hayloft	05
	Other ( <i>Please state.....</i> )	98
B16. Where would you like to stay or live when	In the village	01

thermal plant is completed?	Outside the village (S B14a)	02
<b>B16a. Where would you like to live outside the village?</b>  (Write the place if it is definite)	County	01
	Province	02
	Metropolitan city	03
	Another village	04
	Other	98

### AGRICULTURAL ACTIVITIES

**C1. Please state production and sale in the last 12 months on products (grain, fruit, vegetable, and legume) in all lands, gardens and vineyard of the household?**

**(INTERVIEWER SHOULD WRITE NAMES OF THE PRODUCTS, QUANTITY, KGs)**

**1 TON=1000 KG)**

	<b>C1.1 PRODUCTS</b>	<b>C1.2 PRODUCTION QTY. KG</b>	<b>C 1.3 SALE AMOUNT KG</b>	<b>C 1.4 SALE PRICE KG (PRICE X QTY.)</b>
01	Wheat			
02	Barley			
03	Sugar beet			
04	Trefoil			
05	Tare			
06	Esparsette			
07	Tomato			
08	Pepper			

09	Aubergine			
10	Plum			
11	Apple			
12	Peach			
13	Cherry			
14	Pear			
15				
16				
17				
18				
19	Other?			
20	Other?			
<b>C.2</b>				
<b>1 What is the cost of planting-taming one m2 land? (TL)</b>  <u><b>ASK FOR THE PRODUCT THAT IS GROWN IN HIGHEST VOLUME!!!</b></u>				
<b>C3. For how many months does the wheat (flour) and animal feed you grow for your own consumption supply the need of your family?</b>			<b>HOW MANY MONTHS?</b>	
		3.1 Wheat (flour)		
		3.2 Animal feed		
<b>C4. What will be the TL cost per year if you wanted to buy wheat other than the wheat you produce?</b>  <u><b>This is very hard to calculate, so make an estimation over bag price or ton price, first write the following than write the total next to it</b></u>				

<p><b><u>For example let's say the head of the household said that the wheat he grows supplies his/her needs for 5 months. First of all learn what is the 5 month flour need of the family in kg or bags. Then ask the unit price of it. If it is a bag learn kg and TL price of the bag; if it is ton learn TL price of one ton. Then multiply two and write an average value. This is one of the questions that site coordinator needs to control daily.</u></b></p>	
<p><b>C4.1 What is the cost as grain (TL)</b></p>	
<p><b>C4.2 What is the cost as animal feed (TL)</b></p>	
<p><b>C5. How many <u>TONs</u> of animal feed do you purchase a year?</b></p> <p><b><u>Animal feed purchased from the market besides animal feed he/she grows!!!!</u></b></p>	
<p><b>C 5.1 How much do you pay per ton?</b></p> <p><b><u>Write it in detail if you use another measurement unit!!!</u></b></p>	
<p><b>C5.2 How much do you spend a year?</b></p>	

<p><b>C6. How much <u>kg</u> flour do you use in a year?</b></p> <p><b><u>Flour purchased from the market besides the one he/she produces!!!</u></b></p> <p><b>If a different measurement unit is used please write it in detail!!! (sack/bag etc.) <u>Please note kg of one sack or bag!</u></b></p>			
<p><b>C6.1. How much do you pay per one <u>kg</u> of flour? (TL)</b></p>			
<p><b>C6.2. How much do you spend in total?</b></p>			
<p><b>C7. Which of the products I list do you produce and which of the products do you consume?</b></p> <p><b><u>Coding schedule:</u></b></p> <p><b>01 Only produces</b></p> <p><b>02 only consumes</b></p> <p><b>03 Both produces and consumes</b></p> <p><b>99 Neither produce nor consume</b></p>	<p><b>PRODUCT</b></p>	<p><b>CODE</b></p>	
	Red meat and products		01
	White meat and products		02
	Milk		03
	Cheese		04
	Butter		05
	Yogurt		06
	Legume		07
	Fruit		08
	Vegetable		09
	Molasse/jam		10
	Tomato and pimento		11
	Noodle		12

	Tomato paste		13
	Egg		14
	Honey		15
	Wool		16
	Olive		17
	Tea		18
	Hazelnut/walnut		19
	Chestnut		20
	Pickle		21
	Other (.....)		98
<b>C8. Do you have any animals?</b> (other than bird, dog, pigeon, cat etc.)	Yes		01
	No		02
<b>C9. Which animals do you have and how many?</b>	<b>Type</b>	<b>Qty</b>	
	Cattle		01
	Sheep		02
	Goat		03
	Horse/Donkey		04
	Poultry		05
	Bee Hive		06
	Other		98
<b>C10. How much TL do you earn from small cattle you sell? (or write "0")</b>			



<b>C11. How much TL do you earn from cattle you sell? (or write "0")</b>			
<b>C.12 How much TL do you earn from poultries you sell? (or write "0")</b>			
<b>C13. What are the ANIMAL PRODUCTS you <u>sell</u> every year (milk, egg, yogurt, cheese, etc.) and approximate quantities?</b>	<b>13.1 Type</b>	<b>Qty. (as kg or unit Please state)</b>	<b>13.3 Total sale income</b>
	<b>13.2</b>		
	01 Milk		
	02 Egg		
	03 Cheese		
	04 Yogurt		
	05 Honey		
	06 Other		
<b>C14. Do you pasture your animals?</b>  <b>PLEASE SKIP THE QUESTION WITHOUT ASKING IF HE/SHE DOESN'T HAVE CATTLES or SMALL CATTLES!!!</b>	I don't pasture		01
	In the village pasture		02
	In my own land		03
	In the mountains		04
	Other, Please state?		05

**SOURCE OF LIVING / INCOME and EXPENSES**

<b>D1. How much did you spend as a family within the <i>last 1 year</i> for</b>	Clothes		01
---	---------	--	----

	School expense		02
	Health/Drugs		03
	Goods/Other (white goods, furniture)		04
<b>D2. How much did you spend as a family within the <i>last 1 month</i> for following items?</b>	Kitchen expenses (how much do you spend for market shopping pr month? )		01
	Cigarette		02
	Fuel and electricity		03
	Transportation/ transportation expenses  (Going to and coming from market and city ...)		04
	Telephone (take into consideration the number of fixed telephone and mobile phones used in the house per month!)		05
	Water expense		06

**D3. How much TL approximately would you have spent if you tried to purchase products you grow yourself in the last month (September) like egg, grain, fruit, vegetable, meat?**

**INTERVIEWER THIS QUESTION ONLY ASKS HOW MUCH THE FAMILY CONSUMES OF ITS OWN PRODUCTS. IF THERE IS NO PRODUCTION, SKIP TO INCOME SECTION.**

PRODUCT	QTY.	PRICE/QTY./LITER /KG	TOTAL COST
01 Milk			
02 Egg			
03 Meat			
04 Flour			

05 Vegetable			
06 Fruit			

**D4. How much income in TL did you earn from following items in the last MONTH and YEAR?**

**This question shall be asked according to month and year based on the type of income. If asked according to month, take into consideration the previous month!!**

INCOME SOURCE		PERIOD	QUANTITY (TL)
01	Salary income public servant	Monthly	
02	Salary income worker	Monthly	
03	Salary income tradesman	Monthly	
04	Retired pension	Monthly 3 Month	
05	Widow, orphan and elderly salary	Monthly/ 3 Month	
06	Income from working as temporary or seasonal worker	Annual	
07	Poverty support	Annual	
08	Income from children and families outside the household	Annual	
09	Income from livestock (income from sale of animals)	Annual	
10	Income from sale of byproducts of animals (milk, egg, honey etc.)	Annual	

11	Income from agricultural products (wheat, barley etc.)	Annual	
12	Income from olive, olive oil, fruit, hazelnut, pistachio, grapes, etc. fruit, vegetable and other garden products	Annual	
13	Net income from transportation services, taxi, truck etc.	Monthly	
14	Rent income	Monthly	
15	Unemployment support	Monthly	
16	Bee products		
17	Other		

**D5. How much do you spend on following items *in one year* for agricultural and livestock activities?**

Irrigation	01	
Workmanship	02	
Disinfestations	03	
Manure	04	
Seed	05	
Transportation (delivery, livestock)	06	
Delivery (delivery of agricultural products)	07	

Fuel oil	08	
Electricity	09	
Animal feed	10	
Veterinary/ drug	11	
Shepherd/ animal care	12	
Beekeeping	13	
Other		

**D6. What are your main energy resources? (CHECK ONLY ONE FOR EACH ROW.)**

	Electricity	LPG (Bottled gas)	Wood purchased	Wood from forest	Coal	Gas oil	Other (Please state)
Hating							
Food							
Lightening							

**D7. Which of these do you own?**

	Type	Yes (Qty.)	No (√)

	Fixed phone			01
	Mobile phone			02
	Computer			03
	Radio/ Tape player			04
	TV			05
	Video/DVD/VCD player			06
	Sewing machine			07
	Washing machine			08
	Dish machine			09
	Oven			10
	Refrigerator			11
	Vacuum cleaner			12
	Water heater			13
	Water boiler/kettle			14
	Water heater working by sun power			15
	Bicycle			16
	Motorcycle			17
	Automobile			18
	Pickup			19
	Truck			20
	Minibus			21
	Tractor-trailer			22
	Plough			23
	Drill (Sowing machine)			24
	Tractor rake			25
	Electrical tub			26

	Conventional tub			27
	Milking machine			28
	Bee hive			29
	Hammer drill/ratchet drill			30
	Other(.....)			98
<b>D8.</b> At what level do you supply the needs of your household with your income?	Easy			01
	Moderate			02
	Hard			03
	Very hard			04
<b>D9.</b> Does any member of the household have any debts to anyone/anywhere?	Yes			01
	No (Skip to <b>D10</b> )			02
	Don't know (Skip to <b>D10</b> )			97
<b>D9.1</b> Who did you take this loan/credit from?	Credit from the bank			01
	Loan from family			02
	Loan from acquaintant			03
	Other			04
<b>D9.1.</b> How much loan/credit did you take in the last 12 months?				
<b>D9.2.</b> In economical terms, how shall this loan create financial problems?	Low			01
	Moderate			02
	More than normal			03
	Too much			04
<b>D 10.</b> How much did you save (TL) in the last 12 months?				

**SKIP TO F. HEALTH SECTION IF THERE IS NO CHILDREN IN THE FAMILY BETWEEN AGE OF 6-15**

**EDUCATION**

<b>E1. Do children at the age of 6-14 in the household go to school?</b>  <b><u>IF THERE IS A CHILD AT THE COMPULSORY AGE OF STUDY AND DOES NOT GO TO SCHOOL CHECK IT EVEN OF OTHER CHILDREN OF THE HOUSEHOLD GOES TO SCHOOL!!!</u></b>	Yes <b>(Skip to F1)</b>	01
	No	02
<b>E1.1</b> Number of children that go to school  (age 6-14)	Female student <input type="text"/> <input type="text"/>	01
	Male student <input type="text"/> <input type="text"/>	02
<b>E1.2</b> Number of children that does not go to school  (age 6-14)	Female <input type="text"/> <input type="text"/>	01
	Male <input type="text"/> <input type="text"/>	02
<b>E2. Where are their schools?</b>  (You can check more than one box)	First 5 years in the village/district	01
	First 5 years in the neighborhood village/district	02
	8 years in village	03
	8 years in neighborhood village/district (by transportation)	04
	8 years in neighborhood village/district (without transportation)	05
	Education by transportation between grade 5-8	06
	In the town/county	07
	Other ( <i>Please state.....</i> )	98
<b>E3. What are the reasons for not</b>	They work	01



going to school?  <b>(MULTIPLE ANSWERS ARE POSSIBLE)</b>  <b>(DO NOT READ THE <u>OPTIONS</u>)</b>	School is far	02
	School is expensive	03
	Girls are not sent to school	04
	School is very bad	05
	Doesn't need to study	06
	Sick or disabled	07
	Other ( <i>Please state.....</i> )	98
<b>E4. Do your children continue their education after primary school?</b>	Yes S5	01
	No S.E 4.1	02
<b>E4.1 Why not?</b>  <b>MULTIPLE ANSWERS ARE POSSIBLE)</b>  <b>(DO NOT READ THE <u>OPTIONS</u>)</b>	They work	01
	School is far	02
	School is expensive	03
	Girls are not sent to school	04
	School is very bad	05
	Doesn't need to study	06
	Sick or disabled	07
	Other ( <i>Please state.....</i> )	98
<b>E5. Where do they go for high school and higher education?</b>	There is a high school in our village	01
	At the county center (Tufanbeyli)	02
	In neighborhood villages	03
	Close by counties	04
	City center (Adana)	05
	Surrounding cities	06
	Metropolitan cities (Ankara, Istanbul, Izmir)	07
	Other	08

**HEALTH**

<b>F1.</b> Is there any member in your household who has health problems?	Yes		01
	No (Skip to <b>F2</b> )		02
<b>F1a.</b> What kind of disease?  (WRITE THE MOST SIGNIFICANT)	<b>House hold row no</b>	<b>Name of disease</b>	
<b>F2.</b> Did anyone in the household pass away in the last five years?	Yes		01
	No (Skip to <b>E3</b> )		02
<b>F2.1.</b> What was the reason?			
<b>F3.</b> Does anyone in your household need special care? (physical/mental/visual/hearing impaired, very old etc.)	Yes		01
	No (Skip to <b>E4</b> )		02
<b>F3.1.</b> What kind of care?  State according to demographical order under household information, e.g. son 03, mother in law 07	<b>Household row no.</b>	<b>Car type/reason</b>	

<b>F4. Did anyone in your household have respiratory problems? (Bronchitis, pneumonia etc.)</b>	Yes ( <b>Ask F.4.1</b> )	01
	No ( <b>Skip to F5</b> )	02
<b>F4.1 How many people did have respiratory infection?</b>		
<b>F5. Where/from whom do you get health service?</b>  <b>(WRITE THE MOST BASIC)</b>	Village/district doctor/family doctor	01
	Nurse in the village/district	03
	Midwife in the village/district	04
	Doctor in the town/county	05
	Doctor in the city	06
	Haler who uses traditional treatment methods	07
	Family members	08
	Self-treatment (at home)	09
	Other ( <i>Please state.....</i> )	98
<b>F6. Do you have health insurance?</b>	Yes	01
	No ( <b>Skip to F1</b> )	02
<b>F6.1. What is your health insurance?</b>  (If International Insurance, is it possible to use it in Turkey, if <b>yes</b> , check)	Farmer SSI	01
	Tradesman SSI	02
	Pension Fund	03
	SSI	04
	Private Insurance	05
	Green Card	06
	International Insurance	07

## VILLAGE PROBLEMS

**G1. What are the most important three problems that can be seen in the village? (DO NOT READ THE OPTIONS)**

(CHECK ONLY ONE ON EACH ROW)

	Problem	1 <sup>st</sup> . Priority	2nd Priority	3rd priority
01	Unemployment			
02	Low income			
03	Late payment of salaries and wages			
04	Difficulty in payment of agricultural product sales			
05	Lack of transportation			
06	Bad roads			
07	Inadequate health organization			
08	Inadequate and unsecured health conditions			
09	Inadequate drinking water			
10	Inadequate sewage			
11	Inadequate irrigation water facility			
12	Inadequate energy source			
13	Inadequate accommodation conditions			
14	Difficulty in accessing the land			
15	Inadequate education services			
16	Garbage/waste problem			
17	Inadequate child care service			
18	Inadequate nutrition			
19	Telecommunication/communication			
20	No opportunity for economic development			
98	Other ( <i>Please</i>			

**G1.1** How do you think these problems can be solved?

**G1.1** What can be done to develop your village using village’s resources?

<b>G2.</b> How did the living conditions of your household change in the last five years?  <b>(DO NOT READ THE <u>OPTIONS</u>)</b>	Better	01
	Same	02
	Worse	03
	Don't know (Skip to question <b>G1</b> )	97
<b>G3.</b> How will the living conditions of your house hold change in the next five years?	Better	01
	Worse	02
	Will not change	03
	I don't know	04
<b>G2a.</b> Can you explain why?		

**PLEASE REMIND PERSON YOU INTERVIEW OF THE  
IMPORTANCE OF ANSWERS TO BE GIVEN TO THE QUESTIONS  
IN THIS SECTION**

**PERCEPTIONS AND EXPECTATIONS REGARDING THE PROJECT**

<b>H1.</b> Have you heard of Tufanbeyli Project before?	Yes	01
	No (Skip to question <b>H2</b> )	02
<b>H1a.</b> From whom?	Mukhtar	01
	Family members, village community, friends	02
	Authorities	03
	Local/national press	04
	Internet	05
	Environmentalists	06
	Other ( <i>Please state.....</i> )	98
<b>H2.</b> Do you think you have sufficient knowledge about the project? Would you like to get more information?  <b>(Do not read the <u>OPTIONS</u>)</b>  <b>(CHECK ONLY ON)</b>	Sufficient, I do not want extra information → (Skip to <b>H3</b> )	01
	Not sufficient, I would like to know more	02
	Not sufficient, but I do not want to learn more → (Skip to <b>H3</b> )	03
	Sufficient, but I can learn more	04
<b>H2a.</b> What would you like to learn the most about the project?	What will happen to the village when thermal plant is built	01

	How much the expropriation price be	02
	When will the construction start	03
	Shall we get any jobs	04
	How will our health be affected	05
	How shall the environment change	06
	Other, Please state?	98a
	Other, Please state?	98b
<b>H3.</b> Who/which organization do you trust for getting information about the project? Start with the one you trust the most and list the <b>first three</b> .	<b>Person/organization</b>	<b>Based on priority</b>
	Mukhtar	01
	Village community/friends	02
	Company personnel	03
	Government staff	04
	Imam	05
	Local TV/Newspaper	06
	National TV/Newspaper	07
	Internet	08
	Teacher in the village	09
	Environmentalists	10
	Other( <i>Please state.....</i> )	98
<b>H4.</b> Did you participate in Community Participation Meeting of the project?	Yes I did	01

	I heard but could not go (Skip to <b>H5</b> )	02
	I heard but did not go (Skip to <b>H5</b> )	03
	Did not hear but I would have liked to go (Skip to <b>H5</b> )	04
	Did not hear but would not go anyway (Skip to <b>H5</b> )	05
<b>H4a.</b> Did Community Participation Meeting help you get sufficient information about the project?	Yes	01
	No	02
<b>H4b.</b> Were booklets and brochures about the project beneficial for getting information about the project?	Yes	01
	No	02
<b>H5.</b> What do you think are the benefits of the project?  <b>(DO NOT READ THE <u>OPTIONS</u>)</b>	In the interest of the state not us	03
	Value of the land shall increase	04
	Expropriation fee shall be good for us	05
	Work opportunities shall increase	06
	Economy would boost up in the region	07
	Regular electricity shall be supplied	98a
	Other ( <i>Please state.....</i> )	98b
<b>H6.</b> What are the harms of the project, what are your recommendations for avoiding these harms? <b>(WRITE ACCORDING TO ORDER OF PRIORITY)</b>		
<b>Row</b>	<b>Possible harms</b> <b>97. Don't know</b> <b>99.No harm</b>	<b>Recommendation</b> <b>97.Don't know</b> <b>99.Not suitable</b>
<b>1</b>	Land loss	
<b>2</b>	Noise	
<b>3</b>	Dislocation	
<b>4</b>	Air pollution	
<b>5</b>	Environmental degradation	



<b>6</b>	Health deterioration	
<b>7</b>	Life safety would be in danger due to construction works	
<b>8</b>	High electricity current	
<b>9</b>	No problem	
<b>10</b>	Other	
<b>H7. What types of work would you consider doing after construction of thermal plant?</b>		
	Technical personnel at the plant	01
	Produce poultry	02
	Mine Worker	03
	Beekeeping	04
	Handicrafts, carpet weaving	05
	Fruit growing	06
	Arboriculture	07
	Floriculture	08
	Green housing	09
	Continue farming	10
	Live stock	11
	Other	98
	Do not plan to stay in the region	99
<b>H8. Have you received expropriation fees for your parcels?</b>		<b>01 Yes H8.1.1</b> <b>02 No H8.2.1</b>
<b>H8.1.1 How much did you receive from the expropriation?</b>		
<b>H.8.1.2. What is your opinion on judge compensation fees?</b> <b>(THIS QUESTION IS FOR THOSE WHO HAVE ACCEPTED THE COMPENSATION)</b>		<b>01 The price is good</b> <b>02 The price is too low, I make more money on that land annually</b> <b>03 The price is too low, I cannot afford to buy any land as substitution for lost land</b>

			04 It is just fair	
			05 Don't know	
H.8.2.1. Why have you not received your compensation?			01 Expropriation fees have not been paid yet	
			02 I did not accept expropriation fees, I am taking it to court	
			03 The land has a large number title owners, deed issues cause a court case	
			04 Other pls. Specify	
H.8.2.2. What is your opinion on judge compensation fees?			01 The price is too low, I make more money on that land annually	
(THIS QUESTION IS FOR THOSE WHO HAVE NOT RECEIVED THE COMPENSATION)			02 The price is too low, I cannot afford to buy any land as substitution for lost land	
			03 It is NOT fair, the neighboring villages are compensated at a higher m <sup>2</sup> fees.	
			0 Don't know	
	<b>H8 How will you use the expropriation fee?</b>	<b>H.8.1</b>	<b>H.8.2</b>	<b>H.8.3</b>
		<b>1<sup>st</sup> priority</b>	<b>2<sup>nd</sup> priority</b>	<b>Third priority</b>
1	Buy agriculture tools			
2	Buy farming land			
3	Buy a house in the rural area			
4	Buy a house in the city			
5	Pay my debts			
6	Open a business in the rural area			
7	Open a business in the city			
8	Buy a car			
9	Buy gold			
10	Buy livestock			
11	Marry my kids			
12	Buy a land in the city			
13	Other (...write)			
3	Other (...write)			

<b>H9.</b> Would you like to attend courses to help you get work?	Yes	01
	No (Skip to <b>H35</b> )	02
<b>H9.1.</b> What kind of course would you like to attend to?  <b>(DO NOT READ THE <u>OPTIONS</u>)</b>  <b>(MULTIPLE ANSWERS ARE POSSIBLE)</b>	Computer	01
	Foreign language	02
	Agriculture methods	03
	Weaving (rug, carpet, etc.)	04
	Live stock	05
	Green housing	06
	Beekeeping	07
	Other ( <i>Please state.....</i> )	98
<b>H10.</b> Would you consider building or joining to a cooperation to increase your income and living standards?	Yes	01
	No	02
	Changes according to condition (Skip to <b>H11.2</b> )	03
<b>H11.1.</b> What kind of cooperation?  <b>(DO NOT READ THE <u>OPTIONS</u>)</b>  <b>(MULTIPLE ANSWERS ARE POSSIBLE)</b>	Livestock and/or Agriculture Cooperation	01
	Village Development Cooperation	02
	Beekeeping cooperation	03
	Fishery and Water Products Cooperation	
	Other ( <i>Please state.....</i> )	98

Thank you for your time. If you would like to contact us, you can call the number on the card or send us a mail. Can you give us a telephone number and address for in case we need to contact you in the future?

Home Phone:.....Mobile Phone:.....

Is there any other phone number that we can contact you?.....

Address: \_\_\_\_\_

County: \_\_\_\_\_

Village: \_\_\_\_\_

District or region: \_\_\_\_\_

Household No: \_\_\_\_\_

Name, Surname of the Interviewer:.....

Date of questionnaire.....

## ANNEX II FOCUS GROUP MEETINGS

### Kayarcik Village Women Focus Group Interview

1. How would you define the life in your village? What are the expectations from women in village life?
  - a. Cooking
  - b. Childcare
  - c. Livestock care
  - d. Working in the field

It is expected from women to wake up early, prepare breakfast, clean the house, care the livestock and then go to the field (works on her own field or in someone else's field for a daily wage). After coming back to the house, caring livestock again (milking and feeding), cooking for her husband and children, serving tea for her husband and making the husband feel welcomed in the evening is among the expectations as well. Childcare is also perceived as a task of women.

Only few men are working in the fields. Women are going to the fields and work there for a daily wage while men are sitting in the coffeehouse. Men want women to work in the field because they don't have any money.

When they go to the sugar beet fields to work, women daily receive 25TRY and men receive 50TRY. Men are harvesting, throwing beets to the tractor. Women are cutting green parts of the sugar beets. Women can't resist this. Because the wage of 25TRY paid to women is determined by the senior men of the village. In potato fields women are receiving 27TRY daily and men receive 40 or 50 TRY. Because in sugar field, landlord is providing meal while in potato field people are bringing their own meal. The 2TRY difference is because of that.

Men don't force women to work in the fields. Beet or potato jobs are seasonal jobs and women stay at home other than those months. Women are saving the money that they earned from the field for themselves and additionally their husbands give some allowance from time to time.

Men don't perceive the work that women do as work. Women do all the tasks in the village but still men/husbands say "what did you do, have you even worked on anything to say that you are tired".

The biggest problem of women is to work. Spouses generally don't help and go to coffeehouse. Women, after coming back from the field, cook and then prepare tea. So as to understand, for the women there is no sleep till morning.

**Women health:** They don't give any importance to women. Doctor comes to the village and gives medicine only by looking. There are gynecological problems in the village. Doctors don't help even if you go to the district. Women get older at early ages in here.

**Children Health:** There isn't any major problem about children's health.

#### **Education:**

In new generations among children there is no distinction between girls and boys. They only want their children to go to school. They send their girls to boarding schools even out of village or district.

**Role of women:**

Men in the village do not let women talk or value what they think. Women can't stand against or oppose men. What women think has no importance. Particularly if you're a widow woman they won't give you the right to talk, they would envy you and react claiming that you are meddling in everything and they talk behind your back. In our region women cannot talk.

**Migration:**

Young people leave home for work. They go to nearby cities such as Kayseri and Adana to work but later they come back.

Some elderly people during winter stay in the city if they have children living there, and in summer come back to the village.

**Polygamy:**

Polygamy is so rare that we can say it doesn't exist. There are one or two people and their reason for second marriage is not having a child from the first spouse.

**How is the perception about women involving in labor power?**

In the village they gossip about women working outside of the house. They won't let women work near another men not to hear gossips within the village. That's why they won't let them to work in a store in the district or city. They won't let them to work as a cleaning worker. Women are only allowed to work in the fields together with other women.

**Would there be participation if special courses are provided for women?**

If courses open women won't participate. If the courses would be about embroidery or weaving carpet, then they may participate. Or they may participate to vocational courses such as computer, sewing, weaving.

**Do they have any information about thermal power plant project?**

We don't know anything about thermal power plant. If we would like to get information, men would not invite us to the meeting.

**Is there anyone who lives in the houses bought for the project? (How many)**

Thermal power plant will take the land of five people among us.

**How do they realize the money taken?**

They generally use it for retirement. But if they give money enough to buy a house, they may leave the village too. They would clear their loans as well. Generally, they invest the money they receive to a bank or retirement. That's why they wouldn't prefer courses for investment.

**How do you think the effect of the project would be? Positive. Why?**

While the women who do not lose their land have a positive view, the ones who lose have a negative one. The reason of the ones who have a positive view about the thermal power plant's construction is that jobs can be created for both men and women. Women were working in the power plant in Korhan. It would be nice if women could work in this power plant too. Job opportunities can be provided for women such as: cleaning, cooking.

**Negative:**

Every year we were planting and harvesting crops and earning income more or less, if we lose our fields now we won't be having that source of income anymore. When we have the land we were eating our fill. Women say, now our land is taken away from us, what are we going to eat or drink. They give a penny, what are we and the next generations going to do from now on. What is going to happen to the village life? Our health will crack up, nothing can be cultivated where power plant exists, products cannot grow because of the smoke and animals are born disabled, livestock breeding cannot be done.

**Expectation:**

They need to resettle us some other place, if the power plant is built we cannot stand the smoke here. They should give enough money to cover our lands' values because Enerjisa gives my land 2000TRY while it gives the land next to me 600TRY, they need to adjust this situation. . According to what, they give that much money, why the amount varies greatly we couldn't understand.

In addition, we want our children to be employed in the power plant, we want "good job, good meal".

Especially women over middle age don't have an expectation; their only concern is after their fields are sold what job their children will be doing. They think that can be solved by the children getting work in the thermal power plant.

**Expression of a woman who had attended a demonstration in Kayarcik Village:**

We can't make our voice heard. We have done a demonstration, no one heard us. The men of the village didn't defend the village well. We hold a protest march in the village, they have sent gendarmerie, shut us up and arrested the ones who started the march. "WE HAVE BEEN GUILTY BECAUSE OF OUR OWN LANDS". Muhtar (the elected head of the village) said why are you marching women by yourselves, we got scared and couldn't say a word, muhtar doesn't call us for the meetings anyway he says that we won't understand this kind of issues. We went to the meeting but men sent us back and we had nothing else to do then turning back to our houses otherwise they would start talking behind our back. When we were holding the protest march against the thermal power plant, governor, judge and district governor came to our village and told us "if you keep on protesting you will be criminals, we won't give job to your children and you all will be arrested". The ones who responded to the judge and public prosecutor have arrested by gendarmerie and stayed in the jail overnight. Noone was able to shut the youngsters up. Youngsters broke the windows of engineering vehicles, some youngsters broke into the worksite but Enerjisa employed and silenced them.

State was not with us either, apparently Enerjisa has bought the state too.

## YEŞİLOVA VILLAGE WOMEN FOCUS GROUP INTERVIEW

Women wake up early in the village, prepare breakfast, care for livestock and then finish housework. From 6 a.m. to 7p.m. women work in the field and then come back to house, cook, and care for livestock again. Milking is also women's task. But men certainly help women about caring for livestock. In winter since we are at home too we weave bootees and sell them to contribute to the budget.

In village there is a tradition of working collectively and helping each other (imece) Women hoe each other's field together in a row. Women also bake breads for winter collectively. Men plough the field with motor plough. There is solidarity between men and women. Women and men are working together.

Women have a say in the village. Spouses consult each other the times when something will be bought for the house, livestock will be bought or sold, and the decisions like which product will be sowed to the field. Spouses decide together for those. There is no discrimination between men and women in the village. Widowed women receive more respect in the village, people are trying to support and help more because they don't have a man to look after themselves.

There is no discrimination between boys and girls in education too. Everyone's trying to send their children to school even if to transfer the children other places where schools are available is necessary.

Children don't have any health problems because they are fed totally naturally in the village. They grew everything themselves, women do not buy much from outside.

Everything's normal and nice about the women's role. Women are happy about their role in the house and family, and their husbands. But the main responsibility in the house is taken by the women. They undertake housework and childcare.

About poverty, the economic situation of villagers is okay, because they don't pay for the fruit and vegetables. We grow plenty in the summer and preserve some for the winter. We either dry them or put them in deep freeze in a plastic bag.

Migration: Men go out of village for 2-3 months in the winter to be able to save money and later they come back. People who left the village and are civil servants come back to the village after they are retired. The ones who don't return to village, for sure come to the village in the summer and cultivate the land. There are a lot of people who are retired and come back to village.

Polygamy doesn't exist in the village. Before women were getting married around the age of 15-16. Still this age has not increased much but it changes around 18-20.

Women can work. They can attend if enjoyable courses are opened but only after they finish their tasks of course. As courses they want sewing, embroidery, hairdressing and kuran. For the kuran course they are looking for a female hodja.

Environment: we don't have any knowledge about thermal power plant, men would know. As women we don't attend meetings. Only one woman is attending and that's because her husband's sick.



They don't want the power plant. Because their land which provide their income for generations and their source to feed, raise and send their children to school will be gone. It doesn't matter how much money that they give because it won't be enough to feed all next generations and will run out easily. One another problem is men and women in the village do not have professions and the only thing that they know is farming, cultivating and livestock breeding. They cannot carry this on in the city. Even if they go to the city they cannot work as civil servants, they don't have a diploma. Women have the same situation, even if they go to the city and go for cleaning houses, they say that "people would disparage and humiliate us because we are coming from the village".

Our nature is so beautiful that we could grow everything we need but with the thermal power plant our nature will be ruined. They say where there is a thermal power plant nothing would grow, we can't receive product, nothing would grow in the soil because of the smoke and ashes, and it would be unhealthy.

Additionally, they really get afraid from the noise and lurching ground because of the explosion of dynamites. The dynamites exploded without a prior notice is problematic. Besides, snow would not fall because of the thermal power plant and it is a big problem for the village as well.

Everyone's land is within the margin of the thermal power plant among interviewed women.

If the money given could provide a house they may think of moving to Adana or Kayseri because power plant will create huge problems afterwards. Also if the villages are expropriated by the company and more healthy places is provided where they can cultivate and livestock, they are more willing to move to those places.

Trainings for investment are convenient for the villagers as well.

If it won't be possible in their own village, they are still absolutely willing to continue cultivating and livestock breeding in other places, the only thing that they know is they don't want to be away from farming.

Positive: It would be nice if women can work in the power plant too. They can attend courses such as secretariat, cooking or anything if it would provide them a job in the power plant. They really lean towards the idea to be employed in the power plant.

Expectations: Recruitment in the power plant. Continuation of living in a nice place. Transportation of the village to another place.

## Tufanbeyli Thermal Power Plant Social Effect Assessment Research

### Kayarcık Village Focus Group Interview

#### Participant List

Sinan Çapanoğlu, 28 years old, married, elementary school graduate, going out of village to metropolises for work

Okan Çapanoğlu, 21 years old, single, high school graduate, going other cities for work

Mustafa Aykanat, 18 years old, single, drop out of high school, farming

Volkan Bozkurt, 18 years old, single, elementary school graduate, going out of district to work, from time to time helping family with farming

Gökhan Yıldırımcan, 21 years old, single, high school graduate, going foreign places for work, working as a waiter in his father's coffeehouse.

Veli Yıldırımcan, 16 years old, single, elementary school graduate, farming

Mesut Danacı, 18years old, single, high school student, farming

When we ask young villagers how they would define the village, they described it as a rather boring place. The reason they gave was the fact that there are not many things to do in the village. As an example, they told that there isn't any internet café, so internet in the village and they have to pay for the road and go to Tufanbeyli to be able to use internet. Likewise, they say they may have the chance to get a better education and get advantage of the opportunities in the city in case they live in there. When we ask people who has been in cities like Adana for work, whether they missed the village or not, they told that they did not miss the village that much but they missed the city.

Youngsters spend most of their time in the village's coffeehouse. They told that because there is no internet café in the village, they have to pay for the road and go to Tufanbeyli to provide their internet needs. When we ask them about where they go and roam, they replied as they are walking to neighboring villages which are in a walking distance and then they walk back. As they were telling about how they eat apples and pears on the way to other villages they without realizing listed some of the nature friendly activities that they enjoy in village life.

Eating fruits and vegetables from the branches was told as if it was an activity. So it was obvious that they enjoy gathering together with friends from the village and spending time laughing and chatting together even if they express that they got bored of the village. Youngsters were constantly in a mood of chit chatting. They told that besides these leisure time activities they go to help their families when the time of farming and harvesting, and go and help to other landlords who need labor power in exchange of a daily wage.

Young people to get education are transported to other places where schools are available, but the ones who want to go to high school or equivalent schools have to migrate to the district or cities

such as Adana or Kayseri, depending on where their relatives live. Likewise youngsters told in detail that because special preparation courses for university entrance exams do not exist in the village and their number is not sufficient in the district; not only the young people but their families altogether are migrating to the city to send their children to those courses.

Some youngsters are going out foreign places for work because there is no job else than farming in the village. The fact that a few of the youngsters among that we had interviewed had been out to foreign places for work was helpful for us to see the balance between the ones who stay in the village and who left the village. The ones who had been out because of the unemployment were feeling that they are cleverer than the ones who stayed in the village and they had the tendency to give advices to their peers who stayed. At that point, boys who work in seasonal jobs mostly in cities like İstanbul, Adana, Kayseri, Mersin were claiming that they know those places and the world outside the village so the ones who stayed are more illiterate compared to them. According to the ones who had been to foreign places, attachment to the village was meaningless and it shouldn't happen because attachment to the village is the same as desiring poverty at the same time.

Youngsters mostly were aware of the thermal power plant project. They were trying to comprehend the reality of thermal power plant departing from the former thermal power plant that has built in Maraş. They mentioned that in Elbistan there were no young people left after the thermal power plant. From this point, they voiced that thermal power plant will cause health problems and will pull the children down. When we ask about whether thermal power plant will create employment or not, they told that there was the same expectation in Maraş but the people coming out and working was three times in number of the local workers. Departing from this, it is not so hard to guess that they don't have big employment hopes.

When we question about what is going to happen after thermal power plant to the money given for the lands, they told that it will be distributed within family in a way. At this point, because elderly have the saying on this issue, they don't really know much about how it will be distributed. When we ask them whether they follow any certificate program to be able to work in thermal power plant, they told that some of the young people are trying to learn welding and get a certificate to be able to get a job opportunity. From this point of view, young people seem really willing to work if job opportunities are provided.

Youngsters told that the only positive side of thermal power plant could be the employment opportunities that would be provided. When we ask about the negative effects of thermal power plant, they told similar to the case in Elbistan, the number of people having health problems will increase in their village too. Additionally, they told that the construction of thermal power plant will cause land impoverishment or the villagers raising livestock will not be able to do it anymore. They clearly indicated that because the soil could not be processed, villagers will have to migrate from the village.

The things that young people listed for the development of the village mainly couldn't go beyond speculations about how they can find a job around thermal power plant. Young people finding jobs according to their professions and the ones who don't have any profession to attend certificate programs – like welding, security and operator certificate- were among the things that are listed for development of the village. However, some youngsters were thinking that the certificates would not be enough to find a job as well. Because, according to them, it was expected people to work with

zero error in the power plant and the certificates taken from Tufanbeyli Public Education are not good enough to teach working with zero error.

Thus, we have completed our forty minutes long focus group interview and young people left the coffeehouse one by one.

## ANNEX III NEWS ON LOCAL MEDIA

### TUFANBEYLİ THERMAL POWER PLANT PROJECT

**Date:** January 25, 2007

**Location:** Tufanbeyli, Project Site

**Issue:** Site visits of Projects Director Veli Balat and Project Team to inform local stakeholders about the Project

**Website:** <http://www.kenthaber.com/akdeniz/adana/tufanbeyli/Haber/Genel/Normal/tufanbeyliye-termik-santral/14f6cfb0-bd19-4085-bc09-b561acc84fc1>

**Document:**

The screenshot shows a news article on the Kenthaber website. The article is titled "Tufanbeyli'ye termik santral" (Thermal power plant in Tufanbeyli). The main text discusses the construction of a thermal power plant in Tufanbeyli, Adana, and mentions a site visit by Veli Balat, the project director. The article is dated January 25, 2007. The website header includes the Kenthaber logo and navigation links for various categories like "SİYASET", "GÜNCEL", "DÜNYA", "EKONOMİ", and "KÜLTÜR SİNEMA". The article text is as follows:

**Tufanbeyli'ye termik santral**

EnerjSA tarafından, Adana'nın Tufanbeyli İlçesinde yapılacak termik santrale yılda 3 milyar kilovatt saat elektrik üretileceği ve yüzlerce kişiye istihdam sağlanacağı bildirildi.

EnerjSA Proje Koordinatörü Veli Balat, Türkiye Güçlü İşletmeleri tarafından 180 bin ton kömür rezervi belirlenen bölgede termik santralin yapımı için 2 adet hidroelektrik santral kurulmasının planlandığını söyledi.

Veli Balat, Tufanbeyli yöresinde kömürün ve hidroelektrik santralin ve elektrik santral inşaatına ilişkin Tufanbeyli Elektrik Üretim A.Ş.'nin 22 Mayıs 2006 tarihinde Sabancı Holding Şirketi olan Enerji Üretim A.Ş. (EnerjSA) tarafından satın alındığını ve santral inşaatı için gerekli çalışmaların başlatıldığını anlattı.

Proje yapı-iptal devret modeliyle gerçekleştirileceğine anlatan Balat, şöyle konuştu: "Santralin yapımı için çok sayıda Avrupa firması ile görüşmeler sürüyor. 100 hektarlık alanda inşaat çalışmalarına başlanacak. Santralin temel Haziran ayı içerisinde atılacak."

Termik Santral Projesinin toplam yatırım tutarının 400 milyon dolar olduğunu belirten Balat, sözlerine şöyle devam etti: "TKİ'nin sonuncu 5 yıllık planında kulan bölgede 180 bin ton kömürde biriktirilen rezervi tespit edildi. EnerjSA'ya ait ocaklarla birlikte 280 bin ton rezerv işlenecek."

Kurulacak termik santralin 20 yıl önce EnerjSA tarafından işletileceğini anlatan Balat, Tufanbeyli'nin Kayarık, Yanarık ve Fındıklı köyü üzerinde kurulacak termik santralin temelini Haziran 2007'de atılmasının planlandığını söyledi.

Santralin işletmeye açılmasının ise 2010 yılı sonuna kadar hedeflendiğini anlatan Balat, sözlerine şöyle devam etti: "Bu yatırım gerçekleştirilmesinin sonucu yılda 3 milyar kilovatt saat elektrik enerjisi üretilerek kullanılacak."

**Date:** December 04, 2007

**Location:** Tufanbeyli, Project Site

**Issue:** Site visits of Enerjisa's Mining Manager Mustafa Yorukoglu and Mining Engineer to inform local authorities (Tufanbeyli Sub-Governor and Mayor) about the TPP Project

**Website:** <http://www.kenthaber.com/akdeniz/adana/tufanbeyli/Haber/Genel/Normal/enenjisadan-ziyaret/a9e58ba8-d72e-461f-a8ad-7ca0a3b5dbcf>

**Document:**



**Date:** January 18, 2011

**Location:** Tufanbeyli District

**Issue:** Official Visit of Enerjisa Project Team and Land Acquisition Team to Tufanbeyli Mayor

**Website:**

[http://www.tufanbeyli.com/index.php?option=com\\_content&view=article&id=342:enerjsadan-beledye-bakanina-zyaret&catid=1:anasayfa&Itemid=68](http://www.tufanbeyli.com/index.php?option=com_content&view=article&id=342:enerjsadan-beledye-bakanina-zyaret&catid=1:anasayfa&Itemid=68)

[http://www.tufanbeyli.bel.tr/index.php?option=com\\_content&task=view&id=395](http://www.tufanbeyli.bel.tr/index.php?option=com_content&task=view&id=395)

**Document:**





**Date:** 19 January 2011

**Location:** Yamanlı and Kayarcık villages

**Issue:** Public information meetings about the Project and land acquisition process

**Website:** [http://www.tufanbeyli.com/index.php?option=com\\_content&view=article&id=343-enerjisa-tufanbeyli-termk-santiralne-start-verdim-&catid=1&Itemid=68&joscclean=1&comment\\_id=337](http://www.tufanbeyli.com/index.php?option=com_content&view=article&id=343-enerjisa-tufanbeyli-termk-santiralne-start-verdim-&catid=1&Itemid=68&joscclean=1&comment_id=337)

**Document:**

The screenshot shows the homepage of the website www.tufanbeyli.com. The main banner features a landscape with a stone wall and a tree, with the text 'Tufanbeyli.com' and 'Yamanlıdan Dünyaya'. Below the banner is a navigation menu with links: Haberler, Tufanbeyli Hava Durumu, İletişim, Ziyaretçi Defteri, Resim Galeri. The main content area displays a news article titled 'ENERJİSA TUFANBEYLİ TERMİK SANTİRALİNE START VERDİMİ ?' with a sub-headline 'Tufanbeyli'de yapılan toplantı'. The article text mentions that the Tufanbeyli Thermal Power Plant project has started, and the Çalgınaya Enerjiya Şirketi is conducting a public information meeting. It also states that the project will be implemented in two phases, with the first phase starting in 2011. The article includes a photo of a meeting and a list of items under the heading 'VİTAMİN BÜTETİ'. The bottom right corner of the article area has a section for 'SON YAZILAN YORUMLAR'.



## ANNEX IV PHOTOS OF SOME SITE VISITS FOR PUBLIC INFORMATION AND CONSULTATION ACTIVITIES



Meeting in Kayarcık Village



Meeting in Yeşilova Village

**Photos 1:** Enerjisa Project Team and Enerjisa Land Acquisition Team, local people of Kayarcık and Yeşilova villages

**Date:** 10.05.2011

**Location:** Kayarcık and Yeşilova villages

**Aim of the Visit:** Visiting the Project site of Enerjisa Team and arranging community meetings for informing local people about the Project and land acquisition procedure



**Photo 2:** H. Özgür Yılmaz (Enerjisa Project Engineer) – H. Ömer Özer (Enerjisa Geology and Surveying Manager) – M. Sinan Egeli (Tufanbeyli PP Project Manager) – Recep Balı (Tufanbeyli Mayor) – Mustafa Yörükoğlu (Enerjisa Mining Manager) – Tufanbeyli Municipality Officer – Sinan Uyar (Enerjisa Land Acquisition Team Member)

**Date:** 20.01.2011

**Location:** Tufanbeyli District Centre

**Aim of the Visit:** Visiting the Project site of Enerjisa Team and arranging a public information meeting, and interviewing with Tufanbeyli Mayor so as to inform the Mayor about the nature of Project.





**Photo 3:** Mustafa Yörükoğlu (Enerjisa) – Geylani Kurtman (Yamanlı Village Headman) – Ertem Tuncalı (Enerjisa)

**Date:** 08.12.2010

**Location:** Village road between Yamanlı and Yeşilova villages

**Aim of the Visit:** Taking sample for the plant. The headman also accompanied to Enerjisa team to observe the activity of sample taking, and during this visit, village headman was also informed about the Project and his concerns were received by the Enerjisa Team.



**Photo 4:** Geological Engineer of the contractor together with the local people

**Date:** 21.07.2009

**Location:** Sarız River side

**Aim of the Visit:** Pre-evaluation studies for hydrogeological works. During this study, the engineer and local people working for the pre-studies took a break for lunch. While having lunch, the engineer had roughly explained why hydrogeological works as a pre-evaluation study was required to the local workers.





**Photo 5:** Esenay Haciosmanoğlu (Enerjisa Project Engineer) and local people of Yamanli village

**Date:** 12.07.2009

**Location:** Land of Yamanlı village

**Aim of the Visit:** Wells opened for hydrogeological studies. During this site visit, Enerjisa staff made picnic with some of the local people of Yamanli village and gave brief information about the Project to the public while eating together.



**Photo 6:** Enerjisa Project Engineer together with rural women in a traditional wedding ceremony

**Date:** 03.07.2009

**Location:** Yamanlı village

**Aim of the Visit:** Pre-evaluation studies for hydrogeological works of Enerjisa Project Engineer (good and close relationships with local people of Enerjisa staff)



**Photo 7:** Enerjisa Project Engineer together with workers during performing boreholes

**Date:** 25.06.2009

**Location:** Lands of Yamanlı village

**Aim of the Visit:** Audit of Pre-evaluation studies for hydrogeological works of Enerjisa Project (performing boreholes). Meanwhile she was producing some objects from clay together with workers employed from project surrounding settlements (good and close relationships with local people of Enerjisa staff)





**Photo 8:** Enerjisa Project Engineer helped harvesting female farmers

**Date:** 23.06.2009

**Location:** lands of Yamanlı village

**Aim of the Visit:** Audit of Pre-evaluation studies for hydrogeological works of Enerjisa Project (performing boreholes). Meanwhile she was helping female farmers for harvesting (good and close relationships with local people of Enerjisa staff)





**Photo 9:** Enerjisa Project Engineer with Yamanlı Primary School students

**Date:** 28.11.2006

**Location:** Yamanlı village

**Aim of the Visit:** Site visit held both for technical reasons and for introducing the Project to the Director of the Primary School in Yamanlı and giving info about the educational support of Enerjisa (good and close relationships with local people of Enerjisa staff)