

EnerjiSA Power Generation Company



**KÖPRÜ DAM AND
HYDROELECTRIC POWER PLANT PROJECT**

RESETTLEMENT ACTION PLAN

Ankara
September 2009

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ABBREVIATIONS

%	Percent
BOT	Build Operate Transfer
da	Decare (= 1000 sqm)
DSI	State Hydraulic Works
EIA	Environmental Impact Assessment
EMRA	Energy Market Regulatory Authority
EP	Equator Principles
EPFIs	Equator Principles Financial Institutions
GAI	Gross Agricultural Income
GPV	Gross Production Value
ha	Hectare (=10,000 sqm)
HEPP	Hydroelectric Power Plant
HH	Household
KEAŞ	Kahramanmaraş Elektrik Üretim San. ve Tic. A.Ş.
Km	Kilometer
LARAP	Land Acquisition and Resettlement Action Plan
MoEF	Ministry of Environment and Forestry
MW	Megawatt
NGOs	Non Governmental Organizations
OP	Operational Policy
PAPs	Project Affected Persons
RAP	Resettlement Action Plan
sqm	Square meter
SPA	Special Provincial Administration
TFI	Total Family Income
TL	Turkish Lira

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This report has been prepared by PAR Consulting with valuable inputs from a large number of EnerjiSA staff. The Land Acquisition and Resettlement Action Plan (LARAP) summarized in this report has been under implementation for several years. Soon after EnerjiSA took over the Project from Kahramanmaraş Elektrik Üretim San. ve Tic. A.Ş (KEAŞ) that originally designed the Project, it started the land acquisition process. It carried out numerous consultations to inform the affected communities and households as well as its land acquisition activities. An entire year has been spent to facilitate the acquisition of land by preparing and completing the cadastral surveys in collaboration with the Office of Land Registration. EnerjiSA has assured the affected communities that its objective was to replace and improve agricultural incomes lost as a result of land acquisition.

After all, EnerjiSA would like to acknowledge the works of teams of PAR and EnerjiSA, and local authorities and communities for their engagement and in particular Ayşe Kudat for her contribution in the production of this RAP.

EXECUTIVE SUMMARY

This Resettlement Action Plan (RAP) was prepared to describe the framework and procedures followed in the acquisition of land and other immovable assets affected by Köprü Dam and Hydroelectric Power Plant (HEPP) Project in the three affected rural settlements. The RAP provides insight into the actions undertaken during the period September, 2008 to May, 2009 and presents the findings of RAP socio-economic survey carried out within the affected settlements in 2009.

The Project affected a small number of households which lose a portion of their livelihoods. A total of 152 households were affected; of these only 11 required physical displacement. Nearly half of the project affected households were already living outside the project affected settlements before the Project started¹; for this group there were no adverse impacts of land acquisition. On the contrary, they benefited by receiving cash compensation for land that they might not have been able to sell otherwise. For the remaining group, the Project affected a small portion of livelihoods; close to half of these households lose less than 25 percent of their land holdings. On the overall, the impacts can be considered minor. An overview of the impacts from land acquisition is as follows:

- Most of the land needed for the Project belongs to the Forest Department (85 percent);
- In addition to the Forest Department's land, a total of 193 parcels of land was required for Project; of these 157 parcels belonged to private households and 36 parcels belonged to the Treasury;
- The average number of parcels per affected household was 1.2, with minimum 1 and maximum 5 parcels per household;
- The number of households affected was limited to 24 percent of the total number of households in the 3 affected communities;
- One hundred fifty (152) households lost a portion of their land, crops, trees and different physical structures as a result of land acquisition; of these households, only 18 lost their residential buildings and 11 of these had to relocate;
- A total of 51 households were interviewed out of the 152² affected households; of the affected households 42 were non-resident. Surveyed households owned on average 2.4 ha of land³ and lost 0.6 ha to the Project (i.e. 23.5 percent of their land holdings). Of these households, forty six (46) percent lost less than 25 percent of their land

¹ These households had out-migrated in search for non-agricultural work opportunities before the Project was planned.

² Almost half of the affected households (42 percent) were non-residents prior to the Project; nevertheless they had full or part ownership of some of the affected parcels. Of the remaining, approximately 60 percent were interviewed. A census of affected immovable assets was prepared for all of the 152 affected households.

³ A total of 49.2 ha of privately-owned land (corresponding 157 parcels) have been acquired for the Project from 136 households. Based on the Census results, an average affected household lost 0.3 ha, smaller than the average (0.6 ha) obtained from the 50 households interviewed.

holding; those losing up to 75 percent constituted only 12 percent of the affected households.

- Agricultural income per annum was \$7,776 per household⁴; 84 percent of this was derived from crop production and 16 percent from livestock. Loss of agricultural income was low. The surveyed households lost merely 6 percent of their crop -based agricultural income.
- Seventy seven (77) percent of the households surveyed lost less than 25 percent of their crop-based agricultural income and 13 percent of the affected households lost 26-50 percent. Those losing up to 75 percent are limited to 9 percent of the affected households and only 2 percent lose over 76 percent of their holdings.
- Of the Total Family Income (TFI) of the affected resident households, 55 percent is derived from agricultural income and 45 percent from non-agricultural income. Of the total non-agricultural income, 49 percent comes from retirement and old-age pension, 17 percent from works not related to dam, and 5 percent from transportation works. The average annual GAI per capita in the Project affected villages is \$2,004 and the average annual TFI per person is \$3,655.

For most of the affected lands (65 percent)⁵, willing buyer/seller negotiations were made at prices above the asset prices valued by an independent firm; on average compensation payments exceeded the independent valuation by 9 percent.

Unit cost for land acquisition and resettlement (including administration costs and monitoring) was \$10,847.02 per affected household⁶; the 83 households received from EnerjiSA \$15,075, on average, for the immovable assets they sold to EnerjiSA. The amount of compensation payment for the 42 households interviewed was higher (\$18,915, on average). While there is no land available within the affected settlements, this amount is far above the market values of land in the vicinity of the Project and above the replacement value calculated by an independent valuation expert team. Subsequently, the compensation paid to 83 households is estimated to be **45 years of net agricultural income** that an average household could have generated if they did not sell their land to EnerjiSA; for the 42 households for which there is agricultural income information this figure is **53 years**.

If the affected households leave their compensation in interest bearing accounts⁷, the compensation would double in less than 6 years (compounded). In addition, the affected households whose lands are located on the reservoir area are able to cultivate their land for 2

⁴ Of the 51 households interviewed, 47 provided information on agricultural income.

⁵ At the time of the preparation of the RAP, there were 54 privately-owned parcels to be acquired through expropriation. The land users had legal document for use rights for the 26 parcels belonging to the Treasury.

⁶ This figure also includes usufruct users; however, compensation amounts are estimates because the inventory of the assets on the parcels belonging to the Treasury but used by local people (lands used by usufruct users) has not been conducted yet.

⁷ Current interest in long term government bonds was 12 percent at the time of the preparation of this report. Affected households usually invest in agricultural and/or urban land for higher returns. Many increase their livestock holdings, a strategy that also yields higher returns than the conservative strategy of leaving compensation in an interest bearing bank account.

years after they receive compensation, this would make an additional contribution to the restoration of agricultural incomes. More important, the Project affected households will be given priority for work in Project construction activities; their participation in the labor force will further contribute to income restoration. All in all, the land compensation, employment opportunities, and other contributions of the Project will far exceed life time earnings from land acquisition.

The Project might have direct benefits for the affected villagers through the enhancement of village roads and through the improvement of the local school buildings. In addition to that, indirect benefits include the temporary and permanent employment opportunities and to a lesser extent the local procurement of goods and services needed by the work force.

The Project does not give cause to the usual risks associated with land acquisition: landlessness; joblessness; homelessness; marginalization; food security and loss of income; illness; social disruption; and loss of common property resources. Most of the households lost a relatively small portion of their landholdings; a few lost their homes (and received relocation assistance in addition to cash compensation that they demanded). There is no risk for marginalization as most people (88 percent of affected resident households) will continue to live within their village or nearby. Subsequently, the loss of income resulted from the land taken as the major impact of the Project will be replaced by both compensation and by participation in the Project labor force. Furthermore, there is no evidence of social disruption.

1 INTRODUCTION

This RAP was prepared to describe the framework and procedures adopted in the acquisition and compensation of land and other assets affected by Köprü Dam and HEPP in the three affected rural settlements. The RAP also provides insight into the actions taken during the period September, 2008 to May, 2009 and highlights the mitigation measures.

The sections below:

- Analyze the legislative approach followed during land acquisition;
- Describe the socio-economic profile of the affected settlements through household questionnaires and in-depth interviews;
- Provide a census of affected private and communal assets;
- Provide information on attitudes towards the Project and priorities for local assistance;
- Identify current and potential Project impacts and opportunities for income restoration;
- Design monitoring and evaluation framework for land acquisition and income restoration;
- Describe the grievance procedures; and
- Present a Land Acquisition and Resettlement Action budget, and an implementation schedule.

1.1 BACKGROUND

Hydro-power is one of the prominent sources of renewable energy. It is also important for Turkey as it seeks to meet the energy demand in a cost efficient, reliable and sustainable manner.

In the energy sector, the Build-Operate-Transfer (BOT) Model was introduced in 1984 in order to facilitate private sector involvement. In addition, with the process of accession to the European Union, the Turkish energy legislation was harmonized with the corresponding European Community legislation. The 'Electricity Market Law' was enacted in 2001 to enable progress into a liberalized electricity market and to provide for fair and transparent market regulation.

Köprü Dam and HEPP were first proposed by the State Hydraulic Works (DSI), which is the main institution for utilization of water resources in Turkey. DSI prepared the "Lower Seyhan Basin Master Plan Report (1980)" and the "Upper Seyhan Basin Master Plan Report (1984)" which, provided information on the utilization of water resources, flood control, irrigation and energy generation issues in the Seyhan River Basin.

In 2006, KEAŞ (Kahramanmaraş Elektrik Üretim San. ve Tic. A.S.) obtained a production

license from the Energy Market Regulatory Authority (EMRA) and worked on the Project. KEAŞ was subsequently purchased by EnerjiSA and the right for the operation of the HEPP to serve in providing energy to the national grid has also transferred to EnerjiSA for 49 years.

In addition to its contribution to the Turkish economy and energy market, Köprü Dam and HEPP will create new opportunities in the region including employment during its construction and operation phases.

1.2 BRIEF DESCRIPTION OF THE PROJECT

Köprü Dam and HEPP will produce an annual average of 381.36 GWh Energy with an installed capacity of 145 MW. The Project will be located at the downstream of Menge HEPP on Goksu River, with a powerhouse at the toe of the dam. Minimum and maximum water elevations will be 390.0 and 410.0 m, respectively. The thalweg elevation will be 318.0 m and crest elevation will be 415.0 m. The surface area and volume of the dam reservoir will be 2.93 km² and 93.2 hm³, respectively. The Köprü Project will be one of the four dams to be constructed on Seyhan River by EnerjiSA in order to provide a total energy of nearly 1500 GWh/year on the river. A map illustrating the Project-affected area is shown in Figure 1-1. An overview map showing the Project location is included in Appendix 1.

Figure 1-1: Map Illustrating the HEPP on the Project Site



The Project components include a dam body, spillways, derivation tunnel, water intake structure, penstock, powerhouse, transmission lines and access roads. The scope of the RAP covers all components of the Köprü Dam and HEPP Project with the exception of the transmission lines. The transmission route is not yet identified but if any land is needed for it relevant IFC policies will be applied as described in this document.

1.3 BENEFITS OF THE PROJECT

In addition to its importance for the energy sector in Turkey, the Köprü Project will benefit the local economy and the local communities whether they are directly affected⁸ or not. Expected benefits of the Project can be primarily classified as follows:

- **Work opportunity for local communities:** Since the construction phase has not yet started, no one from the affected villages is employed by the Project at the present moment. However it is estimated that at least 100 people from the affected villages will be employed for the Köprü Project.
- **Improvement in infrastructure:** Within the context of this Project, improvement of some village roads will take place and a new road is planned. This rehabilitation will not only facilitate the construction works but also will enable local residents to access other settlements more easily.
- **Support for local economy:** Employees to be recruited during the construction phase often meet their basic needs locally (food, accommodation, transportation etc.). This will make a contribution to the local economy. Enerjisa has also contracted a local construction company to renovate the schools in the context of support for education described below. The local company working with local workers also benefit from the project.
- **Support for education:** As a part of Enerjisa's corporate social responsibility strategy; renovation of the school buildings in the project affected settlements has taken action. For Köprü Dam and HEPP from the project affected area, Enerjisa has chosen two schools which are in most urgent need and completed the restoration of the buildings, namely Salmanlı and Kızlarsekisi primary schools before the school year 2009-2010 starts. Enerjisa has also prepared school packages for each student (around 75 students for the existing 3 schools) in the project affected area to be distributed at the beginning of the fall semester of 2009. Each school package contains a school bag, 2 notebooks, a pencil case, pencils, an eraser, a pencil sharpener, a painting notebook, crayons, a scarf, a beret, gloves, balloons and scissors.

Details of the Project benefits will be given under Section 5.3.

⁸ Affected communities are those that will lose land and/or other immovable assets to facilitate the construction of the Project.

1.4 AFFECTED REGIONS AND SETTLEMENTS (VILLAGE COMMUNITIES AND QUARTERS⁹)

In accordance with the National Legal Framework and World Bank/IFC Standards, EnerjiSA aims at minimizing adverse impacts of the Project on local communities, resulting from the Project. 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 populations, provides further guidance to avoid or minimize potential adverse impacts to local communities.

The land acquisition process is considered as involuntary when affected individuals 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; they can be acquired through willing buyer/seller arrangements. EnerjiSA recognized that willing buyer/seller negotiation 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 cases¹⁰, the Government agency in charge of the energy sector, EMRA, can declare 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 over 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 people's access to productive assets without physically relocating the people themselves (IFC, 2002).

The Project requires both public and private lands as shown in Table 1-1 to establish the Köprü Project. Most (85 percent) of the land required for the Project belongs to the Forestry Department (See Table 1-1).

Table 1-1: Distribution of the Lands Required for the Köprü Project

Type of Land Required	Size of the Land Acquired (ha)	Portion of Lands within the Total Acquired (%)
Treasury Land	13.56	3
Forestry Land	345.76	85
Privately-owned Land	49.18	12
TOTAL	408.50	100

Source: Köprü, EnerjiSA data, 2009

⁹ In the Project area, villages consist of small clusters which, are locally referred to as quarters.

¹⁰ The most typical case involves disputed land deeds.

In this Project, 36 parcels amounting to 13.56 ha belonging to the Treasury are affected; a large majority of these (82 percent) is located in Ergenuşağı village (Table 1-2). Some of these public lands are legally used by the local producers and the number of usufruct users (those having legal document) is 28.

Table 1-2: Affected Treasury Lands by Settlement

Province	Settlements (Villages)	# of Affected Parcels	Total Size of Treasury Land Affected (ha)	Portion of the Affected Lands	# of Affected Households
Adana	Ergenuşağı	26	11.1	82	23
	Marangeçili	3	0.2	16	0
	Kızlarsekisi	7	2.2	2	5
TOTAL		36	13.5	100	28

Source: Köprü, EnerjiSA data, 2009

The affected villages are forest villages that are composed of several quarters and are relatively far from each other.

As for the privately-owned lands, a total of 5 quarters located within the boundaries of 3 villages are affected by the construction of the dam body and its auxiliary facilities as shown in Table 1-3.

Table 1-3: Privately-owned Affected Lands and Project-Affected Households by Settlement

Province	Settlements (Villages)	Quarters	Total Size of Privately-owned Affected Land (ha)	# of Affected Parcels	# of Affected Households
Adana	Ergenuşağı	Bostancı and Çömlük	23.1	78	65
	Marangeçili	Kayadibi	6.0	23	17
	Kızlarsekisi	Hüsemli and Kocaköy	20.1	56	54
TOTAL			49.2	157	136

Source: Köprü, EnerjiSA data, 2009

The Köprü Project requires 157 privately-owned parcels belonging to 136 households. By April 2009, the purchase of 103 privately owned parcels belonging to 83 households were completed. In addition, there are 28 households with usufruct rights on the lands belonging to the Treasury; half of them (14 HHs) have also privately-owned lands affected by the Project. Moreover, in the socio-economic survey, two households using the lands belonging to their relatives¹¹ was identified. Consequently, a total of 152 households are affected by the Project.

¹¹ They are identified as land users on third-party property. For further information, see Section 3.3.5 and 4.3.4.

Affected resident households, which corresponding to 59 percent of the total number of the affected households, constitute only 24 percent of all households in affected settlements (Table 1-4)¹².

Table 1-4: Total and Affected Households by Community

Villages	Total # of HHs	# of Affected Households			Percentage of the Resident Affected Households within communities
		Total # of the Affected Households	HHs residing outside the village	HHs residing inside the village	
Ergenuşağı	150	76	29	47	31
Marangeçili	100	17	5	12	12
Kızlarsekisi	120	59	29	30	25
TOTAL	370	152	63	89	24

Source: Köprü, RAP Survey, 2009

The houses in the affected villages are relatively far from each other. These villages also lack sufficient irrigable, fertile and sufficiently large agricultural land holdings because the topography is extremely hilly and the land is mostly stony. The main agricultural activities are based on subsistence wheat and barley production, as well as fruit and vegetable.

For the Köprü Project, most of the privately-owned parcels (66 percent) were purchased through willing seller/buyer arrangements. The prices agreed upon are over the valuation amounts of the affected assets and land, which were obtained by an independent party. The owners were compensated for assets existing on their properties including crops, orchards and structures above current market values. The willingness of EnerjiSA to pay high prices for affected immovable assets significantly contributed to the success of negotiations.

However, 21 parcels could not be purchased from the titleholders because of problems related to title deed transfer, and 5 parcels (belonging to 3 households) due to the fact that the compensation price offered by EnerjiSA was rejected and the titleholders asked for unreasonable prices which would have caused inequity among titleholders. In addition to these 21 parcels, there are 28 parcels which are subject to expropriation due to the subdivision issue described in Section 4.3.2.2. Consequently, 54 parcels (16 ha) will be acquired through expropriation and by EMRA.

There are residential buildings on both privately-owned lands (17 parcels owned by 17 households) and Treasury lands (2 parcels uninhabited and legally used by 8 households). In addition to households using their own lands and lands belonging to the Treasury, there is only one household (land user) who loses residential building located on a third-party

¹² 41 percent of the affected households had already left their rural settlements long before the Köprü HEPP project started, to live in Kozan or Adana Province or in other villages nearby because of several reasons (marriage, better health and educational services, alternative economic resources and employment opportunities).

property. Among these, only 11 households will have to relocate. Relocation concerns only these 11 households since:

- 2 houses on Treasury lands are unoccupied (the builders live outside the village);
- Titleholders of 4 houses are dead and their heirs do not use them (they live in other homes either inside or outside the villages);
- 2 owners live in other homes and do not use the affected structures; and
- 9 heirs of an affected structure live outside the village in their own homes.

Moreover, six out of a total of 152 affected households lose over 90 percent of their lands but only one titleholder from Ergenüşağı and one user household residing in the residential building belonging to one of these six titleholders will relocate¹³. The other households losing significant part of their lands don't have to move because of different reasons: titleholder of a house is dead and none of his children use this house and four titleholders of two affected houses inhabit their other houses.

EnerjiSA has acted in accordance with IFC PS 5 to minimize the adverse project impacts on affected people. The purpose of the RAP is to describe how measures to minimize impacts on livelihoods are implemented and how monitoring will be undertaken to ensure the success of the mitigation.

1.5 SCOPE OF RESETTLEMENT ACTION PLAN

Scope of the RAP developed and implemented for the Köprü Project covered 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 a part of the project-affected land owners, valuation of assets and description of compensation and other resettlement assistance to be provided;
- Conduct of a socio-economic survey in the 3 affected rural settlements;
- Calculation of income restoration;
- Description of institutional arrangements for implementation;
- Procedures for grievance redress;
- Arrangements for monitoring and implementation; and
- Preparation of implementation schedule and the budget.

The chapters below give details of these activities:

¹³ This household has no agricultural income. It plans to relocate in Kozan with cash compensation received from the Project.

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 in 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;

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

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

Chapter Eight details RAP costs and the budget actualized for all works carried out through the acquisition process and its following steps; and

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

2 LEGAL FRAMEWORK

This chapter focuses on the legal framework of land acquisition and thereby covers the national legal framework as well as the relevant World Bank / IFC Performance Standards.

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. In case of expropriation of private lands and assets which are acquired for public interest, public agencies are required to pay the value of the expropriated assets to a private bank account in advance of land appropriation and project construction.

Article 46 of the Turkish Constitution allows expropriation of property for public interest. In case of this Project, EMRA is the relevant public authority to determine public interest.

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.

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. It is a common practice to distribute land among male heirs. There is limited female ownership of land in the Project area. Often, the cultivation of family land is carried out by men residing in the affected communities; however, when land is acquired by a second party, some female heirs ask for their share of the sale revenue.

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 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.

The expropriation law ensures that affected people are paid in full before the land changes hands. The Law requires that the valuation process is completed and certified, requires that attempts are made to negotiate the transfer of the ownership or use rights, and full payment in cash is deposited to the personal bank accounts of the titleholders. The disputes among owners or heirs on their shares will not stop this process since the public authority has the right to appeal to the court to allow expropriation. In disputed cases, the value of the land is held in an interest earning bank account to be paid once the courts identify the entitled land holders.

The Law requires the completion of expropriations within six months after the decision of Public Interest is taken. If it cannot be completed within six months, an official permission is required to extend the right of expropriation.

The land acquisition for the Köprü Project was primarily purchased through willing buyer/seller negotiations; however, the Expropriation Law had to be applied in the case of 54 private land parcels. Of these parcels, 5 belonging to 3 households will be expropriated as the compensation price offered was not accepted by the titleholders, whereas 28 due to subdivision (refer to 2.1.5) and the remaining 26 to some legal or procedural problems like tax debts of the land owners will be acquired through expropriation. Compensation levels were equal to or higher than the values of the affected assets whether negotiations were successful or lands were acquired through expropriation.

Moreover, in case of necessity for construction or rehabilitation of village roads in the following stages of the Project, private lands to be likely affected by road rehabilitation will be acquired through SPA as it is responsible for the maintenance and supply of village roads. If the lands to be required are public lands, a different land acquisition process will be followed (Section 2.1.4). However, in the Köprü Project, there is no such land affected by the road project, yet.

2.1.4 FORESTS AND TREASURY LANDS

The Forestry Law no: 5192 (Official Gazette dated 3 July 2004 and numbered 25511) states that “in case of public benefit or exigency concerning the location or construction of defence, transportation, energy, communication, water supply, wastewater, petroleum, natural gas, infrastructure facilities and solid waste disposal sites; sanatoriums, dams, ponds and cemeteries; governmental health, education and sports facilities and related places in governmental forest areas, real and legal persons can be licensed by the Ministry of Environment and Forestry (MoEF) in return for a determined value.” In accordance with this clause EnerjiSA applied for the required licenses from the General Directorate of Forestry. The General Directorate of Forestry determined the value according to the method described in Chapter 4, Section 4.4.1.5. With reference to Article 60 of Part 12 of the Regulation about Permissions given for Forestry Lands (Principles of Valuation) EnerjiSA paid the determined value which includes the costs of reforestation, permission cost for the facilities and lands

and costs of the guarantee.

In order to acquire Treasury lands, EnerjiSA is required to apply 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. The use will be granted based upon site inspection. During operations a yearly rental is paid to the Treasury Department for the land impacted by the Project.

In accordance with a temporary amendment (No. 4628) made to Law on Utilization of Renewable Energy Sources for the Purpose of Generating Electrical Energy (No. 5346) energy companies in Turkey have been granted the right to use for lands owned by the Treasury which are affected by the reservoir area without payment provided that Köprü Project is an energy project which is:

- Based on renewable sources;
- Declared to be in the public interest by EMRA; and
- Completed by the end of 2012.

2.1.5 SUB-DIVISION OF AGRICULTURAL LAND

The Protection of Agricultural Land (No. 5578) law in Turkey stipulates that agricultural plots cannot be sub-divided into parcels smaller than 2 ha if uncultivated. In the case of the Köprü Project, EnerjiSA has a requirement to acquire small portion of larger plots. As the land requirement is small, EnerjiSA did not wish to purchase the entire private parcels, but wanted to acquire small sub-divided sections that it requires. However, the acquisition of these small sections of land results in the creation of land parcels that are less than 2 ha.

In order to leave much of the affected parcels to PAPs, lands will be expropriated by a public agency which will act on behalf of the Project and thus, will be taken through sub-division. This means that the acquisition of the land cannot be undertaken through willing buyer/seller negotiations. It was determined, in consultation with villagers, that these lands would be acquired through EMRA to enable the acquisition of the small land areas required.

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 EP. 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 were Operational Policy (OP) 4.12 issued on December 2001, the Performance Standard 5: Land Acquisition and Involuntary Resettlement issued on April 2006 and IFC's Handbook on Preparing a Resettlement Action Plan utilized in the preparation of RAP.

The main objective of these documents is to ensure that potential adverse impacts on the community are mitigated through planning and undertaking appropriate measures and that people displaced as a result of a specific project financed by the World Bank Group receive benefits from the project. Considering these core issues, the following policy objectives of OP 4.12 are taken into account:

- (a) Involuntary resettlement should be avoided where 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 planning and implementing 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)

As involuntary resettlement is unavoidable for the Köprü Project, EnerjiSA paid compensation at full replacement cost¹⁴ for the loss of assets as a result of the Project. 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.

¹⁴ 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 providing compensation for the lost assets, as the requirement of WB Policy and IFC's PS 5, the Project Owner should focus on the improving or at least restoring the livelihood and standards of living of displaced persons. Resettlement assistance is also important to focus on other kinds of losses like access to public services, to local market as customers and/or suppliers and areas used for fishing or grazing. Thus it is necessary to facilitate equivalent and socially/culturally acceptable resources and opportunities. Considering these issues, EnerjiSA has also conceived the resettlement process as an opportunity for improving the livelihood of the affected people.

Furthermore, the Policy stresses that the Project Owner should focus on the needs of the poorest groups among those displaced. These people may for example, not have eligible formal or legal titles to land but are affected by the project. OP 4.12 emphasizes that such an absence of legal titles should not hinder compensation for such people. As well as the poorest groups, vulnerable groups should be considered within compensation plans since they might not be included in national legal frameworks.

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, so as 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 consisting of: Management Policy, Human Resources Policy, Quality Policy, Environmental Policy and Occupational Health and Safety (OHS) Policy.

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 Köprü Project has been 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 Plan has been developed 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 PAPs 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 Köprü is carried out in accordance with the Stakeholder Engagement Plan. Details on the public consultation and disclosure process followed are given under Chapter 6.

3 OVERVIEW OF THE PROJECT AFFECTED POPULATIONS

3.1 SOCIO-ECONOMIC BASELINE

Köprü Dam and HEPP Project principally affect three villages, namely Ergenüşağı, Kızlarsekisi and Marangeçili in the jurisdiction of Kozan district of Adana province. The villages are on average 54 km away from Kozan and 112 km away from Adana. The magnitude of the Project impact on these settlements varies according to the location and size of the related Project component. No village is affected in its entirety by the Project; rather one or two quarters from each village are partially affected. Moreover, in respect to the percentage of parcels acquired, the magnitude of the Project impact is low (Table 3-1).

Table 3-1 The Project-affected Settlements and Reason and Magnitude of The Impact

Villages	Reason of Impact	Total Number of Parcels of Settlements	Number of parcels in privately-owned lands	% of the Affected Parcels of the Total Parcels in the Settlements
Ergenüşağı	Dam body, equipment domain and derivation tunnel	1266	78	6.2
Kızlarsekisi	Dam body and reservoir area	849	23	2.7
Marangeçili	Reservoir area	1118	56	5.0

Source: Köprü, EnerjiSA data, 2009

The project-affected villages are located on the highlands of Adana province. The agricultural land is scattered and fragmented. This inhibits the use of agricultural technology in the region and results in low yields and high costs per unit in agricultural production, significantly depressing profitability. Consequently, subsistence cropping is the main mode of production in the affected villages. The current agricultural activities are based on wheat production, and fruit and vegetable growing primarily for household consumption.

According to the field observations and information received from the village headmen (muhtars); the houses and quarters in the affected villages are relatively far from each other as a result of the scattered land structure. The population increases during summers in all villages; as a result of summer residents spending hot summer days in the high villages and also harvesting on land. It was stated in all villages that landslide was occurred due to the sloping topography and climatic factors such as rain. Concerning land ownership in villages, 24 percent of the population does not have any land and 45 percent have lands between 0.1 and 1 ha considering three villages. Large majority of the young population has migrated to district or province centers seeking for employment opportunities in all villages. For this reason, creation of new job opportunities is considered to be the key solution for the development of villages, by all village headmen.

3.2 SOCIO-ECONOMIC SURVEY

A household survey was conducted in the affected settlements to establish a baseline and to understand the demographic characteristics and socio-economic profile of the PAPs. As the privately-owned lands are situated in each of the three affected villages, the survey was conducted in these three villages. The scope of the survey covers the people who are economically¹⁵ and/or physically¹⁶ affected by the Project. The interviews were held at the household level by using structured household questionnaire as one of the quantitative data collection techniques (Appendix 2). Data gathered by using the household questionnaires cover information concerning demographic and economic structure of the households, land use patterns, agricultural activities, incomes-expenditures, housing characteristics, overall opinions of the PAPs about the Project and their expectations from the Project, and general information regarding the compensation process¹⁷.

The survey aimed to interview with as many of the affected households as possible that are resident in the communities during the site survey; about half of the affected households were interviewed as shown in Table 3-2¹⁸.

Table 3-2 Total numbers of Households affected and interviewed

Villages	Total number of affected HH	Interviewed HH	Percent interviewed among the Total Affected HH	Percent interviewed among resident HH
Ergenüsağı	76	28	37	60
Kızlarsekisi	59	14	24	75
Marangeçili	17	9	53	47
Total	152	51	34	57

Source: Köprü, EnerjiSA data, 2009

¹⁵ *Economically-affected persons*: IFC conceptualized it as *economic displacement* and defined as an action that interrupts or eliminates people's access to productive assets without physically relocating the people themselves (IFC, 2002).

¹⁶ *Physically-affected persons*: IFC defined the concept of physical displacement 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) (IFC, 2002).

¹⁷ The field study was held between 20 March and 2 April, 2009 with a field team consisting of one supervisor, 4 interviewers and one data-entry operator. At first hand, the supervisor held a pre-interview with the households so as to determine their eligibility and availability of the eligible respondent for the interview. Then questionnaires were conducted by the interviewers and subsequently controlled by the supervisor to avoid the possible mistakes or missing coding. Most of the data collected through questionnaires were entered to the database on field on the day they were conducted. After the entry is completed, the data is analyzed by using SPSS software v.17.

¹⁸ As stated in Section 1.4., almost half of these households (42 percent) reside outside the project-affected settlement; interview could not be conducted with them. Thus, 60 percent of the resident PAPs were interviewed.

3.3 CHARACTERISTICS OF THE AFFECTED PEOPLE

3.3.1 CHARACTERISTICS OF THE RESPONDENTS

Majority of the affected resident households are land owners (in 60.8 percent)¹⁹. The demographic characteristics of the PAPs are given in Table 3-3. Median age of the respondents is 60 and 76.5 percent are male in Köprü; 43 percent of the respondents are primary school graduates, whereas 33 percent are illiterate.

Table 3-3 Characteristics of the survey respondents

	Ergenüsağı	Kızlarsekisi	Marangeçili	Total
Age				
Median	61	59	54	60
Minimum	30	26	27	26
Maximum	75	81	83	83
Gender (%)				
Male	78.6	71.4	77.8	76.5
Female	21.43	28.57	22.2	23.5
Education (%)				
Illiterate	32.1	28.6	44.4	33.3
Literate	17.9	14.3	11.2	15.7
Primary school	46.4	35.7	44.4	43.1
Secondary school	0.0	7.1	0.0	2.0
High school	0.0	7.1	0.0	2.0
University	3.6	7.1	0.0	3.9
Marital status (%)				
Married	85.71	92.86	88.89	88.24
Single	3.57	7.14	0.00	3.92
Widow	10.71	0.00	11.11	7.84
Number of HH	28	14	9	51

Source: Köprü, RAP Survey, 2009

3.3.2 CHARACTERISTICS OF THE HOUSEHOLDS

3.3.2.1 Demographic Characteristics of Affected Households

The average size of household for rural settlements in Turkey is 4.5²⁰ persons. The survey results show that the surveyed households in the affected villages are smaller with an average of 3.88 members (Table 3-4). Household size varies from an average of 3.14 persons in Kızlarsekisi to 4.44 persons in Marangeçili village.

¹⁹ In cases where the land owner could not be reached, interviews were conducted with the spouses, sons/daughters or siblings of the land owners.

²⁰ Turkey: Demographic and Health Survey 2003, Hacettepe Institute of Population Studies.

Table 3-4 Average size of households by settlement

Village	N	Mean	Standard deviation
Ergenüŝađı	28	4.07	2.18
Kızlarsekisi	14	3.14	1.46
Marangeçili	9	4.44	2.07
Total	51	3.88	2.01

Source: Köprü, RAP Survey, 2009

Table 3-5 shows the frequency distribution of household size.

Table 3-5 Frequency of average size of household in the surveyed area

HH size	Frequency	Percent
1	2	3.9
2	16	31.4
3	8	15.7
4	5	9.8
5	11	21.6
6	2	3.9
7	4	7.8
8	2	3.9
9	1	2.0
Total	51	100.0

Source: Köprü, RAP Survey, 2009

Household members who are temporarily living away from home due to various reasons are given in Table 3-6. Accordingly, 13.13 percent of household members live outside the villages, for study (7.6 percent) and for work (3.5 percent).

Table 3-6 Number of HH members temporarily living away from home

	Ergenüŝađı	Kızlarsekisi	Marangeçili	Total	% of total
Studying	12	1	2	15	7.6
Working	4	1	2	7	3.5
Other	0	3	1	4	2.0
Total	16	5	5	26	13.13
Total HH Population	114	44	40	198	100.0
# of Households	28	14	9	51	

Source: Köprü, RAP Survey, 2009

3.3.2.2 Age and Sex Distribution

Age distribution of the surveyed population by settlement is shown in Table 3-7. On average 38 percent of the surveyed population is younger than 25 in all villages and a quarter is over 60, representing an old population. Considering the distribution in general, the percentage of young population in Kızlarsekisi is 27 whereas 41 in Ergenuşağı. The percentage of old people in all three villages ranges between 20 and 30. In parallel with these figures, out migration of young population for job seeking was mentioned by all village headmen during the field study.

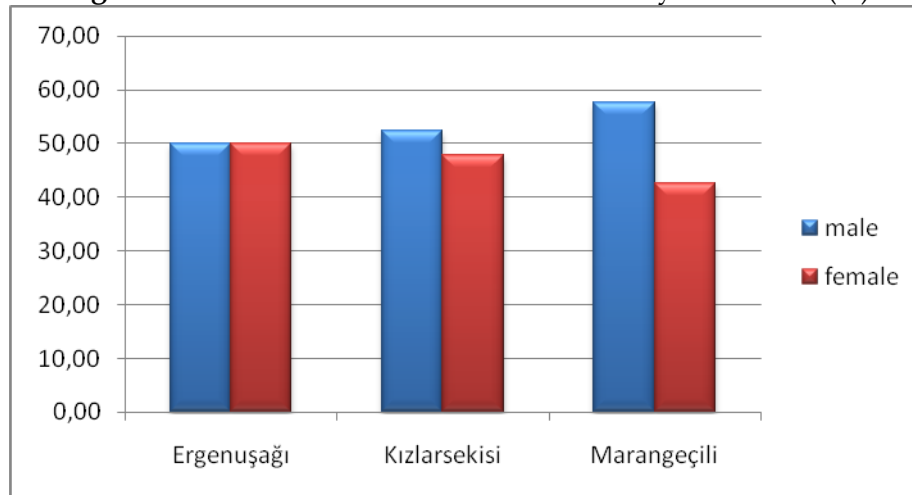
Table 3-7 Age Distribution of HH Members by Settlement (%)

Age interval	Ergenuşağı	Kızlarsekisi	Marangeçili	Total
0-5	7,89	4,55	10,00	7.58
6-15	14,04	4,55	15,00	12.12
16-25	19,30	18,18	12,50	17.68
26-59	36,84	43,18	35,00	37.88
60+	21,93	29,55	27,50	24.75
Number of HH	28	14	9	51

Source: Köprü, RAP Survey, 2009

Sex distribution of affected population is given in Figure 3-1.

Figure 3-1 Sex Distribution of HH Members by Settlement (%)



Source: Köprü, RAP Survey, 2009

3.3.2.3 Education

Education is an important indicator not only for displaying the socio-economic status of the affected households, but also their employability and adaptability to changing circumstances.

Table 3-8 shows that 72.7 percent of the surveyed population who are aged 6 and higher is literate. Given the illiterate population in Turkey²¹, which corresponds to 12.7 percent; the illiteracy in the surveyed villages is higher than the country average. However it should also be considered that the country average corresponds both to rural and urban settlements; whereas the surveyed population represents only the rural areas. The percentage of those graduating from compulsory education, on the other hand, is 62.2 on average considering all villages. Percentage of high school, vocational high school or higher education graduates is 12 percent in the overall.

Table 3-8 Distribution of HH members by the level of education

	Ergenüsağı	Kızlarsekisi	Marangeçili	Total
Illiterate	26	12	12	50
Literate	79	30	24	133
Compulsory Education	54	26	19	99
High school, vocational high school or higher	11	5	3	19
6+ population	105	42	36	183
15+ population	89	40	30	159
Literate population (%)	75.2	71.4	66.7	72.7

Source: Köprü, RAP Survey, 2009

Net primary school enrolment ratios are given in Table 3-9. It can be seen that all 24 children under the age group 6-15 go to school, in three villages. Although the number of children in the villages is very small, it can be concluded that the enrolment ratios are higher than the country average of 90.3²².

Table 3-9 Net Primary School Enrolment Ratio²³ (%) and populations aged 6-15

	Ergenüsağı	Kızlarsekisi	Marangeçili	Total
Net primary school Enrolment ratio (%)				
Female	100.0	100.0	100.0	100.0
Male	100.0	100.0	100.0	100.0
Total	100.0	100.0	100.0	100.0
Population aged 6-15				
Female	6	1	2	9
Male	10	1	4	15
Total	16	2	6	24

Source: Köprü, RAP Survey, 2009

²¹ Census data, TURKSTAT, 2000.

²² Demographic and health indicators, 2006, TURKSTAT.

²³ The ratio of the number of children of officially primary school age enrolled in primary school to the number of children of officially primary school age in the population (TURKSTAT, education statistics).

3.3.2.4 Health insurance

Table 3-10 provides information on the population covered by health insurance schemes. The population that is not covered by various health insurance is 20.2 percent.

Table 3-10 Distribution of HH members covered by health insurance

	Ergenüsağı	Kızlarsekisi	Marangeçili	Total
Covered by health insurance	85	37	36	158
Total population (#)	114	44	40	198
Percentage of covered population (%)	74.6	84.1	90.0	79.8

Source: Köprü, RAP Survey, 2009

3.3.3 CHARACTERISTICS OF HOUSES

Data on sizes of the dwellings as well as domestic and commercial commodities owned by the households give general idea on the living spaces and wealth status of the surveyed population. Table 3-11 gives average sizes for dwellings. Average size of the dwellings in total is 88.3 m² in the surveyed villages, with an average of 3.4 rooms.

Table 3-11 Average size of the dwellings and number of rooms by settlement

	Ergenüsağı Mean	Kızlarsekisi Mean	Marangeçili Mean	Total Mean
Size of houses (sqm)	89.7	95.1	71.9	88.3
# of Rooms	3.5	3.6	2.7	3.4

Source: Köprü, RAP Survey, 2009

Domestic and commercial commodities owned by the surveyed households are shown in Table 3-12. The majority of the households in all villages own refrigerator, TV and mobile phone, whereas only a few own vehicles, including tractor, automobile and minibus.

Table 3-12 Numbers of domestic and commercial commodities

	Refrigerator	Washing machine	TV	Vacuum cleaner	Fixed phone	Mobile phone	Tractor	Automobile	Minibus
Ergenüsağı	96.4	71.4	78.6	25.0	35.7	75.0	3.6	14.3	7.1
Kızlarsekisi	100.0	50.0	92.9	14.3	57.1	78.6	7.1	7.1	0.0
Marangeçili	100.0	55.6	77.8	22.2	0.0	100.0	0.0	0.0	0.0

Source: Köprü, RAP Survey, 2009

3.3.4 ECONOMIC CHARACTERISTICS OF HOUSEHOLDS

Affected households own, on average, 2.4 ha of agricultural land; of this amount, 86 percent is within the village boundaries. Of the total land, 76.9 percent is used for cereals, 20.9 percent as orchards and 2.2 percent as vineyards (Table 3-13).

Table 3-13: Average Size of Agricultural Lands by Type of Agricultural Activity (da)

Village	Ergenüŝađı	Kızlarsekisi	Marangeçili	Total	
	Mean	Mean	Mean	Mean	%
Cropland	16.3	18.5	22.7	18.1	76.9
Vineyard	0.2	0.9	0.7	0.5	2.2
Orchard	5.1	6.6	1.7	4.9	20.9
Total land	21.7	26.0	25.1	23.5	100.0
Number of HH	27	14	9	50*	

*One household in Ergenüŝađı village is a land-user, and owns no land, therefore not taken into consideration.

Source: Köprü, RAP Survey, 2009

Drylands are dominant in all project-affected villages with an average percentage of 76. Vegetables and fruits are grown on limited irrigated lands (Table 3-14).

Table 3-14: Average Size of Agricultural Lands by Type of Land (da)

Village	Ergenüŝađı	Kızlarsekisi	Marangeçili	Total	
	Mean	Mean	Mean	Mean	%
Irrigated land	7.0	6.1	0.8	5.6	24.0
Drylands	14.7	19.9	24.3	17.9	76.0
Total land	21.7	26.0	25.1	23.5	100.0
Number of HH	27	14	9	50*	

*One household in Ergenüŝađı village is a land-user, and owns no land, therefore not taken into consideration.

Source: Köprü, RAP Survey, 2009

Agricultural lands are mainly used for cereal production. Affected households use on average 0.8 ha of land for cereals (92 percent of this is used for wheat production for household use). In addition, bean, tomatoes, olive, grape, pomegranate, fig and orange are also produced in the villages, and also used for subsistence.

Animal husbandry is widespread in the affected villages. Almost all households have on average 1 cattle for daily needs of subsistence. The affected villages are in the mountainous region and hence have suitable conditions to breed sheep and especially goats, therefore the numbers of sheep and goat are high in affected villages, on average there are 9 sheep and 13 goats per household. Moreover, poultry farming is another economic activity carried out for subsistence (Table 3-15). In addition, there are some draught animals in the villages to use for farming activities such as sowing and carrying.

Table 3-15 Livestock (head)

	Ergenüsağı		Kızlarsekisi		Marangeçili		Total	
	Sum	Mean	Sum	Mean	Sum	Mean	Sum	Mean
Cattle	38	1.36	27	1.93	7	0.78	72	1.41
Sheep	433	15.46	30	2.14	13	1.44	476	9.33
Goat	554	19.79	6	0.43	110	12.22	670	13.14
Poultry	267	9.54	27	1.93	45	5.00	339	6.65
Number of HH	28		14		9		51	

Source: Köprü, RAP Survey, 2009

In general, households breed their cattle in their barns whereas sheep on public pasture lands and goats in the forestry area. The households dealing with animal husbandry are not adversely affected due to the loss of their own lands because half of them have only cattle bred in the barns. Of 16 households losing more than half of their own lands, one quarter (4 households) have no animals, one third have (5 households) only cattle and only 2 households deal with poultry.

For the analysis of agricultural and non-agricultural income of the affected households, Gross Production Value (GPV), GAI and Variable Costs were calculated and all non-agricultural income sources were taken into account. GPV was obtained by multiplying total production with producer price. GAI was calculated by subtracting variable cost from GPV. TFI was calculated by adding non-agricultural income and agricultural subsidies to the GAI.

Annual GAI is 12,053 TL (\$ 7,776) per household and 3,106 TL (\$2,004) per person; 84 percent of this comes from in kind subsistence crop production and 16 percent from livestock production (Table 3-16).

Table 3-16 Gross Agricultural Income on Average (TL)

	Ergenüsağı	Kızlarsekisi	Marangeçili	Total
	Mean	Mean	Mean	Mean
Crop production	14,050	12,057	3,996	10,118
Livestock production	3,750	327	986	1,935
Total Gross Ag. Income (GAI)	17,799	12,383	4,982	12,053
GAI per person	4,587	3,192	1,284	3,106

Source: Köprü, RAP Survey, 2009

Annual non agricultural income is 9,824 TL (\$6,338) per HH and 2,528 TL (\$1,631) per person. Of the total non-agricultural income 37 percent comes from retirement pension, 17 percent from works not related to dam, 12 percent from old-age pension, and 5 percent from transportation works. On average, the annual Gross TFI is 21,983 TL (\$14,182) per HH and 5,666TL (\$3,655) per person. Of the annual TFI, 54.9 percent is GAI, 44.7 percent is based on

non-agricultural income and 0.4 percent is derived from agricultural subsidies²⁴ (Table 3-17).

Table 3-17 Family Income on Average (TL)

	Ergenüsağı	Kızlarsekisi	Marangeçili	Total
	Mean	Mean	Mean	Mean
GAI	17,799	12,383	4,982	12,053
Non-agricultural income	15,710	8,063	4,151	9,824
Agricultural Subsidies	97	97	148	106
Total Family Income (TFI)	33,610	20,543	9,280	21,983
TFI per person	8,662	5,295	2,392	5,666

Source: Köprü, RAP Survey, 2009

Food expenditure has the largest share of the total family expenditure with 58.3 percent. Clothing, transport, health, education and residence expenditures follow food expenditures respectively with 12.4 percent, 12.2 percent, 8.3 percent, 4.5 percent, and 4.4 percent.

3.3.5 CHARACTERISTICS OF VULNERABLE GROUPS

This section provides information about potentially vulnerable groups' access to compensation and/or benefits provided by the Project.

Age-based Vulnerable Groups:

In the surveyed households, 30 out of 51 households (58.8 percent) have members above 60. In total, 49 people out of 198 (24.7 percent) are above 60, in the surveyed population. In addition, in 43 percent of the surveyed households there are people with serious illnesses; most of these are related to old age.

Gender-based Vulnerable Groups:

Considering the compulsory education, girls and boys within the age group 6-15 all go to school, according to the survey results. This can be interpreted that girls and boys are treated the same in terms of compulsory education.

There are 29 women landowners, 9 of which are in Ergenüsağı, 1 in Marangeçili and 22 in Kızlarsekisi. Of these, 4 women in Ergenüsağı and 3 women in Kızlarsekisi were interviewed. In relation to the Project, women do not have any disadvantage in accessing information and receiving cash payments for their land 5 percent higher of the valuation.

²⁴ As stated in the Report of Private Specialization Commission for Agricultural Policies and Structural Arrangements published by State Planning Organization of Turkey in 2001, the agricultural subsidy is paid to producers/farmers by the Government to support production of agricultural commodities, to increase yields, and/or to cultivate new and alternative crops. The subsidies are provided by the Ministry of Agriculture through respective local agencies. The social survey revealed that in 2008, local producers received Direct Income Support, Support for fuel, fertilizer and soil analysis.

Handicapped People:

Among the 51 households interviewed, there are handicapped people in 12 households (23.5 percent). These people are either mentally or physically disabled and do not benefit from special care and education. On average, 75 percent of the household members in these 12 households were covered by health insurance.

The households in which there are handicapped people lose on average 37 percent of their lands; the same figure for all PAPs is 24 percent²⁵. However, these people are not directly and adversely affected by the land acquisition because they don't actively deal with the farm works.

Other Disadvantaged Groups:

Landowners who shared compensation with others: There are 18 landowners who have to share their land acquisition compensation with others outside their household (e.g., siblings or other relatives). They could be disadvantaged in the following manner: if their land had not been acquired for the Project they would have continued cultivating the land, keeping much of the produce; when the land is sold, they have to share the compensation with others and thus their incomes are reduced.

Land users on third party property: There are two households using lands for cultivation and/or having buildings on the affected lands belonging to a close kin. One of these households resides on and uses the land of the head of household's father. As the residential building was affected by the Project, the household thought that this likely displacement might be a new opportunity for them to migrate from rural to urban and would like to move to Kozan. The other household has a house, a barn and 87 olive trees on the land of a cousin. The household don't have to move from the village because they have another house elsewhere in the community; but they are economically affected as they lose some olive trees. Similar to the other household, they will receive compensation payment for their trees from their relative who is the titleholder of these assets. They are disadvantaged in that they did not receive any cash compensation for the lands and assets they use as these did not belong to them legally.

3.4 AFFECTED ASSETS

In a HEPP project, types of the affected assets can be gathered under two main categories. First, there are immovable productive assets such as land, orchards and fruit trees; and secondly, there are immovable structures such as houses, barns, arbor²⁶ etc. Immovable assets consist of land, standing crops on affected lands, trees grown on the affected plots, and buildings (Table 3-18).

²⁵ Given the small sample, the difference between the two groups is not significant.

²⁶ Arbor is a shady resting place near the houses or in the orchards. They are often made of wood on which plants are grown and family members spent their time for resting together.

As seen from the Table 3-18, in all villages, some orchards are affected as a result of the land acquisition process. These orchards consist of orange, pomegranate, grape and fig. In addition to the orchards, olive trees are another asset affected by the Project. These trees are mainly found in Ergenuşağı and Kızlarsekisi and some of the households earn cash by selling their fruits.

A limited range of vegetables are grown in the Project affected villages. Tomato, cucumber and pepper are among the vegetables grown and bring limited revenue.

Table 3-18 Project-affected Assets by Settlement

Villages	Immovable Productive Assets	Immovable Structures
Ergenuşağı	Agricultural land and orchard (plot and trees)	15 stone barns, 1 two-storey reinforced concrete house, 1 two-storey house, 18 trellis, 2 barns, 1 wooden barn, 2 concrete walls, 7 concrete pools, 1 ruined concrete pool, 4 reinforced concrete houses, 5 briquette houses, 2 briquette police offices, 1 briquette barn, 1 briquette house with zinc roof, 1 stone barn with zinc roof, 3 stone houses with zinc roof, 3 stone houses, 1 stone barn with ground roof, 1 stone house with ground roof, 4 WCs, 3 concrete grounds
Marangeçili	Agricultural land and orchard (plot and trees)	1 barn, 19 trellis, 1 two-storey stone house, 1 two-storey house with zinc roof, 1 wooden barn, 1 concrete area, 2 concrete area- stairway, 1 briquette house with concrete roof, 1 house with concrete roof, 10 concrete pools, 3 adjacent house-barn, 1 briquette barn, 1 briquette house (barn/house), 1 briquette house, 10 houses with zinc roof, 28 stone barns, 1 chicken house, 2 stone haylofts, 1 stone tandouri, 8 houses with ground roof, 5 WCs
Kızlarsekisi	Agricultural land and orchard (plot and trees)	9 stone houses, 8 stone barn, 4 trellis, 3 concrete pool

Source: Köprü, EnerjiSA data, 2009

3.5 PRIORITIES FOR LOCAL ASSISTANCE

3.5.1 VILLAGE-LEVEL PRIORITIES

The infrastructural priorities of the villages are related to water, electricity and sewerage facilities, according to the information received from the headmen. Concerning the water, Kızlarsekisi village doesn't have a water supply network, and although Ergenuşağı village has one, the water is still carried from a fountain since the network is out of order. Concerning electricity, all villages have electricity network but frequent power cuts during winter were mentioned in all villages. As none of the villages have a sewerage system, it becomes an area of priority for the affected-villages.

The most important problem of the villages, perceived by the affected households is given in Table 3-19. Although the percentages differ among the villages, insufficiency of roads and unemployment are perceived as the most important problems in all villages. In addition to that, inadequate drinking water and inadequate health facilities are other important problems expressed by the muhtars.

Table 3-19 The most important problem of the village perceived by the surveyed households (%)

	Ergenüŝađı	Kızlarsekisi	Marançeçili
Unemployment	42.3	23.1	44.4
Low income	3.8	0.0	11.1
Insufficiency of the roads	26.9	53.8	44.4
Inadequate health facilities	3.8	7.7	0.0
Inadequate drinking water	19.2	15.4	0.0
Inadequate education services	3.8	0.0	0.0
Total	100,0	100,0	100,0

Source: Köprü, RAP Survey, 2009

3.5.2 HOUSEHOLD-LEVEL PRIORITIES

According to the surveyed households, unemployment appears to be the most important problem and insufficiency of roads follows unemployment. Low income, inadequate drinking water, inadequate health facilities and high costs of living are also perceived as the important problems (Table 3-20).

Table 3-20 The most important problem of the HH perceived by the surveyed households (%)

	Ergenüŝađı	Kızlarsekisi	Marançeçili
High costs of living	11.1	7.1	0.0
Unemployment	40.7	14.3	66.7
Low income	11.1	7.1	0.0
Insufficiency of the roads	7.4	14.3	22.2
Inadequate health facilities	11.1	14.3	0.0
Inadequate drinking water	14.8	21.4	0.0
Inadequate housing	3.7	0.0	0.0
Disagreement with EnerjiSA	0.0	7.1	0.0
Care for elderly	0.0	7.1	0.0
No problems	0.0	7.1	11.1
Total	100,00	100,00	100,00

Source: Köprü, RAP Survey, 2009

3.6 OPINIONS ABOUT THE PROJECT

Perceived benefits and problems attributable to the Project are of utmost importance for the future community actions that could be carried out in the Project affected area. A bulk of the affected population expects employment opportunities and improvement of village roads from the Project; these will be provided. Compensation received is seen as one of the benefits of the Project by the surveyed population. 5.3 percent of all responses in Ergenüŝađı village and 12.5 percent of all responses in Kızlarsekisi village expect no direct benefits from the project. Moreover, main personal advantages of the Project was mentioned to be employment (76.3 percent), and accordingly more efficient agriculture, view and possibility for fishery were also mentioned.

Table 3-21 Perceived benefits attributable to the Project

	Ergenüsağı	Kızlarsekisi	Marangeçili
No direct benefit	5.3	12.5	0.0
Employment opportunities	52.6	43.8	70.0
Improvement of village roads	28.9	25.0	10.0
Irrigation	0.0	0.0	10.0
Compensation received	10.5	18.8	10.0
Better climate conditions	2.6	0.0	0.0
Total	100.0	100.0	100.0

Source: Köprü, RAP Survey, 2009

Moreover, during the survey, the households were asked how they have used or were planning to use the compensation they received for their affected immovable assets. In the overall, 23 percent were depositing the money in a bank, 15 percent wanted to buy an urban house, 12 percent paid off their debt and 8 percent wanted to buy residential land. Making pilgrimage (6 percent) and sending money to their children (3 percent) were among other ways of using the compensation.

According to the households interviewed, the common problem attributable to the Project is the disruption of lands and crops.

Table 3-22 Perceived problems attributable to the Project

	Ergenüsağı	Kızlarsekisi	Marangeçili
Disruption of roads	0.0	11.1	0.0
Dust	3.0	5.6	0.0
Disruption of lands and crops	39.4	50.0	71.4
Increase in traffic	3.0	0.0	0.0
Loss of land	6.1	0.0	0.0
Disruption to settlements	18.2	5.6	0.0
Damage to commonly used areas belonging to Village Legal Entity (pasture etc.)	0.0	11.1	0.0
Safety due to construction	3.0	0.0	0.0
No disruption	27.3	16.7	28.6
Total	100.0	100.0	100.0

Source: Köprü, RAP Survey, 2009

4 LAND ACQUISITION PROCEDURES

4.1 GENERAL

The land acquisition process for the Köprü Dam and HEPP Project includes valuation of affected assets, clarification of valuation procedures, payments 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 public, private and usufruct lands were described.

4.2 LAND ACQUISITION REQUIREMENTS

In order to build the Köprü Dam and HEPP, acquisition of both privately and publically owned lands was required. For Köprü Project, a total area of 409 ha; 88 percent of which is composed of publically owned lands was needed (Table 1-1). Land acquisition carried out for this Project affects three villages; Ergenuşağı, Marangeçili and Kızlarsekisi. Ergenuşağı is affected by the dam body, site for construction materials and derivation tunnel, Marangeçili by the reservoir area and Kızlarsekisi by the dam body and reservoir area.

4.3 LAND ACQUISITION PROCEDURES

4.3.1 PUBLICLY OWNED LANDS

The Köprü Dam and HEPP Project has impacts both on Treasury and Forestry lands. Treasury and Forestry lands cannot be purchased but are rented for use for 49 years in accordance with Turkish laws governing these lands.

As majority of the lands required belong to the Forestry Department, legal procedures established by the Forestry Law (No. 6831) and the Electricity Market Law amended in 2007 (No. 4628) were used. In line with these laws, EnerjiSA rents these lands for the term of production license (49 years). The rent corresponding to the permitting cost²⁷ is determined by the Forestry Department, including the cost of re-planting the same number of affected trees elsewhere. This cost was paid by EnerjiSA to the relevant public authority. As a consequence, lands are acquired for the Project's term of production license (Appendix 3).

As described in Chapter 2 energy companies in Turkey have been granted rights of use of Treasury lands provided that an energy project is declared to be in the public interest by EMRA. This right is granted for the lands on the reservoir area without payment to the Project provided that construction is completed by the second quarter of 2012 as per the Electricity Market Law amended in 2001 (No. 4628). In line with the Law, EnerjiSA applied to EMRA for rights of use of the Treasury owned lands.

²⁷ The details of how the forestry land assets were valued are included in Section 4.4.1.5.

4.3.2 PRIVATELY OWNED LANDS

Privately owned lands are acquired through either willing seller/buyer arrangement or through expropriation carried out by public agencies. Expropriation of privately-owned lands required for this Project will be undertaken by two different institutions: EMRA and SPA. Accordingly, privately owned lands to be acquired through different methods of acquisition can be grouped as follows:

- Lands *purchased* by EnerjiSA;
- Lands *expropriated* by EMRA; and
- Lands likely to be *expropriated* by SPA.

4.3.2.1 Lands Purchased by EnerjiSA for the Project

Land acquisition of the privately-owned lands for the Köprü Dam and HEPP 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 was the primary objective of EnerjiSA when purchasing lands together with the other immovable assets on it.

The asset acquisition process has been managed by the EnerjiSA Land Acquisition Team (Section 4.5). They use the following steps to purchase immovable assets:

1. Identification of titleholder of each affected parcels;
2. Disclosure meetings to inform PAPs about the project and the valuation method;
3. Inventory and valuation of the immovable affected assets by an independent agency;
4. Meetings and/or face-to-face interviews with the land owners to negotiate the valuation amount stated by the independent agency;
5. Completion of follow-up site visit to address issues raised by the land owners;
6. Revision of the valuation amount of affected assets and determination of a premium over the stated valuation price;
7. Calculation of final offers and disclosure of those offers to the land owners;
8. Negotiation and agreement on purchase price between buyer and sellers;
9. Establishment of a bank account in the name of each land owner (all costs are covered by EnerjiSA);
10. Transfer of the purchase price to the account of the seller; and
11. 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 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 buildings (houses, barns) receive cash compensation above the valuation prices set by the responsible agency.

4.3.2.2 Land expropriated by EMRA

There are 54 parcels (34 percent of total number of private parcels) amounting to 16 ha (33 percent of total private land area) belonging to 65 households which will be expropriated through EMRA.

In Ergenusağı village, 19 parcels will be expropriated by EMRA (Table 4-1). Of these, 4 parcels --belonging to 2 households-- will be expropriated as no agreement on the compensation could be reached with the titleholders throughout the negotiations and other 10 parcels due to title deed problems, making it legally impossible for EnerjiSA to purchase their land through negotiation. Expropriation of other 5 parcels has resulted from the sub-division issue described in Section 2.1.5. In Marangeçili, there are 8 parcels to be acquired by EMRA; 7 due to sub-division issue and the remaining one due to legal problems related to title deeds. In Kızlarsekisi village, there are 27 parcels which will be expropriated by EMRA. Only 1 parcel among these 27 will be expropriated because the owner of this land did not accept the price offer EnerjiSA made. Among the remaining parcels, 10 will be expropriated because of legal problems related to title deeds and 16 will be expropriated due to sub-division. As a result, 28 parcels out of 54 parcels will be acquired through expropriation to be undertaken via EMRA because of the sub-division issue (See Table 4-1).

Table 4-1: The number and Size of the Parcels expropriated by EMRA and the Number of Affected Households by Settlement

Villages	Parcels to be Expropriated by EMRA				Area of Lands (ha)	The # of Affected Households
	Due to No Agreement	Due to Title Deed Problems	Due to Sub-Division Issue	TOTAL		
Ergenusağı	4	10	5	19	3.6	23
Kızlarsekisi	1	10	16	27	9.9	35
Marangeçili	0	1	7	8	2.5	7
Total	5	26	28	54	16.0	65

Source: Köprü, EnerjiSA data, 2009

EnerjiSA will monitor the expropriation process and include the households of these parcels in RAP External (Impact) Monitoring Activity to ensure that their livelihoods are not adversely affected (Chapter 7).

EnerjiSA submitted an Expropriation Plan to EMRA which includes details of the above mentioned parcels and the valuation results including compensation values²⁸ for the

²⁸ The valuation was carried out by an independent agency. For details, see Section 4.4

available ones. After the submission of the Expropriation Plan, EMRA will make a decision. Provided that the decision is positive EnerjiSA will pay the value price of the affected lands to EMRA which will negotiate the purchase prices with the affected land holders. If the negotiated price is above the valuation, EnerjiSA will provide additional funds to EMRA. After an agreement on the price is reached, the corresponding amount will be deposited by EMRA into the affected landowners' bank accounts and the title deed transfer will be finalized. All administration, registration, transport/subsistence costs of EMRA and of the landowners will be paid by EnerjiSA. It is expected that final negotiated prices for these lands will accord with the prices paid for these lands as part of the willing buyer/seller negotiations as the earlier negotiated prices set the market prices.

If EMRA cannot reach agreement with the landowners regarding the compensation value for the lands to be expropriated, the case will be referred to the courts and managed in accordance with the Expropriation Law, described in Chapter 2.

4.3.2.3 Land likely to be expropriated by the SPA

For the Köprü Project, rehabilitation of some village roads for construction is planned; however, the length and location of these roads are not exactly known at the present moment. Maintenance and similar works related to the road will be undertaken by SPA as the road is a part of the provincial road network. In addition, a new road is planned to be constructed in Kızlarsekisi village, since an existing road will be covered by water as a result of the dam construction. SPA will manage and maintain the construction of this new road, too. The SPA procedures for expropriation are the same as described above for EMRA.

4.3.3 USUFRUCT LANDS

'Usufruct Lands' are those that are owned by a state agency but are under occupation and/or use by villagers. This usage of land has already been legally recognized through formal registration. Producers have legal documents stating that they pay annual tax to the government for the Treasury land that they use. It is known that there are such lands composed of 26 parcels belonging to 28 households. Majority of these lands (19 parcels corresponding to 91 percent of all Treasury Lands required in Ergenusağı) is located in Ergenusağı village and some (only 7 parcels corresponding to 100 percent of all Treasury Lands required in Kızlarsekisi) are located in Kızlarsekisi village whereas there are no such lands officially registered in Marangeçili.

In accordance with good practice defined by WB and IFC standards, users of public lands are compensated for their permanent and temporary assets; namely standing crops and/or structures. In order to prevent future disputes concerning the rightful users of those parcels, EnerjiSA will obtain the legal document of the user rights and subsequently pay the compensation.

4.3.4 LAND USERS ON THIRD-PARTY PROPERTY

There are two households that reside on and cultivate the land owned by third parties with consent. They do not have legal rights for the use or occupation of the land but are residing there with the consent of the owner; in other words they are tenants of legal owners but do not pay rent. Both of these households are in Ergenüşağı and have close kinship to the owners, one being the son and the other being the cousin of the owner. Because these households do not have legal rights to compensation, EnerjiSA paid the compensation amounts to the legal owners.

4.4 VALUATION

As discussed under Section 2.2.1., EnerjiSA determined the compensation amounts with reference to principles described in OP 4.12. Methodology 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, the independent agency determining the values for assets considers the following criteria:

- The nature of the land and/or building;
- The size of the land and/or building;
- 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;
- Current market of lands determined as a result of previous land transaction;
- The net income that could be obtained from the asset and/or the resource;
- For the house plots, the amount for which similar house plots have been sold without change in the use to which it is put; and
- For buildings, official unit prices at the date of purchase, estimates of the cost of rebuilding and depreciation²⁹ for wear and tear.

²⁹ 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.

4.4.1 VALUATION METHODOLOGY FOR IMMOVABLE ASSETS AND THEIR INTEGRAL PARTS

4.4.1.1. Valuation Methodology for Agricultural Land

The value of agricultural lands is calculated by using the net income approach³⁰. Net income is calculated by subtracting total costs from GPV. The valuation of agricultural land is based on the capitalization of net income from the land to be purchased. The formula used for assessing the value of lands is simply $K=R/f$ which mean;

K = Value

R = Net income (GPV - production cost)

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

For the land valuation process of the Köprü Project, capitalization rate³¹ is assumed to be 5 percent and it is assumed to be 6 percent for pomegranate orchards.

4.4.1.2. Valuation Methodology for Trees

For valuation of fruit or fruitless trees, 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.

4.4.1.3. Valuation of Buildings

Valuation of buildings is done according to their type and building costs based on unit values stated in "Notification about 2007 Average Unit Costs of Buildings used for Calculation of Costs for Consulting on Architecture and Engineering Works promulgated March 26, 2008 numbered 2682". On the other hand, values of ruins were calculated as the value of materials that might be used after demolishing of the building. Structures/buildings are compensated at full replacement cost³².

³⁰ 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).

³¹ Since the capitalization rate is calculated based on the actual market prices in the expropriation / land acquisition area, this rate will give the full replacement cost of the land to be purchased (Yusufeli Dam and HEPP Project RAP, 2006, Chp4, p.7).

³² In OP 4.12 of WB, "Replacement Cost" is defined as follows: "For houses and other structures, it is the market cost of the materials to build a replacement structure with an area and quality similar to or better than those of the affected structure, or to repair a partially affected structure, plus the cost of transporting building materials to the construction site, plus the cost of any labor and contractors' fees, plus the cost of any registration and transfer taxes".

4.4.1.4. Valuation of Forestry Lands

According to “Regulation on Permits to be given for Lands Considered as Forest” dated March 22, 2007, the valuation of forestry lands is done by General Directorate of Forestry. On the basis of information from Regional Directorates, valuation of forestry lands is done by calculating the cost of reforestation³³, cost for permits³⁴, Cost for Development of Forest Villagers³⁵, Cost for Reforestation and Erosion Control³⁶.

However, the Article 8 of “The Law on Utilization of Renewable Energy Resources for the Purpose of Generating Electrical Energy” numbered 5346 states that for the facilities that will be in operation by December 31, 2012, there is 85 percent of decrease in the amounts of permits; rent, easement, and utilization permits. Cost for Development of Forest Villagers and Cost for Reforestation and Erosion Control are also not requested. As the Köprü Project is planned to be operational within the first half of 2012, EnerjiSA benefits from these rights entitled in the Article 8 of the Law.

4.4.2 CONSULTATION AND NEGOTIATION

EnerjiSA organized a team for land acquisition process including one representative from each of the following teams: Survey and Expropriation Team (Section 4.5), Financial Affairs Team and Construction Team. EnerjiSA paid on average nearly 10 percent over the valuation for the affected assets compared with the asset values calculated by the independent agency (a private firm). The values determined by the agency are used as the primary reference point for the negotiation process. For the valuation of the affected structures (especially dwellings) structural and physical conditions did not affect the valuation price; instead, 2008 prices listed for structures according to the Ministry of Public Works and Houses were accepted. This was an important benefit as most affected structures were old and worn down. Adopting this approach enabled losses to be compensated at their replacement values³⁷.

All immovable assets are valued at full replacement cost and compensated by using different compensation strategies under different circumstances (Figure 4-1).

³³ Cost of reforestation is calculated by multiplying gross cost of unskilled labor with the total area (ha). Labor cost was calculated as 1615 hour/ha for the coniferous forests and 1748 hour/ha for broad-leafed forest.

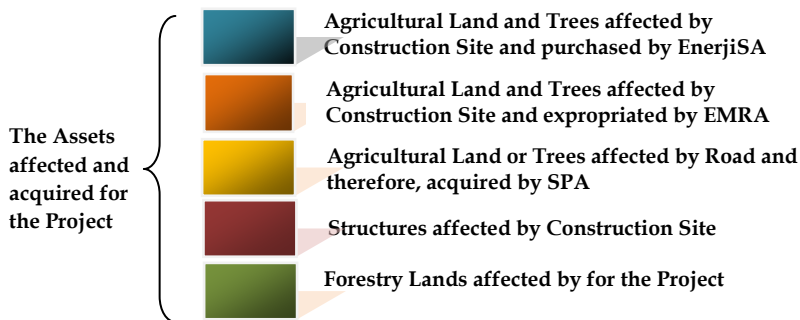
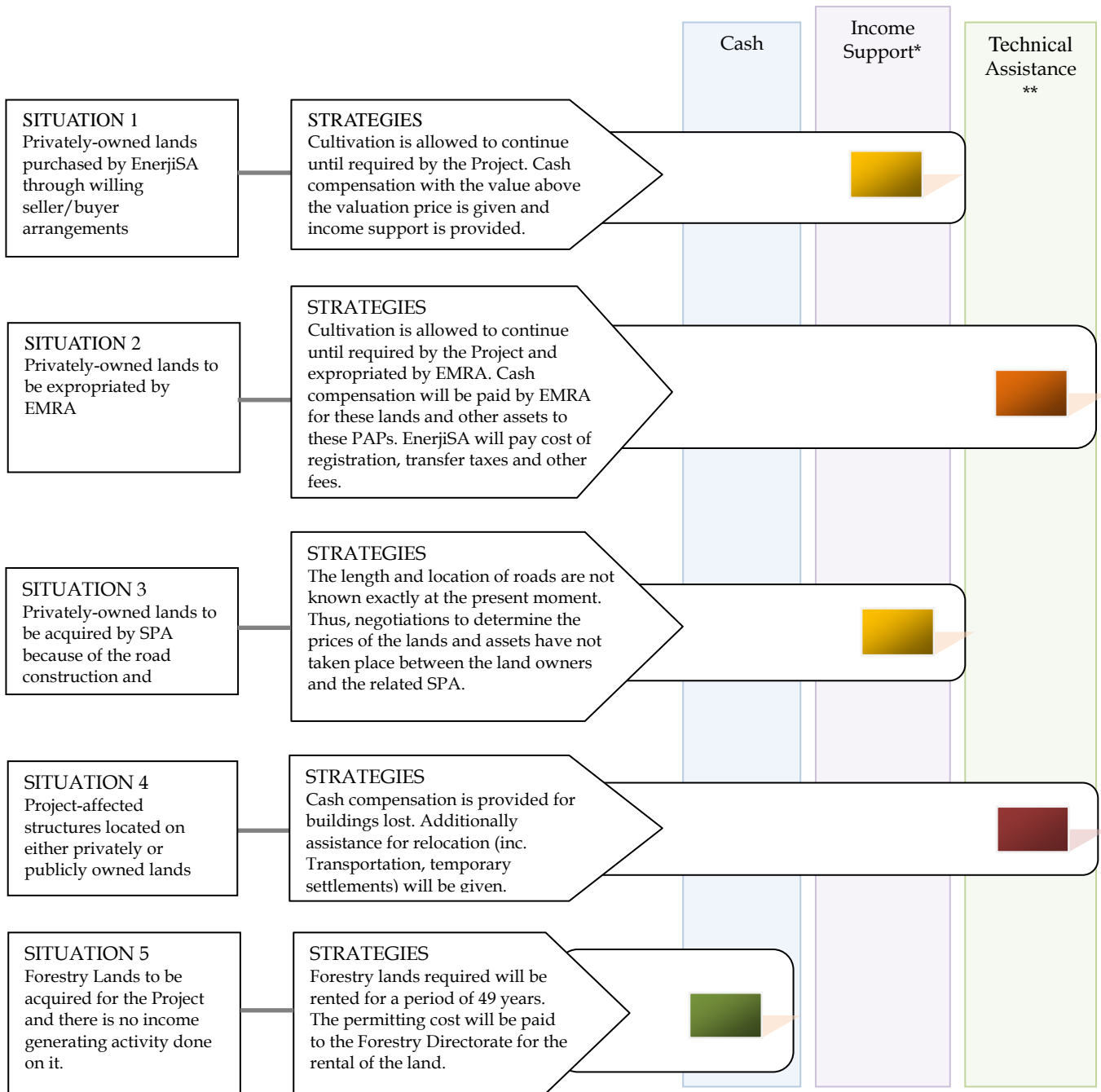
³⁴ Cost of permit for land is accepted as 5 per mille/per year of the total cost of the Project.

³⁵ Cost of development of forest villages is accepted as 3 percent of the total Project cost that would be paid once.

³⁶ Cost of reforestation and erosion control is accepted as 2 percent of the Project that would be paid once.

³⁷ According to World Bank OP 4.12 on Involuntary Resettlement, replacement value is defined as follows: “For agricultural land, it is the pre-project or pre-displacement, whichever is higher, market value of land of equal productive potential or use located in the vicinity of the affected land, plus the cost of preparing the land to levels similar to those of the affected land, plus the cost of any registration and transfer taxes. For land in urban areas, it is the pre-displacement market value of land of equal size and use, with similar or improved public infrastructure facilities and services and located in the vicinity of the affected land, plus the cost of any registration and transfer taxes. Where domestic law does not meet the standard of compensation at full replacement cost, compensation under domestic law is supplemented by additional measures so as to meet the replacement cost standard.”

Figure 4-1: Illustration of Compensation Strategies for RAP of the Köprü Project



*Currently income support refers to preferential employment opportunities for temporary positions on the Project.

** Technical assistance refers to assistance in relocation and also payment for transfer taxes and other fees.

4.5 ROLES AND RESPONSIBILITIES FOR LAND ACQUISITION AND COMPENSATION

The land/asset valuation was conducted by HAPA which is an independent private firm recruited by EnerjiSA. HAPA valued lands of Ergenüşağı, Marangeçili and Kızlarsekisi villages affected by the Köprü Project and the valuations were based on the following principles:

- Land is classified based on its physical, agricultural characteristics (i.e. clay soil, agricultural soil, dry soil etc);
- It is assumed that the land located under the area of reservoir will be utilized for maximum two years in the future and the estimated income is calculated according to the crops expected to be gathered from the land during those years (shift of crops is also taken into consideration in the calculations);
- Value of existing crops and trees are determined;
- Values of existing structures (i.e. houses, barns etc.) 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 Survey and Expropriation Team within the Projects Department is headed up by an experienced team leader who has worked at the General Directorate of DSI as an expropriation expert for many years. The team consisting of two more surveying engineers receives the valuation data from the independent valuation agency (see above) and analyzes it in order to present to EnerjiSA administration.

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 for questions 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. In some cases, the land owner stated that he had more trees planted than stated in the valuation report which required a second visit by the team and a recounting of the trees;

- 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;
- All affected farmers whose lands are going to be under water are allowed to continue their production until the affected parcels are used by the Project;
- 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.

4.6 MINIMIZATION OF IMMOVABLE ASSETS ACQUISITION

One of the aims when considering Project Alternatives³⁸ was minimizing immovable assets acquisition. During the site selection process a suitable location for the axis of the dam and other auxiliary facilities were evaluated with reference to topographic and geologic characteristics as well as the location of immovable assets that may be affected. Other sites considered presented environmental hazards and did not necessarily reduce the volume of assets to be affected. Moreover, taking public safety considerations into account the present sites were identified. The results of this process and the many considerations that formed the basis of the relevant decisions were shared with affected communities during the disclosure of EIA.

³⁸ Project alternatives were described in the EIA Report of the Köprü Dam and HEPP Project.

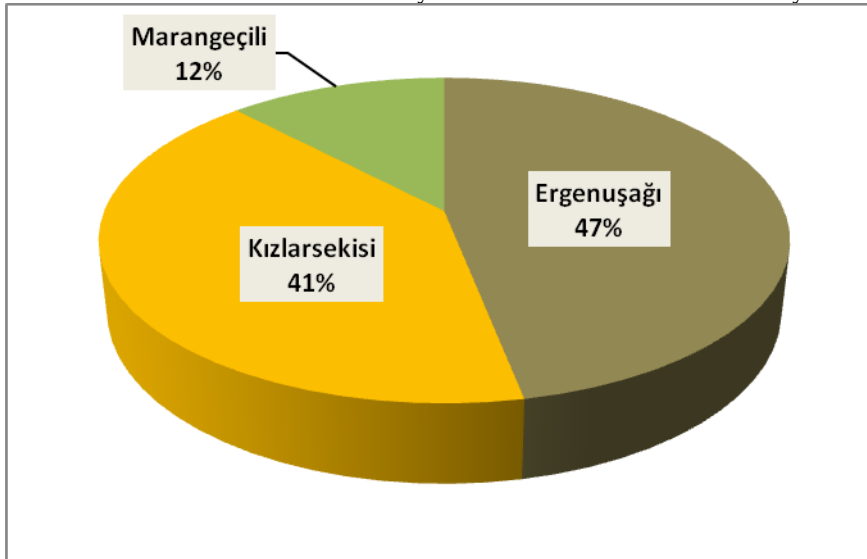
5 PROJECT IMPACTS AND MITIGATION MEASURES

Köprü Dam and HEPP Project affects three rural settlements belonging to Kozan district of Adana; Ergenuşağı, Marangeçili and Kızlarsekisi. Although the size of privately-owned lands required for the Project is small compared to forestry lands (Table 1-1), 157 parcels belonging to 136 households living in three settlements are affected by the Project.

Since it is a small-scale hydro-electrical power plant with small reservoir area, no settlement is affected in its entirety and no large scale physical resettlement is necessary even though there are 11 households which are subject to relocation as their residential buildings will be acquired for the Project. Except for 2 user households, all of them are titleholders. Of these 11 displaced households, 7 moved to Kozan district whereas one moved to Adana Province. As of August 2009, the last three households were still staying in the village³⁹.

The area of the privately-owned lands affected by the Project varies by settlement. As seen in Figure 5-1, majority of the affected privately-owned lands belongs to people living in Ergenuşağı (47 percent) and Kızlarsekisi (41 percent).

Figure 5-1: Distribution of the Privately Owned Lands Purchased by Settlements



Source: Köprü, EnerjiSA data, 2009

Total number of the privately-owned parcels affected by the Köprü Project is 157; the number of affected parcels is 23 in Marangeçili whereas this figure increases to 78 in Ergenuşağı. All parcels required are less than 20 da of land. The average size of the affected 157 parcels is 0.3 ha. The majority of the affected parcels (64 percent) are smaller than the average; 80 percent is even smaller than 0.5 ha. 16 percent is between 0.5 and 1 ha and only 6 parcels (4 percent) is larger than 1 ha. The average number of affected parcels per household is 1.2 and ranging from 1 to 5.

³⁹ More details about their current situation are given under the Section 5.1.1 and 5.1.2.

The total number of the affected households in three settlements is 136; data on loss of lands and agricultural income are available for 51 and 47 households, respectively. The percentage of the households losing less than 10 percent of their land is 28 whereas that of households losing less than 10 percent of their agricultural income is 43. The number of households that is subject to relocation is only 11 out of 136 households (see Table 5-1 and Section 5.1.1 below).

In addition to the privately-owned lands, there are some households that use Treasury lands for agricultural production in Ergenüşağı and Kızlarsekisi villages as described in Section 4.3.2. 91 percent of this lands (13.6 ha) are used as usufruct lands by 28 households who are officially registered. Majority of them (23 HHs) are from Ergenüşağı.

In accordance with WB's OP 4.12, the land acquisition process required for a project can bring about major impacts as follows:

- Loss of shelter resulting in relocation;
- Loss of productive assets and/or access to them; and
- Loss of income or means of livelihood.

Impacts of the Project on local people who are directly affected by the land acquisition process are shown in the Table 5-1.

Table 5-1: Typology of Impacts of the Köprü Project

IMPACTS	Magnitude of Impacts	# of Affected HHs	Category of Displacement
IMPACT ON ASSETS			
<i>Loss of residential buildings</i>	Loss of residential buildings	11 HHs	Physical displacement
	Loss of residential buildings	7 HHs	No physical displacement (To be monitored)
<i>Loss of productive assets</i>	- Loss of more than 90 percent of productive assets	6 HHs	Economic displacement (significant impact)
	- Loss of more than 10 percent of productive assets	31 HHs	Economic displacement (moderate impact)
	- Loss less than 10 percent of productive assets	14 HHs	Economic displacement (minor impact)
IMPACT ON PAPs			
<i>Loss of income or means of livelihood</i>	- Loss of more than 90 percent of agricultural income	1 HH	Economic displacement (significant impact)
	- Loss of more than 10 percent of agricultural income	26 HHs	Economic displacement (moderate impact)
	- Loss less than 10 percent of agricultural income	20 HHs	Economic displacement (minor impact)

Source: Köprü, RAP Survey, 2009

5.1 IMPACTS ON IMMOVABLE ASSETS

5.1.1 IMPACTS

Loss of Structures/Buildings

The villages affected by the Project site are widely scattered and the size of the Project area affecting privately owned land is relatively small. Almost all structures are affected by the dam reservoir and there are some affected by construction camp site. Structures affected by the Project belong to 32 households and 18 of these 32 households lost their residential buildings. Of 18 households, only 11 residing in Ergenüşağı and Kızlarsekisi were subject to physical displacement. Relocation is not on the agenda for the remaining 7 households because 2 houses belong to 2 households are unoccupied; 3 houses are not permanently used as the owners reside outside the villages and the last 2 houses are the second homes of their owners. In addition to the privately-owned lands, it is revealed that there are residential buildings on the public lands affected by the Project; however, owners of these houses are not subject to any physical displacement because they live outside the village and therefore, these houses are unoccupied.

Construction for the Köprü Project has not yet started. Although EnerjiSA did not force the households to relocate immediately, apart from three households, all households in Ergenüşağı and Kızlarsekisi villages left their houses. Thus, physical side of resettlement (relocation) was completed for these households. .

Loss of Productive Assets

Productive assets to be affected by the Project comprise of agricultural lands, standing crops and fruit trees. In total, 49.2 ha of land are to be acquired for the Köprü Project.

The average size of affected land per household was equal to 0.4 ha. Table 5-2 shows the total number of affected households whose privately-owned lands are affected by the Project and the total land size affected by settlement.

Table 5-2: Number of Households and Land Size Affected by Settlement

Villages	# of Affected HHs	Total Size of Land Acquired (ha)
Ergenüşağı	65	23.1
Marangeçili	17	6.0
Kızlarsekisi	54	20.1
TOTAL	136	49.2

Source: Köprü, EnerjiSA data, 2009

It was revealed that the households surveyed lose an average of 23.5 percent of their total land holdings. This rate is lower in Marangeçili whereas slightly higher in Ergenüşağı (Table 5-3).

Table 5-3: Percentage of Loss of Lands by Settlements

Villages	Total Land Holdings (ha)	Total Land Taken / to be Taken (ha)	% of loss of land	# of corresponding Households
Ergenuşağı	58.6	15.5	26.5	28
Marangeçili	22.6	3.5	15.6	9
Kızlarsekisi	36.4	8.6	23.6	14
TOTAL	117.6	27.6	23.5	51

Source: Köprü, RAP Survey, 2009

The magnitude of impact attributable to the loss of agricultural land was classified under three categories as follows: those who lost more than 90 percent of their lands (significant impact), those who lost some part of their lands (moderate impact) and those who lost less than 10 percent of their lands (minor impact). Of the 51 households interviewed, 50 households provided information on their total land holdings. Findings of the survey⁴⁰ show that almost one fourth of the project-affected households interviewed lost less than 10 percent of their lands whereas 12 percent of the affected households lost more than 90 percent of their lands. Accordingly, majority of the affected households (62 percent) lose some portion of their lands (See Table 5-4). For these reasons, impact of the Project in respect to the loss of land can be defined as moderate.

Table 5-4: Households with Land Loss

Criteria of Magnitude of Loss of Land	# of Affected HHs interviewed	Portion of the HHs Lost their Lands (%)
Those who lost more than 90% of the land	6	12
Those who lost more than 10% of the land	31	61
Those who lost less than 10% of the land	14	27
TOTAL	51	100.0

Source: Köprü, RAP Survey, 2009

5.1.2. MITIGATION MEASURES

Measures taken for the affected structures: There are some structures belonging to 32 households and affected by the Project. Among these households, 18 lost their residential structures due to the Project. However, only 11 households were subject to actual physical relocation. All those structures affected were compensated in-cash by EnerjiSA at prices negotiated and agreed with the households⁴¹. Of these 11 displaced households, 7 moved to Kozan district whereas one moved to Adana Province. As of August 2009, the last three

⁴⁰ For details, see Appendix 5.

⁴¹ There is one household who had to leave their house, but do not have right to receive any cash compensation as it was not the legal owner. Consequently, cash compensation was paid to the owner but resettlement assistance was provided for the user.

households were still staying in the village. Of 7 households moved to Kozan, 2 inhabit own homes; these were purchased; the three households rented houses until building of their new houses are completed on land purchased in Kozan; another household moved a house for rent and the last household stay with their relatives. One household among those staying in the village moved to another home in another section of the village. Two households plan to move to Kozan. However, only children of one of these two households will be settled in Kozan whereas the parents continue to stay in the village. Although some of these affected households are going to settle outside the village, they will keep in touch with their villages because they have second homes for summer time.

Preferential employment will be provided to the members of these households where possible. As the construction has not started, nobody was employed up to date in the Köprü Project but EnerjiSA has stipulated in the contract with the main construction contractor (signed on April 2009) to provide job opportunities for the project affected people to the extent that their skills match the job requirements.

Measures taken for the affected productive assets: In all settlements, EnerjiSA proposed to pay compensation higher than the valuation price for the affected assets. In all cases, final values for compensation were determined through negotiations with willing sellers.

Of the 136 affected households whose their own lands are affected, 81 households (60 percent) are given compensation payments for 102 parcels they owned at levels over the valuation conducted by the independent valuation agency whereas one household for one parcel received compensation below total values determined for all assets on that parcel.⁴²

Consequently, total values of replacement and compensation for all titleholders who sold their lands and received their cash compensation in three settlements, and ratios of increase between these two values are summarized in Table 5-5⁴³.

EnerjiSA paid high price for land, standing crops and trees. The PAPs in the settlements of Ergenüsağı, Marangeçili and Kızlarsekisi received on average 9, 19 and 5 percent above the initial valued price, respectively (Table 5-5). The high unit prices determined in this cash payment will also be applicable when EMRA or SPA expropriates the land; EnerjiSA will pay these public agencies in advance to ensure that compensation levels are comparable.

⁴² During the negotiation undertaken for determination of compensation values for the assets affected, the titleholder stated that some of trees did not belong to him, and therefore, he did not accept to receive compensation for the trees planted by someone else even though the trees were located on his parcel. As a result, as he received only for the trees belonging to him, it is seen that compensation value is lower than the valuation value and the discrepancy between these two values is - 9 percent. On the other hand, as the titleholder of the remaining trees is dead and process of inheritance and title deed transfer could not be completed by her heirs, and thus compensation payment could not be given to them until the legal procedures are completed.

⁴³ A full breakdown and comparison of replacement value and compensation payment is provided in Appendix 5.

Table 5-5: Replacement Values and Compensation by Settlement⁴⁴

Villages	Replacement Value (RV) of Assets Purchased (\$)	Compensation Value (CV) of Assets Purchased (\$)	Ratio of Increase Btw RV and CV (%) ⁴⁵
ERGENUŞAĞI	714,928	780,710	9
MARANGEÇİLİ	89,684	106,290	19
KIZLARSEKİSİ	346,429	364,193	5
TOTAL	1,151,042	1,251,193	9

Source: Köprü, RAP Survey, 2009

In addition, there are 28 households⁴⁶ who are using treasury lands and have legal document for user rights. As these lands belong to the Treasury, they will have to be acquired through expropriation and usufruct users will be compensated by EMRA.

5.2 IMPACTS ON THE PROJECT AFFECTED PERSONS

5.2.1 IMPACTS

Loss of agricultural income: The primary impact of land acquisition process is related to the potential reduction of livelihood as a result of reduced agricultural incomes. In addition, the affected households may have to modify the structure of their livelihood. The potential need for such an alteration in and adaptation to a new or modified situation depends on the extent of the impact of the Project on the productive assets, which are vital for livelihood.

Agriculture is the main source of income in the project affected villages according to the findings of the socio-economic survey conducted, which accounts for 54.9 percent of TFI. In these villages, agriculture is based on family farming and subsistence cropping. The non-agricultural sources of income (46 percent) include pension payments, waged labor, old-age pension, transportation works, forest guard payments, pension for disability, widow pension, orphan pension, commercial income, rent revenues, and civil employee salaries. For few people (0.5), agricultural subsidies also provide income.

The main source of income of the affected households depends on agriculture; the

⁴⁴ Figures shown in Table 5-5 do not include both replacement and compensation values for the affected-assets to be compensated by EMRA and the values for the standing crops and structures belonging to usufruct users. As compensation amounts of 54 parcels that will be acquired through expropriation will be determined by EMRA, ratio of increase between RV and CV cannot be calculated.

⁴⁵ The average increase is lower in Kızlarsekisi, whereas remarkably higher in Marangeçili because of one titleholder who received a compensation payment of 105 percent over the valuation price. The titleholder was not available during the asset inventory, instead, his wife provided information about the productive assets; however, she under-declared and therefore, many trees could not be counted and valued. Later, at the request of the titleholder, 52 olive trees were re-assessed and additional valuation price for these were determined and paid.

⁴⁶ Half of these 28 usufruct users have also privately-owned lands which are affected by the Project. For this reason, total number of project-affected households is 152.

average agricultural income loss for the PAPs is 6.1 percent⁴⁷. The average total income loss for the same households is lower at 3 percent. Loss of gross agricultural income in Ergenüsağı and Kızlarsekisi villages is slightly higher than the average whereas it is lower in Marangeçili (Table 5-6).

Table 5-6: Percentage of Agricultural Income Loss of PAPs by Settlements

Villages	Crop-based Total Agricultural Income (\$)	Income generated from Lands Taken / to be Taken (\$)	% of loss of agricultural income	# of corresponding Households
Ergenüsağı	7,758.5	372.7	4.8	26
Marangeçili	1,305.6	226.1	17.3	9
Kızlarsekisi	7,778.6	615.0	7.9	12
TOTAL	6,528.0	397.0	6.1	47

Source: Köprü, RAP Survey, 2009

As mentioned in Chapter 3, agricultural income of these affected households is based on crop production whereas livestock production is their second agricultural income source. Survey results show that crop production constitutes on average 84 percent of GAI of the sampled affected households whereas livestock constitutes only 16 percent of it.

Reduction of gross agricultural incomes of the affected households was estimated on the basis of figures obtained from 47 affected households. Almost half of the affected and surveyed households (20 HHs corresponding to 43 percent) lose less than 10 percent of their crop production-based agricultural income whereas only one household lose more than 75 percent of it (Table 5-7).

Table 5-7: The Number of Project Affected Households by Estimated Reduction of Gross Agricultural Incomes

Criteria of Magnitude of Estimated Loss of Agricultural Income	# of Affected HHs interviewed	Portion of the HHs Lost their Agricultural Income (%)
Those who lost more than 75% of their incomes	1	2
Those who lost between 51% and 75% of their incomes	4	9
Those who lost between 26% and 50% of their incomes	6	13
Those who lost between 11% and 25% of their incomes	16	34
Those who lost less than 10% of their incomes	20	43
TOTAL	47	100

Source: Köprü, RAP Survey, 2009

⁴⁷ Loss of GAI derived from land taken/to be taken by the Project was calculated by assuming that value of land taken is equal to agricultural income generated from the land taken by EnerjiSA. The percentages of the loss of income were calculated by comparing values of land required for the Project to the crop-based agricultural income of the surveyed households. See Appendix 5.

Vulnerable Groups:

The payments/compensation made to the vulnerable groups and the potential reduction in their agricultural incomes indicates, without statistical validity, a relatively favorable treatment of landowners who share/will share their compensation compared to the female owners.

There are 29 affected female landowners in the three settlements (Section 3.3.4.). Of these female titleholders; 9 are from Ergenusağı, 1 from Marangeçili and 19 from Kızlarsekisi. 7 of these women were included in the survey. The results shows that three of these female landowners lose less than 10 percent of their agricultural income derived from the land taken for the Project whereas the five ones lose more than this but none of them do not lose more than one fifth of their agricultural income (Table 5-8). In addition, there are 5 landowners in Ergenusağı, 1 in Marangeçili and 16 in Kızlarsekisi and the amount of reduction in agricultural income for these female landowners could not be determined as they were not interviewed⁴⁸.

Table 5-8 Female Landowners and Percentage of Agricultural Income Loss

# of Female Landowners	Crop-based Total Agricultural Income (\$)	Income generated from Lands Taken (\$)	% of loss of agricultural income
<i>Ergenusağı</i>			
1	17,605	632	4
2	447	63	14
3	663	99	15
4	2,235	243	11
Average	5,238	259	5
<i>Kızlarsekisi</i>			
1	59,581	3,091	5
2	1,011	163	16
3	2,444	152	6
Average	21,012	1,135	5

Source: Köprü, RAP Survey, 2009

Except for 1 surveyed female landowner whose lands are subject to expropriation, all surveyed female landowners sold their lands through willing buyer/seller negotiation and were compensated over the valuation price (Table 5-9). They seem to receive compensation below the average (9 percent) paid across all landowner groups; however given the small numbers of the two populations, the differences are not statistically significant.

⁴⁸ The number of questionnaire conducted with female landowners is low because there were only 12 female landowners who resided in the villages.

Table 5-9: Distribution of the Total Replacement and Compensation Values paid for female land owners by Settlement

# of PAPs	Replacement Value ⁴⁹ (RV) of Land Purchased (\$)	Purchase Price (\$)	% of Increase Btw RV and CV
Ergenüşağı			
1	67,701	71,613	6
2	1,917	1,935	1
3	4,835	4,903	1
4	6,841	7,258	6
Kızlarsekisi			
1	61,515	EMRA	NA
2	4,864	5,161	5
3	4,854	5,161	6

Source: Köprü, RAP Survey, 2009

Of the 29 female landowners, land belonging to 17⁵⁰ will be acquired through expropriation. Most (15) will be expropriated because of the sub-division issue described in Section 4.3.2.2. On the other hand, the remaining 12 female titleholder sold their lands and received compensation on average 6 percent above the valuation price.

A final issue related to these women concerns with relocation resulting from any loss of houses due to the land acquisition. Of the 29 women, only two are subject to relocation. These two women have received their compensation for all assets lost including their houses but one hasn't moved, yet whereas the other moved to Kozan. In addition to the cash compensation, assistance for carriage of salvageable materials will be provided for them, if required.

In addition to these female landowners, there are two women who use lands on the third-party property, and one of them will be relocated. Loss of the female land users will be compensated via their relatives who are the owners of lands that they use (Section 4.3.4). Finally, there are 6 female usufruct users who have legal documents for use rights. They will be compensated for standing crops and structures in the line with IFC standards and national legal framework.

There are 20 landowners (including 4 female owners) who share their compensation payment with others; this is another potentially vulnerable group. All these landowners were interviewed, except for two landowners because their lands are not cultivated and therefore, crop-based agricultural income is not obtained. Of all interviewed landowners, 16 lose less than 30 percent of their income and almost half of the landowners who share their compensation lose below the average rate of loss of agricultural income (6.1 percent) (Table 5-10).

⁴⁹ This is the valuation price calculated by an independent firm, and unit prices obtained by the Provincial Directorate of Agriculture.

⁵⁰ The 17 female landowners are as follows: 4 from Ergenüşağı village (3 of them due to subdivision), 1 from Marangeçli, 12 from Kızlarsekisi village (11 of them due to subdivision).

Table 5-10 Distribution of Landowners who will share their Compensation By Loss of Agricultural Income

Landowners who will share their compensation	Crop-based Total Agricultural Income (\$)	Income generated from Lands Taken (\$)	% of loss of agricultural income
<i>Ergenüŕađı</i>			
1	6,699	1,119	17%
2	27,948	479	2%
3	17,605	632	4%
4	3,387	1,187	35%
5	5,706	163	3%
6	2,235	243	11%
7	2,904	310	11%
8	0	684	NA
9	10,758	471	4%
10	771	128	17%
11	15,355	128	1%
12	1,203	42	4%
Average	7,881	465	6%
<i>Kızlarsekisi</i>			
1	3,325	501	15%
2	0	163	NA
3	1,011	163	16%
4	2,444	152	6%
5	5,715	79	1%
Average	2,499	212	8%
<i>Marangeçili</i>			
1	1,029	284	28%
2	2,365	425	18%
3	1,355	331	24%
Average	1,583	347	22%

Source: Köprü, RAP Survey, 2009

All landowners who will share their compensation payments with others agreed upon the amount and sold their lands through willing buyer/seller arrangements to EnerjiSA. Out of the 20 landowners in this group, 11 received compensation above the respective valuation; seven of them received over the average (9 percent)⁵¹. As seen from the Table 5-11, one of these titleholders received compensation well over (105 percent) the valuation⁵². The remaining two titleholders will receive compensation from EMRA as their parcels will be acquired through expropriation.

⁵¹ Given the small numbers of the two populations, the differences are not statistically significant.

⁵² For the explanation of this remarkable increase, see footnote 45.

Table 5-11: Distribution of the Total Replacement and Compensation Values for landowners who share their compensation by Settlement

PAPs	Replacement Value (RV) of Land Purchased (\$)	Purchase Price (\$)	% of Increase Btw RV and CV
Ergenüsağı			
1	61,253	65,806	7
2	47,361	48,387	2
3	67,701	71,613	6
4	27,812	29,032	4
5	8,502	9,839	16
6	6,841	7,258	6
7	5,562	6,774	22
8	58,197	64,516	11
9	36,728	41,935	14
10	5,261	EMRA	NA
11	5,261	EMRA	NA
12	1,004	1,290	29
Kızlarsekisi			
1	36,013	34,419	4
2	4,864	5,161	6
3	11,107	11,613	5
4	4,853	5,161	6
5	3,762	3,871	3
Marangeçili			
1	11,855	12,903	9
2	25,858	28,387	10
3	6,618	13,548	105

Source: Köprü, RAP Survey, 2009

5.2.2 MITIGATION MEASURES

Regardless of the extent and scope of impacts, certain basic principles form the basis of any social mitigation strategy such as reducing poverty, improving well-being and adaptation capabilities of affected people, enhancing resilience and livelihood adaptation and ensuring natural resource sustainability.

As shown at the outset, the PAPs are compensated for their immovable assets in line with WB policies and IFC standards. In addition to EnerjiSA, the parties responsible in land acquisition for the Project include the governmental authorities; EMRA and SPA. These agencies pay the compensation as cash for the assets acquired from titleholders based on mutual agreement. Since the compensation paid for land purchased by EnerjiSA through negotiation constitutes a new market price for land, it is expected that compensation to be paid for expropriation by public agencies become higher than what they would have been

if these agencies were to acquire the land on their own. This is particularly the case since EnerjiSA provides the financial resources to the agency undertaking the expropriation.

The loss of agricultural income is 6.1 percent for an average household, and the almost half of them (43 percent) loses less than 10 percent of their total agricultural income (Table 5-7). As some do not cultivate their land and others may not be cultivating efficiently, the loss of agricultural income is less than the loss of land (23.5 percent).

The alternative mitigation options for income restoration are reviewed below.

- The investigation of options for land-for-land solutions show such arrangements to be against the wishes of the affected households. Also, the procurement of comparable small plots of land within the area is almost impossible given restrictions on partitioning of existing plots. Moreover, as most of the arable land in the affected communities is under cultivation, EnerjiSA would have to buy land from other willing buyers in order to make it available for the already willing sellers whose lands are affected. For all these reasons, this option for the PAPs is not applicable.
- An active land market is available in the region to allow the Project to purchase land in the nearby communities, but the affected people considered cash payment option because they believe that cash payments made directly to them would provide greater opportunities for income restoration through migration to urban centers (by purchasing residential land, residential or commercial property, etc). Furthermore, they also prefer cash compensation so that they can meet social obligations (education, marriage, pilgrimage, etc).
- Urban migration is especially preferred if households have children at school age as urban educational facilities are better in quality and easier to access⁵³.
- Work opportunities as one of the income restoration alternatives is given particular importance by PAPs.

In line with people's wishes, losses of assets are compensated in cash at high levels by the Project and it is also expected that at least 100 people will be locally employed with the commencement of construction works for the Köprü Project (Section 5.3.1). Cash compensation was paid in full and well in advance of the use of the assets; it is estimated that compensation levels exceeded full replacement costs⁵⁴.

⁵³ Investment in education has high returns in terms of future income.

⁵⁴ Most homes were old and built with traditional building materials. Neither the age of the affected structures nor their inexpensive building materials were taken into consideration; rather was the cost of replacing them with newly built homes offered as compensation.

To calculate the potential for income restoration, it was assumed that the cash payments made to PAPs would be deposited for a two year⁵⁵ period where the real interest is 7 percent⁵⁶. It was also assumed that the capital remained the same during the two year period and was not withdrawn. The deposit date for the funds received as compensation is assumed to be 01.02.2009 in the calculations. The calculations made with the above mentioned assumptions could only be realized for 83 households out of the affected 150⁵⁷ due to the pending payments of SPA and EMRA for those remaining 67 households. Hence, those households were anticipated not to have any revenues from interests on capital. The interest earned from the cash compensations deposited is considerably higher than the income anticipated for the sales of crops harvested from the lands acquired. The annual interest earned would be (on average) 3.41 times⁵⁸ greater than the estimated net agricultural income obtained by the PAPs from the land they sold to the Project. This is a significant indicator of the additional income generated through the cash compensation provided by EnerjiSA for the PAPs in comparison with their former conditions⁵⁹.

As the construction of this Project has not yet started, there is no one who has already been employed among the project affected households for the Köprü Project. Therefore, the income generated from short term employment was not included in the computation of interest; however, it is estimated that short term employment will be provided for more than 100 local people, including those directly affected.

In addition, roads to be improved in parallel to construction works will enhance the ability of villagers to transport more easily their products to local markets thereby; this improvement will potentially increase incomes.

5.3 BENEFITS OF THE PROJECT

5.3.1 ECONOMIC BENEFIT OF THE PROJECT: WORK OPPORTUNITIES FOR THE LOCAL PEOPLE

EnerjiSA is guided by international standards set by WB/IFC in addition to national legal requirements in its activities targeted for the restoration of losses in income and livelihood sources of the PAPs, as is explained Chapter 2. For this reason, EnerjiSA has the goal of providing as many employment opportunities as possible for the local people in this project. Since the construction phase has not been started, there is no person from the

⁵⁵ As stated, most of the affected land plots are left to their previous owners to continue cultivation after EnerjiSA fully pays the negotiated values and until they are required for any phase of the Project. Moreover, if PAPs cannot make investments with higher rates of return, it is assumed that they can minimally leave the cash they received in an interest bearing account.

⁵⁶ Annual inflation rate is deducted from the actual interest paid.

⁵⁷ 2 households using lands of the third party property was excluded as there is no registered land on them.

⁵⁸ The given interest income for the PAPs was calculated on a year based and it can be used as a reference for the following years. See Appendix 6.

⁵⁹ It should also be taken into consideration that in this scenario the interest earnings are assumed not to be saved but spent during the year.

affected villages employed at the present moment. During this period which was planned to last 36 months, work opportunity will be available for around 100 people living in the vicinity of the Project area and directly affected households will receive priority for recruitment as a requirement of a contract signed with the Contractor. A list of directly affected people will be provided to the Contractor (and sub-contractors) to ensure them to be employed. All employees will be registered workers and will be covered by the social insurance scheme⁶⁰. In addition to a job with social security, the local workforce will have the opportunity to develop their skills and gain experience by working for a project owned by one of the reputable and well-known energy companies in Turkey. They will thus enhance their chances for employment in similar jobs elsewhere in the country in the future.

It can be said as for the potential labor force in the affected villages that there is at least one member of almost every household interviewed, who would like to work for the Project. All the three village headmen stated that employment opportunity is the most expected benefit from the project for their villages, because unemployment is common and causes the young labor force to out-migrate. The information gathered from the headmen reveals that there are local people in the affected villages, who have qualifications for welding, construction, vehicle operator jobs, electricity works, and driving works.

5.3.2 INFRASTRUCTURAL BENEFIT OF THE PROJECT: IMPROVEMENT OF ACCESS ROAD

Under the scope of the Köprü Project, some village roads will be rehabilitated in order to facilitate construction works. At the present moment the length and exact location of the roads to be rehabilitated is not known. The rehabilitation will be carried out in collaboration with SPA and after the construction is completed, renovation and maintenance of the improved roads will be undertaken by SPA, as the responsible public body for village roads. In addition to the improvement of the existing village roads, a new access road shall be constructed in Kızlarsekisi village not only for facilitating the dam construction but also for compensation purposes at large. Moreover, a road linking different quarters in this village will remain under water as a result of the project, and EnerjiSA will construct a new access road in order to compensate the loss of the community.

5.3.3 SOCIAL BENEFIT OF THE PROJECT: RENOVATION OF SCHOOL BUILDINGS

As a part of EnerjiSA's corporate social responsibility strategy; renovation of the school buildings in the project affected settlements has taken action. For Köprü Dam and HEPP

⁶⁰ In Turkey unregistered employment is common and especially in construction sector, contractors usually employ people without registering them to social security schemes. However, all people to be employed by the Köprü Project will be registered and most of them will be a part of a social security scheme for the first time in their life.

from the project affected area, EnerjiSA has chosen two schools, which are in most urgent need and completed the restoration of the buildings, namely Salmanlı and Kızlarsekisi primary schools before the school year 2009-2010 starts. EnerjiSA has also prepared school packages for each student (around 75 students for the existing 3 schools) in the project affected area to be distributed at the beginning of the fall semester of 2009. The school packages contain the school bag, 2 notebooks, a pencil case, pencils, an eraser, a pencil sharpener, a painting notebook, crayons, a scarf, a beret, gloves, balloons and scissors.

5.3.4 ECONOMIC BENEFIT OF THE PROJECT: CONTRIBUTION TO LOCAL ECONOMY

EnerjiSA plans to procure some basic needs of the construction stuff like food from the nearby villages. Moreover some vehicles, equipment and services that will be required during construction and operation phases will be procured from the region. It is expected that this will also have a positive impact on generation of additional income for the PAPs and make indirect contribution to the local economy.

6 PUBLIC CONSULTATION 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 phases of RAP.

EnerjiSA has launched its public involvement process by providing information to village leaders and other residents, including PAPs. Since majority of the land acquisition process is based on willing buyer/seller arrangements, 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; illustrated community pamphlets were also distributed.

6.1 PUBLIC CONSULTATION

EnerjiSA used a Stakeholder Consultation Methodology which formed the framework for its Stakeholder Engagement Plan developed in 2009. The methodology aims at:

- Defining the PAPs and other project affected groups such as NGOs, media, academics, government authorities;
- Providing an interactive system that provides free, objective and prior information, receive feedback at a local and national level during the planning, construction and operation phases;
- Providing opportunities for other project affected groups especially NGOs to be interactive /to participate in the project during the project 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.

In the light of these principles, EnerjiSA has undertaken a stakeholder analysis as a part of the consultation process of the Project. Steps followed for stakeholder analysis are given below.

6.1.1 STAKEHOLDER IDENTIFICATION

Primary stakeholders for the Köprü 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 so as to inform them, and to seek feedback.

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

Government Authorities:

- Ministry of Environment and Forestry;
- DSI VIth Regional Directorate;
- MoEF, Regional Directorate of Forestry;
- Adana Governorship;
- Adana Special Provincial Administration;
- Adana Provincial Directorate of Agriculture;
- Adana Provincial Directorate of Environment and Forestry;
- Adana Provincial Directorate of Culture and Tourism

Local Government Authorities:

- Kozan Sub-governorship;
- Kozan Directorate of Agriculture;
- Kozan Directorate of Forestry; and
- Ergenüsağı, Kızlarsekisi, and Marangeçili Headmen (Muhtars).

6.1.1.2. Local Residents and Communities

In Ergenüsağı, Kızlarsekisi, and Marangeçili villages, people whose assets were affected by the components of the Project are the primary stakeholders for all project-related activities (social assessment studies and RAP). From the beginning, locally affected people were involved in the consultation activities through village 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 households in the Project area is 152 including the usufruct users and land users on the third party property. More than half of the PAPs still live in their villages. This has enabled EnerjiSA to maintain continuous contact with PAPs.

According to the findings of the socio-economic survey conducted, 33 percent of the surveyed households were informed of the Project by EnerjiSA between 2008 and 2009; 10 percent were informed by the former project owner (KEAŞ) between 1996 and 2000; and 6 percent received information during the explorations of General Directorate of State Hydraulic Works during 1988-1990, and 4 percent were informed by the headmen or other villagers. The rest of the respondents do not remember how they were informed.

6.1.1.3. NGOs, Media and Other Interest Groups

NGOs with an interest in agriculture, animal husbandry or other land-based livelihood issues in Adana Province or nearby districts, villages and affected villages themselves are also stakeholders. Additionally, media, universities, foundations or associations of the region would be partners of 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 who have been visited at the early stages (during preliminary consultation and the initial mobilization processes) of the Köprü Project. These partners are Provincial Gendarmerie Command; and Provincial Directorate of Security.

6.1.2 STAKEHOLDER ENGAGEMENT (PUBLIC PARTICIPATION)

For the Köprü Project, public information disclosure and consultation activities were started in accordance with the requirements of the EIA study and the provisions of the Environmental Impact Assessment Regulation (dated 16 December 2003 and no. 25318).

6.1.2.1. Preliminary Consultation Activities

The preliminary consultation meeting about the Project was conducted by EnerjiSA as part of EIA study on 08.04.2008 in Kozan with the aim of informing local authorities and project-affected population about the project and to receive their opinions and suggestions about the project (See Appendix 7). Meeting details (including date, time, place and the content) were published in local and national newspapers before the meeting was organized and a wide participation was achieved under the coordination of Director of Adana Directorate of the MoEF.

In this meeting, local people were also informed briefly about technical details of the Project, potential environmental impacts attributable to the Project, the project-affected

area and the valuation and compensation processes. Furthermore, people who are directly affected by the Project as they lose their lands, trees and houses were informed in detail through interviews about the valuation of the affected assets and compensation paid for their assets lost.

Moreover, all relevant local authorities at both provincial and district levels were visited and informed about project details and PAPs. Besides, planned procedures of land acquisition and negotiation were briefly explained.

6.1.2.2. Consultations

During the land acquisition process, lands affected by the Project were visited for asset inventory and during these visits; all titleholders were informed of the valuation process. After the completion of asset inventory and valuation, both meetings with the participation of titleholders in each project affected settlements and interviews with all titleholders were held.

First meeting with landowners from Kızlarsekisi village was held on November 17-18, 2008 at a garden of one of titleholders. Secondly, two meetings at different locations were held for the landowners of Ergenuşağı. First meeting was held in the village on November 18, 2008 and the second one for the participation of titleholders living in Kozan was held on November 19, 2008. Finally, a meeting was held at the village's coffee house of Marangeçili with the participation of titleholders. As the number of titleholders of Ergenuşağı and Kızlarsekisi is higher than that of Marangeçili, it took two days. However, it was not possible to engage all titleholders to these village meetings. Under these circumstances, EnerjiSA got in touch with them by the help of their relatives or friends/neighbors. Then, these titleholders contacted with EnerjiSA via phone and consultation was undertaken for them.

At the beginning of the meetings and interviews, EnerjiSA's Expropriation Team briefly introduced the Project, then, initiated negotiation process for land acquisition. During these interviews, EnerjiSA offered compensation payment to each titleholder. If titleholders as the willing sellers reached agreement with EnerjiSA as the willing buyer, land taking process was to be successively completed. If not, consultations with titleholders continued until the midst of April 2009. At the end, for the acquisition of lands on which titleholders didn't accept the price offer for compensation, legal land acquisition procedure (expropriation through EMRA) was put on the agenda.

Finally, during the social survey conducted for RAP, all interviewed project-affected households including titleholders and land users were informed of how they could easily access EnerjiSA if they have any questions, grievances and/or requests. Community pamphlets prepared for giving brief information about the Project and introducing EnerjiSA's approach towards public participation was also distributed.

6.1.3 COMMENTS AND RECOMMENDATIONS OF THE PROJECT AFFECTED PEOPLE

Consultation activities carried out up to date revealed that the local people have some expectations and concerns regarding the Project. Employment opportunity, rehabilitation of the existing village roads and receiving cash for compensation are considered as the main benefits of the Project by the local people. As the construction of the dam has not yet started, no local people has been employed; however, , procurement of job opportunities for the local people; especially for the project affected people is planned for the construction phase of the Project. Moreover, rehabilitation of the existing roads is one of the planned activities (Section 5.3.2).

Regarding the problems attributable to the Project, a loss in or damage to crops and agricultural lands is the common issues stated by the PAPs interviewed. As pointed out under Section 3.6, loss in crops and agricultural lands were compensated by EnerjiSA.

In addition, there are some people who expect neither adverse impacts nor benefits attributable to the Project.

6.2 PUBLIC DISCLOSURE

Disclosure of the Project and associated environmental and social issues 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 provided 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 many meetings held with the affected groups collectively and individually. The success of willing buyer/seller arrangements is one of the best indicators for the effective management of the public consultation and disclosure activities.

In addition to initial disclosure activities directly managed by EnerjiSA, a community pamphlet was distributed to the PAPs interviewed during the social survey (Appendix 8). 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; it also included contact details for grievances and queries.

EnerjiSA recognizes that continued accessibility of Project information for all stakeholders should be ensured. 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, 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 engagement will be undertaken with EnerjiSA's Stakeholder Engagement Plan.

6.3 GRIEVANCE MECHANISM

EnerjiSA will be accessible for its stakeholders and respond to complaints and grievances in the shortest possible time. A grievance mechanism is designed to fit the context and needs of PAPs to ensure that all complaints are dealt with appropriately and corrective actions are taken.

On-site staff will be responsible for collecting written complaints and communicating them to the Corporate Communication representative in Ankara who is responsible for recording and coordinating responses to all complaints. A Project hotline number, free of charge, has also been established with direct links to the Corporate Communication representative in Ankara. The hotline number has been provided to PAPs through the community pamphlet; the village headmen also have copies. Both verbal and written complaints will be recorded in the Grievance Form shown in Appendix 9.

7 MONITORING AND EVALUATION

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

7.1 RAP MONITORING FRAMEWORK

The purpose of monitoring in RAP is to ensure that measures developed for compensating the losses 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 RAP procedures will be put into effect as needed.

For the Köprü Project, EnerjiSA's Environmental and Social Group will undertake the RAP 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 a three-person panel of independent experts; and
- A RAP Completion Audit.

Indicators have been established in order to measure RAP activities, results, objectives and goals. There are five categories of indicators for performance monitoring. The first three; input, output and process indicators, are mostly used for medium term measures to ensure that the RAP is relevant, effective and efficient. The last two, outcome and impact indicators, are mostly used for long term measures for assessing the results.

- ***Input indicators*** cover the human and financial resources that are utilized in the RAP activities;
- ***Output indicators*** include activities and services produced with the inputs. Examples for output indicators in a RAP can be a database of land acquisition, compensation payments made for the loss of assets etc.;
- ***Process indicators*** represent the changes before and after the RAP in terms of quality and quantity of access and extent of activities and services provided. An example would be the creation of grievance mechanism, and the establishment of public consultation and disclosure channels.

- *Outcome indicators* cover delivery of mitigation activities and measures to compensate physical and economic losses created by the project such as restoration and compensation of agricultural production and overall income levels, changes in PAPs and community attitudes towards the project, use of compensation payments for income generating activities; and
- *Impact indicators* define the change in medium and long-term measurable results in behavior and attitudes, living standards, and conditions. Impact indicators aim to assess whether restoration activities of the RAP are effective in maintaining and even improving social and economic conditions of PAPs.

An overview of the RAP monitoring framework is shown in Table 7-2.

7.2 INTERNAL MONITORING

Internal monitoring measures the progress of activities defined in the RAP. EnerjiSA's Social-Environmental Group will be responsible for this process with support from appointed experts as necessary.

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

- Public Consultation and Informative Meetings;
- Data collected by EnerjiSA during the processes of purchase and expropriation of lands;
- Field observations reports; and
- Grievance records.

7.3 EXTERNAL MONITORING

External monitoring activities will verify the process defined in the RAP which is realized by EnerjiSA and its implementing partners (e.g., the Contractor). External monitoring will be carried out by a three-person panel of independent experts. The data collection tools will include semi-annual reports for the first two years, yearly reports until Köprü Dam and HEPP construction is completed, and records of interviews realized with PAPs.

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;
- Number of skilled and unskilled PAPs engaged in construction workforce;
- Additional support measures provided by EnerjiSA;
- Process of grievances and complaints; and
- Extent of restoration for quality of life and living standards of PAPs.

Both internal and external monitoring will end with RAP Completion Audit. Detailed process and reporting periods of internal and external monitoring is given in Figure 7-1.

Figure 7-1: Monitoring Process

No	Item	2007				2008				2009				2010				2011				2012			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
1	Land Acquisition																								
2	Construction of the Köprü Dam & HEPP																								
3	Internal Monitoring																								
4	External Monitoring																								
5	Completion Audit																								

7.4 RAP COMPLETION AUDIT

The RAP completion audit will be undertaken by EnerjiSA with support from external experts as required. The RAP completion audit will provide final indication that the livelihood restoration is sustainable and no further interventions are required.

7.5 STAFF AND RESPONSIBILITIES

There are two teams responsible for monitoring process-- internal and external monitoring teams:

- EnerjiSA’s Environmental and Social Group, will be responsible for regular reporting for internal monitoring and following other actions defined for internal monitoring;
- A three-person panel of independent experts 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 of EnerjiSA within the context of RAP.

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"> • Community liaison activities carried out. • Community liaison activities planned. • Grievances • Requests
Annual Reports to Lenders at the corporate level for the first 2 years	<ul style="list-style-type: none"> • Disclosing information regarding economic, social and environmental yearly activities.
Annual Reports to lenders at the corporate level for the following year	<ul style="list-style-type: none"> • Disclosing information regarding economic, social and environmental yearly activities.

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

Table 7-2: RAP Monitoring Framework

RAP Monitoring Framework				
Monitoring Area	Indicators and Measures	Monitoring Frequency	Duration	Responsible Parties of the Monitoring
Efficiency and Effectiveness of RAP	<ul style="list-style-type: none"> • Progress in signing land acquisition agreements - % complete. • Payment of compensation to right holders - % complete. • Amount of land acquired for construction - sqm in total. • Title deed registrations of contractor - number, % complete. • Households replaced - number complete, % in total. • Defined and working grievance system- number of grievances lodged/closed out. • Public consultation process defined -log of activities, number of meetings held. • Monitoring process defined - responsible teams appointed. 	Monthly	From Land Acquisition to RAP Completion	EnerjiSA Field Representatives and Environmental & Social Group
Restoration of Living Standards	<ul style="list-style-type: none"> • Cash compensation to landowners - amount, number, % complete. • Cash compensation to other users - amount, number, % complete. • Compensation paid in line with agreed rates and time - number of payments, % in total. • Other losses (roads, irrigation channels, drains etc) of right owners compensated/restored - type and number of other compensations, % in total. • Occasions where special needs of vulnerable groups addressed - number and type of aid/support. • Following up health and safety regulations for EnerjiSA employees - number of trainings gives, number of grievance about health and safety 	Monthly Biannual (for the first 2 years) Yearly (for the following year)	From Land Acquisition to Construction Completion	EnerjiSA Field Representatives and Environmental & Social Group Panel of Experts
Restoration of Income and Livelihood	<ul style="list-style-type: none"> • Changes occurred in income and expenditure patterns of PAPs before and after the project - amount or % of income increase. 	Quarterly (for the first 2 years) Six Monthly (for the following year)	From Land Acquisition to RAP Completion	EnerjiSA Field Representatives and Environmental & Social Group Panel of Experts

RAP Monitoring Framework				
Monitoring Area	Indicators and Measures	Monitoring Frequency	Duration	Responsible Parties of the Monitoring
	•			
Community Satisfaction	<ul style="list-style-type: none"> • Attitudes of PAPs to the land acquisition process - observation and feedback collected through interviews. • Attitudes of PAPs to the activities living standards restoration - observation and feedback collected through interviews. • Attitudes of PAPs to the activities of livelihood and income restoration - observation and feedback collected through interviews. • Attitudes of stakeholders to public consultation - observation and feedback collected through interviews. 	Ongoing	From Land Acquisition to RAP Completion	<p>EnerjiSA Field Representatives and Environmental & Social Group</p> <p>A three-person panel of independent experts</p>
Public Consultation and Grievance	<ul style="list-style-type: none"> • PAPs understanding of land acquisition and compensation process - observation made during interviews and feedback collected through interviews. • Types of grievances - number of lodged and closed grievances and outcomes. 	Ongoing	From Land Acquisition to RAP Completion	<p>EnerjiSA Community Liaisons and Environmental & Social Group</p> <p>Panel of Experts</p>

8 BUDGET

As IFC states in *Handbook for Preparing a Resettlement Action Plan*, “the RAP 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 tables in this chapter show actual costs for all resettlement activities including development, implementation, monitoring and evaluation of RAP and other contingencies. In addition to breakdown of total cost for RAP of the Köprü Project, period of expenditures and sources of funds are also shown in Table 8-1. According to the total cost, the unit cost of RAP per affected household was calculated.

8.1 COSTS FOR RAP DEVELOPMENT AND IMPLEMENTATION

Total cost for RAP development and implementation includes the following items:

- Land acquisition administration costs of EnerjiSA;
- Consultancy services for social impact assessment studies and RAP implementation;
- Compensation payments for acquisition of privately owned lands including compensation payment for structures/building;
- Compensation fees for standing crops and structures used by Usufruct Users
- Contingency for potential extra land acquisition costs over the life time of the Köprü Project.

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

Cost for RAP including all management costs, compensation for both landowners and users between 2008 and 2012 was budgeted as \$1,469,183.77 (Table 8-1). Moreover, cost for external monitoring was determined as \$29,677.42 (Table 8-2). To sum up, Total RAP Budget including contingency is \$1,648,747.31. Unit Cost for RAP covering land acquisition administration costs including monitoring was calculated as \$10,847.02 per household.

In addition to privately-owned lands purchased, forest lands are acquired for the Project. EnerjiSA paid 3,900 TL (\$2,516) as a cost of guarantee; 218,374 TL (\$140,886) as the cost of permission for the first year rent and 1,965,623 TL (\$1,268,144) for reforestation to the Ministry.

Table 8-1: Cost Table of RAP Development and Implementation

ITEMS	TOTAL TL			PERIOD OF EXPENDITURE	SOURCE OF FUNDING
	TOTAL TL	TOTAL \$*			
Consultancy Services (Survey studies, SIA, and RAP implementation)	21,949.15	14,160.74		March 2009 to April 2009	EnerjiSA
Land Acquisition Administration Costs (Valuation, title deed registration, cadastral fees, stamp tax)	84,949.27	54,805.98		2008-2009	EnerjiSA
Land Acquisition of Privately Owned Lands (compensation fees for lands and structures)	1,939,350.00	1,251,193.55		2008-2009	EnerjiSA
Compensation Fees for standing crops and structures used by Usufruct Users ⁶¹	230,986.43	149,023.50		2009	EnerjiSA
External Monitoring	46,000.00	29,677.42		2010-2012	EnerjiSA
TOTAL BUDGET	2,323,234.85	1,498,861.19			
Contingency	232,323.49	149,886.12		2008-2012	EnerjiSA
TOTAL RAP BUDGET	2,555,558.34	1,648,747.31			

*Exchange used was 1.55 USD to TL (Central Bank of Turkey April 2009)

8.2 COSTS FOR MONITORING AND EVALUATION

Total cost of external monitoring and evaluation issues of RAP was budgeted as \$ 29,677.42 (Table 8-2). As stated in Chapter 7, internal monitoring and evaluation activities will be realized by EnerjiSA and external monitoring and evaluation activities will be realized by an independent team of experts.

Table 8-2: Cost Table of RAP External Monitoring and Evaluation

RAP MONITORING AND EVALUATION	TOTAL TL				TOTAL \$	PERIOD OF EXPENDITURE	SOURCE OF FUNDING
	Total	Year 1	Year 2	Year 3			
External Monitoring	46,000	16,000	12,000	18,000	29,677.42	3 years (2010-2012)	EnerjiSA
TOTAL	46,000	16,000	12,000	18,000	29,677.42		EnerjiSA

8.3 PROJECT FINANCING

All costs for RAP development, implementation, monitoring and evaluation will be paid by EnerjiSA in addition to staff and administrative costs. The price stated for the valuation of both publicly and privately-owned lands, payments of compensation for crops to landowners/land users are discussed in Chapter 4.

⁶¹ As the inventory of the assets on the parcels belonging to the Treasury but used by local people (lands used by usufruct users) has not been conducted yet, compensation amounts are estimates.

9 IMPLEMENTATION SCHEDULE

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

For the Köprü Project, preparation of the RAP was concurrently carried out with the land acquisition process. Consultation and disclosure with PAPs and related public institutions started when EnerjiSA took over the project from KEAŞ in 2008. However; a meeting was also arranged during EIA preparation process so as to inform local people about the project on 08.04.2008 in Kozan. For land acquisition and compensation of the loss of assets, negotiations with landowners of the privately-owned lands and land users of the publicly-owned lands were carried out between 2008 and 2009. Payments for land and other assets were made after negotiation and, legal procedures for title deed registration and transfer were realized.

EnerjiSA consulted with affected people one by one on values determined as a result of asset inventory conducted by HAPA during 2008; paid compensation for the affected assets at the values negotiated and initiated official act for the lands to be acquired through expropriation. In addition to that, most of the households whose residential buildings were affected by the Project left their home by August, 2009.

Table 9-1: RAP Implementation Schedule

	2008	2009	2010	2011	2012
Planning & Preparation					
<i>Preparation of EIA</i>	■				
<i>Public Consultation & Disclosure</i>	■	■			
<i>Asset inventory and valuation</i>	■				
<i>Negotiation on compensation payments</i>		■			
<i>RAP Preparation & Approval</i>		■			
<i>Acquisition of Lands</i>		■			
Construction Activities					
<i>Nomination of construction contractors</i>		■			
<i>Preparation of construction site</i>		■			
<i>Construction</i>		■	■	■	■
Monitoring & Evaluation					
<i>Internal Monitoring</i>		■	■	■	■
<i>External Monitoring</i>			■	■	■
<i>RAP Completion Audit</i>					■

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