



**Acacia**  
Mining Operations

# **ACACIA MINE OPERATION GOKIRMAK COPPER MINE Social Impact Assessment 2017**

**Document Number**

**ACACIA-2017-E&S-SRM-SIA-183**

**Disclosure Date**

**29.09.2017**

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**Social  
Risk  
Management**

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## Abbreviations

<b>ABBREVIATIONS</b>	<b>DEFINITION</b>
AoI	Area of Influence
CAP	Community Advisory Panel
DSI	State Hydraulic Works
EBRD	European Bank for Reconstruction
EIA	Environmental Impact Analysis
EMP	Environmental Management Plan
ESRP	IFC Environmental and Social Review Procedures Manual
FHC	Family Healthcare Center
FRS	Farmers Register System
GCP	Gokirmak Copper Project
GDH	General Directorate of Highways
GHI	General Health Insurance
GVA	Gross Value Added
HA	Hectare
HEPP	Hydroelectric Power Plant
IFC	International Finance Corporation
İŞKUR	Turkish Labor Agency
KUZKA	Northern Anatolia Development Agency
MEU	Ministry of Environment and Urbanization
MTA	Mineral Research and Exploration Institute
NA	Not Applicable
NGO	Non-Governmental Organization
OIZ	Organized Industrial Zone
PAP	Project Affected Population
PHC	Public Healthcare Center
PTC	Public Training Center
RPBS	Regional Boarding School
SASF	Social Assistance and Solidarity Foundation
SEP	Stakeholder Engagement Plan
SGK	Social Security Institution
SHW	General Directorate of State Hydraulic Works (DSI)
SIA	Social Impact Analysis
SIE	Small Industrial Estate
SMP	Social Management Plan
TUIK	Turkish Statistical Institute
TURKVET	Ministry of Food, Agriculture and Foodstuff Veterinary Information System
USD	US Dollar
VHO	Vocational High School

## Executive Summary

### Introduction

Acacia Maden İşletmeleri A.Ş. (“AMI” or “Acacia” or the “Company”) is planning to apply for a loan to International Financing Institutions (IFIs) for the development of the Gökırmak Copper Project (“GCP” or “the Project”) located in Hanönü district of Kastamonu province of Turkey.

GCP is an open-pit copper mine project and involves land preparation phase and the construction, operation and closure of the following main units:

- Open Pit
- Process Plant
- Çorakoğlu Waste Rock Dump (WRD)
- Kepezkaya Tailings Storage Facility (TSF)
- Tailings Pipeline
- Other auxiliary facilities (administrative building, warehouse, topsoil storage areas etc.)

In addition to the main units, the associated facilities of the Project are as follows:

- Gökırmak River Diversion System
- 28.8 km 154 kV Energy Transmission Line (ETL)

The Project’s construction phase is planned to be finalized in the first quarter of 2018, followed by an estimated production life of 11.3 years. The reclamation will go parallel to operation activities and the mine closure period will continue for an additional 2 years following the end of operation phase.

The selected mining method is open pit mining and a total of 22 Mt of ore at 1.50% Cu is planned to be produced. As a result of ore production, 2 Mt per annumore will be fed to the processing plant. The processing plant is expected to operate at 85% recovery, having a total production of approximately 1,278,703 tonnes of dry concentrate with a copper grade of 22.0% throughout the life of the mine. Approximately 282.2 million tonnes (Mt) of waste rock will be generated as a result of open pit activities and the waste rock will be deposited at Çorakoğlu WRD.

### PURPOSE AND METHODOLOGY

The Social Impact Assessment (SIA) report has been prepared to provide detail for the Environmental and Social Impact Assessment disclosure package being prepared for AMI for GCP. This report is the second volume of the disclosure package and complements the EIA Volume I report. The main objective of the Volume II Social Impact Assessment (SIA) report is to establish a baseline, depict potential social issues and devise mitigation mechanisms to avoid/minimize/reduce adverse impacts; and present Social Management and Monitoring Plan to manage social components of the Gökırmak Copper Project (GCP) which is currently in the construction phase.

While the SIA analyzes the positive and/or negative socioeconomic and social impacts of the project, it helps the project;

- to recognize the possible impacts and manage the change,
- to predict the possible impacts and take necessary measures regarding negative impacts, and
- to identify unpredicted social impacts through monitoring and evaluation programs.

While preparing the SIA, international standards, Environmental and Social Policies and Performance Requirements of IFC and EBRD have been pursued. In order to measure the impact of the project, qualitative and quantitative research methods have been employed. A database was compiled through secondary research for GCP. Quantitative data from public institutions were also collected from the field study consultations. Qualitative data collection techniques were applied in order to reach a wide range of Project Affected Persons (PAPs) and stakeholders. During field studies 114 stakeholders including 37 stakeholders from 34 organizations, 65 PAPs, (35 males and 30 female) from local communities, and 12 local employees (3 female and 9 male), were consulted.

### *Project location and area of influence<sup>1</sup>*

The project activities will be carried out predominantly in Hanönü District, in Kastamonu province. Hanönü District is a small town located in the eastern part of Kastamonu, between Boyabat District of Sinop province and Taşköprü District of Kastamonu on the highway connecting Kastamonu to Sinop. There are 5 directly affected settlements from the project (2 neighborhoods, and 3 villages). There are 11 sub-districts affiliated to these areas. Indirectly affected settlements include Taskopru District, and villages neighboring the directly impacted settlements. Overall, the Project's Area of Influence encompasses 2 districts, in which 5 directly affected settlements, and 7 neighboring settlements are impacted.

## **BASELINE STUDY**

### *Demography and social composition:*

- Hanönü is one of the smallest districts of Kastamonu. Hanonu District covers an area of 41,191.40 ha encompassing 20 villages. Comparing Hanönü's area to Kastamonu province, Hanonu comprises only 4% of the total provincial area, its population of 3,865 accounts for 1% of the population of Kastamonu

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<sup>1</sup> IFC defines Area of Influence (IFC PS 1 Para 8) as: The area likely to be affected by (i) the project and the client's activities and facilities that are directly owned, operated or managed (including by contractors) and that are a component of the project; (ii) impacts from unplanned but predictable developments caused by the project that may occur later or at a different location; or (iii) indirect project impacts on biodiversity or on ecosystem services upon which Affected Communities' livelihoods are dependent Associated facilities, which are facilities that are not funded as part of the project and that would not have been constructed or expanded if the project did not exist and without which the project would not be viable. Cumulative impacts that result from the incremental impact, on areas or resources used or directly impacted by the project, from other existing, planned or reasonably defined developments at the time the risks and impacts identification process is conducted.

province. Neighboring district of Taşköprü on the other hand is one of the larger districts of Kastamonu and makes up around 10% provincial population with a population of 39,847. Taskopru's population is more than 10 times Hanönü's, hence Taskopru has a more established infrastructure, economy and services sector.

- Kastamonu province has the second oldest population among all provinces in Turkey. Hanönü has a similar population composition where the population in the district exhibits an ageing tendency and declining population growth. Migration from Hanonu to provincial center or other provinces has been a defining trend. Limited job opportunities enforced the young population to seek employment elsewhere, leaving behind an elderly population.
- Average household size is low at 2.7, which also illustrates that households are comprised of 2-3 people.
- Total population of directly impacted settlements in 2016 was 2,324.
- The level of education in the district is rather low. The proportion of those who graduated from high school or a higher educational institution to the population over the age of 15 is 15% and illiteracy rate for over the age of 15 was at 11% in 2016. Low education levels illustrate that most of the residents are unskilled. Apart from the educational institutions in Hanönü district center, there is no educational institution in the villages. There is 1 kindergarten, 1 elementary school, 1 secondary school and 1 multi-program high school (MPHL) in the district. The secondary school also functions as a regional boarding secondary school (RBSS). The number of students at all educational levels was 471 in 2015-2016 academic year.
- In terms of health care facilities, there is no hospital in Hanönü district, nearest hospital is in Taskopru District at a 30km distance. There is 1 public health center (PHC), 1 family health center (FHC) in the district serving the residents.

#### *Local economy*

- 80 percent of the land in Hanonu belongs to Ministry of Forestry and Water Affairs, the remaining 20 percent of land is used for farming, agriculture, pastures and settlements. Hence, Forestry is a significant income source for PAPs who are members of Forest cooperatives. There are 13 forestry cooperatives available in total in the district. Forestry cooperatives play an important role in cleaning and rejuvenating forests. Yet, two factors may hinder income from forestry activities. The first factor is aging population. Members of forestry cooperatives are ageing, rapidly, and there is no cooperative member younger than 40 year old. This reflects on the capacity of the cooperative. As the income from forestry activities fluctuates depending on the capacity and labor force of the cooperative, it is critical to retain young labour in the settlements for the sustainability of the forestry activities.
- Rural income sources of agriculture and livestock activities are the main source of income for the PAPs in the region. Agriculture is predominantly done to support livestock production. In all five directly affected settlements, income from **stockbreeding and agriculture** comprises an important part of household budgets. Additionally, **pension benefits** also comprise a significant source of

income. The interviews conducted with local organizations and communities revealed that there is a pensioner in almost all households, which helps the households to maintain their income levels due to the regular and stable flow of the pensioner benefits.

- Livestock production includes both cattle and ovine production. However, there is already a trend of declining livestock activities in the district. According to the information received from the District Directorate of Agriculture, the numbers of cattle and ovine livestock have significantly declined. For example, while there were 6,670 cattle in 2006, this figure dropped more than half to 3,300 as of 2016. Total number of cattle and ovine animals in affected areas is 3,300 and 2,500 respectively. Livestock activities carried out in the affected areas constitute a third of livestock farming for cattle in the district. Pastures are important for livestock production; yet the quality of pastures in the district are quite low. Pasture yield is calculated as ensuring a cattle of 500 kg to consume hay equal to 1/10 of its weight per day. Accordingly, the yield of 86-decare pasture area in Vakıfgeymene village is only enough to feed a single cattle of 500 kg weight in a year. Simple calculation of available pasture size divided by number of cattle reveals that existing pasture areas are extremely small and insufficient.
- When agricultural production is analyzed, 32% of agricultural area in the district in 2013 was left fallow. In all affected settlements, the main produced crop is wheat. Higher income generating products such as garlic, beet are also produced in the directly impacted settlements but the production is on a smaller scale. Rice, is cultivated on in Gökçeagaç village. Since all of these areas are located on or near the banks of Gökırmak, the PAPs are engaged in irrigated farming. There are 3 or 4 households in each settlement that are engaged in greenhouse farming.

### *Land acquisition*

The Project's land acquisition consists of forests, public and private lands. A total of 4,122.3 decares of land was acquired<sup>2</sup> for Project's facilities that include open pit area, processing plant, tailings facility, waste dump sites, access roads and transmission lines. Majority of the land impacted by the Project belongs to Forestry (79%), followed by Private land (13%). Land acquisition of private land comprises of 537.5 decares of land acquired for Project's main facilities and transmission line. 299 decares of private land impacting 91 parcels in total in Vakıfgeymene and Merkez neighborhoods were acquired through willing buyer seller negotiations. Acquisition of private parcels for transmission line is predominantly based on right of way, whereby 224 decares of land impacting 357 parcels is acquired through expropriation. Only 2 decares of private land is fully expropriated for transmission line, and for the remaining 222 decares only right of way is obtained by the Project.

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<sup>2</sup>Project's land acquisition is analysed in detail at the Livelihood Restoration Plan. Land acquisition includes all land purchased/ leased/ rented in order to fulfil Project's land requirements. Please refer to LRP section 4 for detailed land acquisition data.

### *Infrastructure:*

- All Project affected settlements; 3 neighborhoods (Vakıfgeymene, Hanönü central, Gelinbükü) in the district center, Bağdere, Gökçeagaç and Kurecağ have access to water supply network. Gökçeagaç village, and Kurecağ on the other hand, each have 50-tonne water reservoir. There are not any problems faced with access to water supply in Project affected settlements during baseline studies.
- Centralized sewerage is not available in Bağdere, Vakıfgeymene and Gelinbükü settlements. Rest of the settlements are connected to centralized sewage system.

### *Vulnerable groups:*

- According to EBRD as well, in terms of environmental and social policy, there is no exact definition of vulnerable groups as it is something which is context specific, but generally can include people who, by virtue of gender identity, sexual orientation, religion, ethnicity, indigenous status, age, disability, economic disadvantage or social status may be more adversely affected by project impacts than others and who may be limited in their ability to claim or take advantage of project benefits. Accordingly, vulnerable individuals and/or groups may also include, but not be limited to, people living below the poverty line, the landless, the elderly, women and children headed households, refugees, internally displaced people, ethnic minorities, natural resource dependent communities or other displaced persons who may not be protected through national legislation and /or international law<sup>3</sup>.
- Within the project area, there are no ethnic and religious groups with minority status, landless people, refugees, internally displaced groups, natural resource dependent communities or other displaced persons who are not protected through legislation.
- District SASF Directorate shared information on the population residing in the affected settlements that is within the scope of GHI and benefit from SASF supports. Accordingly 274 residents in Hanonu receive social support. The support ranges from old age pensions to disability allowances. Of the 274 receiving social support 84 reside in project impacted settlements.

## **KEY BENEFITS, IMPACTS AND MITIGATION MEASURES**

As result of the baseline assessment and the key issues identified as possible impacts of the Project from social perspective. The key impacts are as follows;

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<sup>3</sup><http://www.ebrd.com/downloads/research/policies/esp-final.pdf> (Article 11, footnote 8)

- Project's impact on livelihoods due to;
  - Land acquisition and risk of decrease in farming land and pasture areas,
  - Impact of dust and other construction related works on agriculture and livestock
- Threats of the mine related activity to human health and safety of the communities from
  - Blasting, dust and noise,
  - The potential risk of damage to drinking and utility water resources,
  - Traffic incidents,
  - Landslides,
  - Increasing risks of harm to human and animal health,
  - Concerns and risks due to hazardous chemical and explosive substances

These potential impacts remain the highest potential residual significance after the application of mitigation measures. Mitigation measures have been proposed to respond to all of the identified potential impacts, combining a combination of management controls (such as the development and implementation of a Social Management Plan, and internal management procedures, and continuous engagement with stakeholders. Opportunities for enhancement of beneficial impacts are also available, including strengthening delivery of sustainable community development initiatives in the Project area and formation of an advisory panel which also includes representatives from AMI, governmental bodies and community representatives.

**Key benefits of the Project include:**

- Creation of direct and indirect employment opportunities for the life of the mine; Regarding the employment forecasts of the mine; Number of staff needed in the operation phase is 544 in total. 250 (150 white collar + 100 blue collar) of them will be employed in Acacia Mining Operations and 340 (18 white collar + 322 blue collar) will be employed in Köseoğlu company. Number of labour force foreseen to be supplied from the region is 350 people. Number of labour force foreseen to be employed from outside the region is 240 people.
- Induced job creation from service and supply jobs to meet demands from the resident workforce and the mine itself during construction and operations phases;
- Increase in local procurement opportunities in particular during operational phase;
- Increased revenue to the province and districts in the area through taxes, royalties and other payments, in particular during the construction and operational phases; and

Strengthened and sustainable community development initiatives implemented in partnership between the Project and key stakeholders. The summary of Impacts and

Mitigation measures for those potential impacts are as follows, here showing the potential impact, mitigation measures and residual significance, and relevant Social Management Plans, policies and procedures:

Potential Impact	Summary of Key Proposed Control, Mitigation and Enhancement Measures	Relevant Management Plans & Policies	Potential Residual Significance
<b>Employment (EBRD PR 1,2)</b>			
Project's local employment opportunities are expected to decrease the outmigration from Hanonu, and keep the young population in the District	<ul style="list-style-type: none"> <li>• AMI will give priority to local employment in Hanönü district, particularly to the affected settlements, both during construction and operation phases</li> <li>• Develop cooperation programs between organizations in order to recruit the work force required from the locality, providing support to organizations in initiating new vocational training courses.</li> <li>• Communicate employment estimates, timeframes and skills requirements clearly to the community on a continuous basis</li> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>• Human Resources policy</li> <li>• Local Recruitment Policy</li> <li>• Influx Management Plan</li> <li>• Workers Accommodation Manual</li> <li>• Subcontractor Manual</li> <li>• Stakeholder Engagement plan</li> </ul>	Moderate
The lack of local work force at sufficient amount and with necessary skills	<ul style="list-style-type: none"> <li>• AMI will contribute to the preparation of local work force through vocational training courses</li> <li>• Invest in skills training to facilitate employment of local population through cooperation with training partners, to supplement on-the-job training.</li> <li>• Vocational knowledge and skills of local employees can be improved by continuing to provide them on-the-job trainings</li> </ul>	<ul style="list-style-type: none"> <li>• Vocational training programs</li> <li>• Human Resources policy</li> <li>• Influx management plan</li> </ul>	Moderate
<b>Livelihoods (EBRD PR 1,5)</b>			
The risk that agriculture and livestock farming is adversely affected and related income decrease for the PAPs due to; dust and other construction impacts, risk of decrease in pasture areas and reduction of farmlands	<ul style="list-style-type: none"> <li>• AMI will implement and monitor the Livelihood Restoration Plan</li> <li>• AMI will prepare a community development program within the framework of this plan on the issues of developing agriculture, livestock farming, apiculture, forestry, handicrafts and local skills and work force, women's economic integration</li> <li>• AMI will support local procurement especially agricultural products from Project affected areas</li> </ul>	<ul style="list-style-type: none"> <li>• LRP</li> <li>• Local procurement manual</li> <li>• Community development plan</li> <li>• Grievance mechanism</li> <li>• Land acquisition procedure</li> </ul>	

	<ul style="list-style-type: none"> <li>To mitigate adverse impacts of construction on agriculture and livestock production AMI will track and analyze reported grievances in line with grievance management mechanism</li> </ul>		
Impact on land and other acquisition; Reduction in the utilized forest and public lands, Concerns that means of subsistence will be affected adversely, Impact on the municipal recreational area	<p>In this regard AMI will;</p> <ul style="list-style-type: none"> <li>continue willing buyer seller negotiations</li> <li>prepare a full asset census for new land that will be acquired by the Project, including valuations done by a Third party</li> <li>implement and monitor the livelihood restoration plan targeted to PAPs whose livelihoods may be impacted by the Project</li> <li>monitor vulnerable groups, especially the elderly as their mobility may be restricted and they may be adversely impacted by the Project.</li> <li>Ensure that PAPs impacted by land acquisition benefit from community investment program which will be prepared in the future.</li> <li>Continue stakeholder engagement as defined in SEP,</li> <li>Monitor the grievances to assure that grievances for land acquisition and livelihood restoration are recorded and responded.</li> <li>Prepare a Resettlement Action Plan according to EBRD PR 5 if the Project entails physical displacement.</li> </ul>	<ul style="list-style-type: none"> <li>LRP</li> <li>RAP ( if necessary )</li> <li>Asset census</li> <li>SEP</li> <li>M&amp;E</li> </ul>	
<b>Community Health and Safety (EBRD PR1, PR4)</b>			
The risk of adverse impacts that could be caused by blastings, dust, noise, The potential risk of damage to drinking and utility water resources, traffic incidents, landslides, Increasing risks of harm to human and animal health, Concerns and risks due to hazardous chemical and explosive substances	<ul style="list-style-type: none"> <li>Take occupational health and safety, and environmental measures for issues related with public health and safety concerning means of subsistence as well as infrastructure and quality of life.</li> <li>Regarding water; A hydrogeological study is conducted and included in the ESIA as ESIA Volume I- Chapter 7 which will also be monitored as part of project ESMP</li> </ul>	<ul style="list-style-type: none"> <li>Traffic management plan</li> <li>The Environmental Management Plan dust measures</li> <li>Monitoring &amp; evaluation system</li> <li>Grievance/claims management</li> <li>Explosion procedure</li> <li>Stakeholder Engagement Plan</li> <li>Contingency Plans,</li> <li>EIA Report,</li> <li>Waste discharge system,</li> </ul>	

	<ul style="list-style-type: none"> <li>• Vibrations caused by blastings will be constantly measured and recorded, and the commitments made in the EIA Report will be fulfilled,</li> <li>• In order to identify the current conditions of houses around the mine, construction survey reports for designated houses is prepared by Paye Engineering</li> <li>• Blastings will not be carried out at nights and on Sundays</li> <li>• Throughout the project, Acacia Mining will check dust levels through measures carried out, check the effectiveness of the measures taken, and fulfill the commitments in the EIA. Please refer to Vol 1 for detailed dust control mechanisms.</li> <li>• Dust emission measurements will be carried out inside and outside of the project area.</li> <li>• Measures regarding dust emissions will be put into practice as soon as the construction works start</li> <li>• Since dust emissions due to vehicle traffic will be high at locations close to settlements, roads should be sprinkled regularly</li> <li>• The noise measurements will be monitored.</li> <li>• Train the employees of the company and the subcontractor on traffic, defensive driving techniques etc. in order to reduce traffic accident risks,</li> <li>• Specify speed limits and establish control mechanisms to determine whether these limits are abided, A radar was already purchased and currently in use at mine site.</li> <li>• Design protocols regarding the haulage of mine concentrate and hazardous substances, and</li> <li>• Escape ramps will be built on the haul road between the open pit mine and the mining facility, which will reduce accident risks.</li> </ul>		
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	<ul style="list-style-type: none"> <li>• Drawing up procedures regarding the hauling and storing of hazardous substances,</li> <li>• Holding toolbox meetings with relevant personnel is recommended</li> <li>• Open pit mine and tailings storage facility will be checked against flood and landslide risks with geo-radar (in the open pit), and measurements will be performed.</li> <li>• The spillway on Gökırmak river is built according to Q10 thousand.</li> <li>• In order to identify the current conditions of houses around the mine, construction survey reports for designated houses is prepared by Paye Engineering,</li> </ul>		

## Chapter 1. Introduction

### 1.1 Project Description

Acacia Maden İşletmeleri A.Ş. (hereinafter referred to as “AMI”, “Acacia”, “the Company”) was established in 2007 under the name Asya Maden İşletmeleri A.Ş. In 2011 a partnership was formed with İlbak Madencilik Sanayi ve Ticaret A.Ş. Following a partnership deal with Akfen Mühendislik A.Ş. in 2016, the Company is currently conducting its operations under its current name, Acacia Maden İşletmeleri A.Ş.

AMI is planning to operate an open-pit copper mine within the scope of Gökırmak Copper Project (“GCP”, “the Project”), located in Hanönü district of Kastamonu province of Turkey. The copper will be extracted from a volcanogenic massive sulphide (VMS) deposit and a total of approximately 22 Mt of ore reserve at 1.50% Cu will be extracted according to the results of detailed estimation studies. The construction phase of the Project is currently ongoing, and operations are estimated to commence in Q1 2018.

Since 2011, AMI has conducted various surface and underground explorations to characterize the grade and geometry of ore body, as well as site and desktop studies regarding identification of environmental and social baseline conditions of the wider Project area and identification and management of environmental and social impacts associated with the Project.

AMI is considering International Finance Institutions (IFI) financing for the development of the Project. For this purpose, the Project requires preparation of an ESIA Disclosure Package, selected to be in compliance with the standards of European Bank for Reconstruction and Development (EBRD) and therefore, the European Union (EU) standards and legislation. In line with the EBRD’s Environmental and Social Policy (2014), and its associated Performance Requirements (PRs), a project of this type and scale requires a fit for purpose Environmental and Social Impact Assessment (ESIA). Following a review of the previous environmental impact assessment (EIA) report prepared for the Project to meet national requirements, additional supplementary environmental and social studies have been developed to meet the EBRD PRs and international good practice.

AECOM and SRM have been retained by AMI to develop a fit for purpose ESIA disclosure package of the Project in line with EBRD requirements, which is independent of the permitting process as required by the Turkish Competent Authorities.

#### *ESIA Disclosure Package Overview*

The ESIA Disclosure Package includes:

- ESIA Report (provided separately as EIA and SIA reports)
- Environmental and Social Action Plan (ESAP)
- Stakeholder Engagement Plan (SEP)

- Non-technical Summary (NTS)

The ESIA Report includes the assessment of environmental and social impacts of the Project in line with EBRD PRs and is compiled in four volumes as below:

Volume I – EIA Report prepared by AECOM (including occupational health and safety assessments, cultural heritage assessments, cumulative impact assessments and a summary of community health, safety and security assessments compiled from

Volume-II)

Volume II – SIA Report prepared by SRM

Volume III – Technical Reports supporting the EIA and SIA Reports

Volume IV – Management Plans

## 1.2 Report Structure

This report presents the SIA prepared by SRM Consulting to meet the EBRD's Performance Requirements. This report has been prepared to provide detail for the Environmental and Social Impact Assessment disclosure package being prepared for AMI for GCP.

This report comprises the following sections: Introduction (Chapter 1); Socio-Economic Baseline (Chapter 2); Social Impact Assessment (Chapter 3); Residual Impacts (Chapter 4); Monitoring and Evaluation (Chapter 5); Social Management Plan (Chapter 6); Appendices follow the body of the report.

Legal framework for the Project has been detailed in the Volume I EIA Report Chapter 2, which has been prepared by AECOM.

Cultural Heritage Assessment has been detailed in Volume I EIA Report Chapter 7, section 7.2 which has been prepared by AECOM.

Project description has been detailed in Volume I EIA Report Chapter 3, which has been prepared by AECOM.

Cumulative impact assessment plan has been detailed as an Annex of Volume II SIA report , which has been prepared by SRM.

## 1.3 Objectives and Area of Influence for SIA

### 1.3.1 Objectives of SIA

The main objective of the Volume II Social Impact Assessment (SIA) report is to provide the Social Impact Assessment (SIA) of Gökırmak Copper Project (GCP), which is currently in the construction phase.

SIA identifies the types of social impacts, and devises mitigation mechanisms in order to avoid/minimize/reduce any potential adverse impacts. SIA's scope includes;

- Determining the area of influence

- Establishing the socio-economic baseline
- Assessment of socioeconomic impacts of the project according to category and type of impact, duration, probability of occurrence and significance level.
- Defining mitigation measures for each impact.
- Developing a monitoring program throughout the project implementation period.

While the SIA analyzes the positive and/or negative socioeconomic and social impacts of the project, it helps the project;

- to recognize the possible impacts and manage the change,
- to predict the possible impacts and take necessary measures regarding negative impacts, and
- to identify unpredicted social impacts through monitoring and evaluation programs.

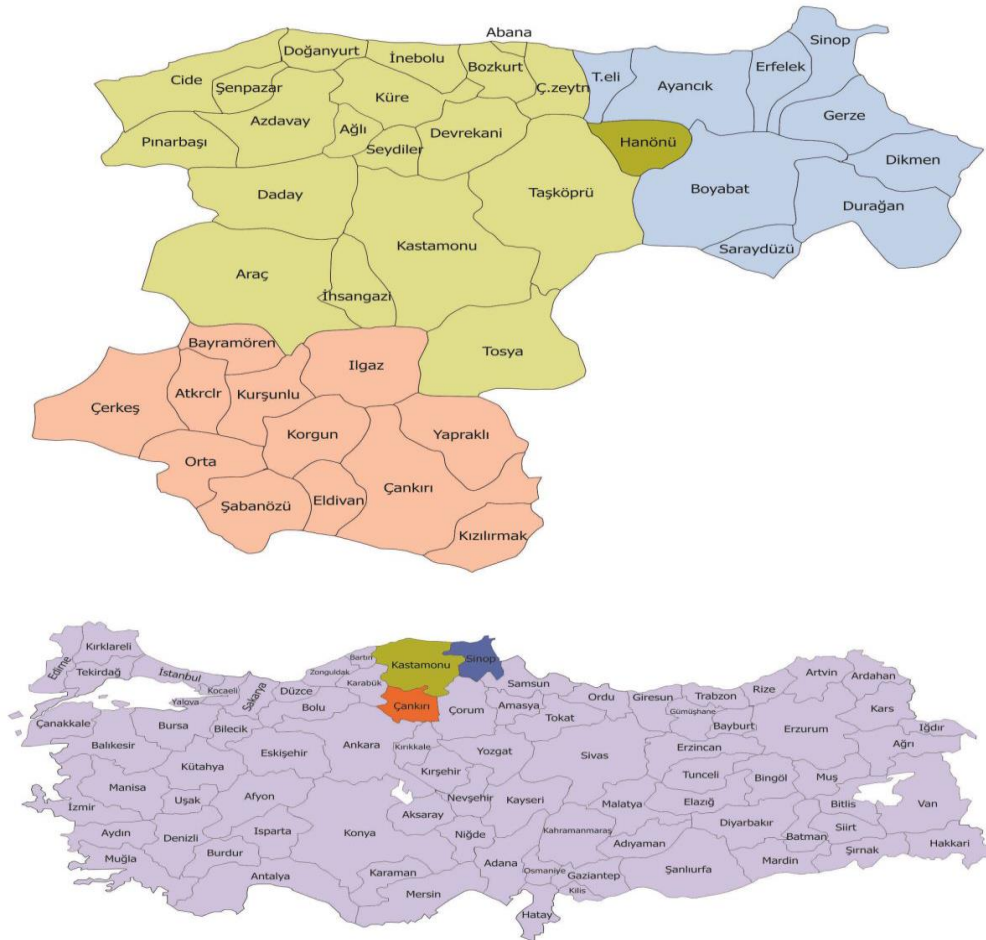
### **1.3.2 Area of Influence (Aoi).**

Methodology to define the area of influence (Aoi) of GCP, is based on the level and degree of impact of the Project. The Aoi includes the settlements that are directly and indirectly affected from project activities. Directly impacted settlements are those settlements who are impacted by Project's activities including associated facilities. Indirectly affected areas are more difficult to assess as they would depend on factors such as ease of transport, but for the purpose of this analysis the approach has been to consider geographical proximity, thus incorporating areas that are neighboring to the directly affected settlements. Indirectly affected areas are included in the assessment even though they are not expected to be adversely impacted by the Project since they are not prone to loss of land; or they are not in direct interaction with Project's daily activities. Yet, they have the potential to benefit from project activities primarily in terms of local employment, procurement, trade, and accommodation etc. Thus area of influence is concerned with impact of the project both positive and negative.

The project activities will be carried out predominantly in Hanönü District, in Kastamonu province. Hanönü District is a small town located in the eastern part of Kastamonu, between Boyabat District of Sinop province and Taşköprü District of Kastamonu. The district was used to be a village affiliated to Gökçeada sub-district of Kastamonu province's Taşköprü District. Hanönü became a township municipality on December 30, 1988, and a district on May 20, 1990. There are currently 20 villages and 3 districts affiliated to the district.

Map 1. Location of Hanönü District and the Region

### İlçenin ve Bölgenin Konumu



Source: EIA Report, 2014

There are 5 directly affected settlements from the project (2 neighborhoods, and 3 villages). There are 11 sub-districts affiliated to these areas.

Table 1. Settlements Affected from the Project in Hanönü

No	Directly Affected Settlements	Sub-Districts Affected from the Project
1	Hanönü Central Neighborhood	Vakıf, Yılanlı, Central
2	Vakıfgeymene Neighborhood	Dereköy, Sepetçioğlu, Geymene
3	Bağdere Village	Çaylı, Çayağzı, Bağdere
4	Gökçe ağaç Village	Nefsigökçe ağaç
5	Küreçayı Village	Aşağıküreçay

Source: SRM, 2017

The settlements in the vicinity of directly affected settlements are also included in the Area of Influence (AoI). There are 7 villages in this category (Table 2). Amongst these 7 villages, the closest is at a 5 km distance to the directly affected settlements listed above. During field

studies, there were no adverse impacts identified or foreseen in these settlements. Thus, these settlements constitute the border of the Project's Aol.

Table 2. Villages in the vicinity of Directly affected settlements in Hanönü

No	Neighboring Areas to Affected Settlements in Hanönü (airview 5 km)
1	Akçasu Village
2	Gelinbükü Neighborhood
3	Hocavakıf Village
4	Sirke Village
5	Yeniboyundurcak Village
6	Yeniköy
7	Yılanlı Village

Source: SRM, 2017

It is necessary to include the entire Hanönü district in the Project's Aol. Hanönü is a small town, and neighborhoods and villages within Hanönü may be affected from the Project especially in terms of employment and local procurement. As the Project will have impact on these communities, these areas were also included in the definition of Aol

In addition to this, the neighboring Taşköprü district was also included within the Aol as a neighboring community, since it has been affected from the project in terms of employment, accommodation, land acquisition from transmission lines and local procurement.

Table 3. Districts Affected from the Project

No	Neighboring Areas
1	Hanönü District
2	Taşköprü District

Source: SRM, 2017

Overall, the Aol encompasses 2 districts, in which 5 directly affected settlements, and 7 neighboring settlements are impacted.

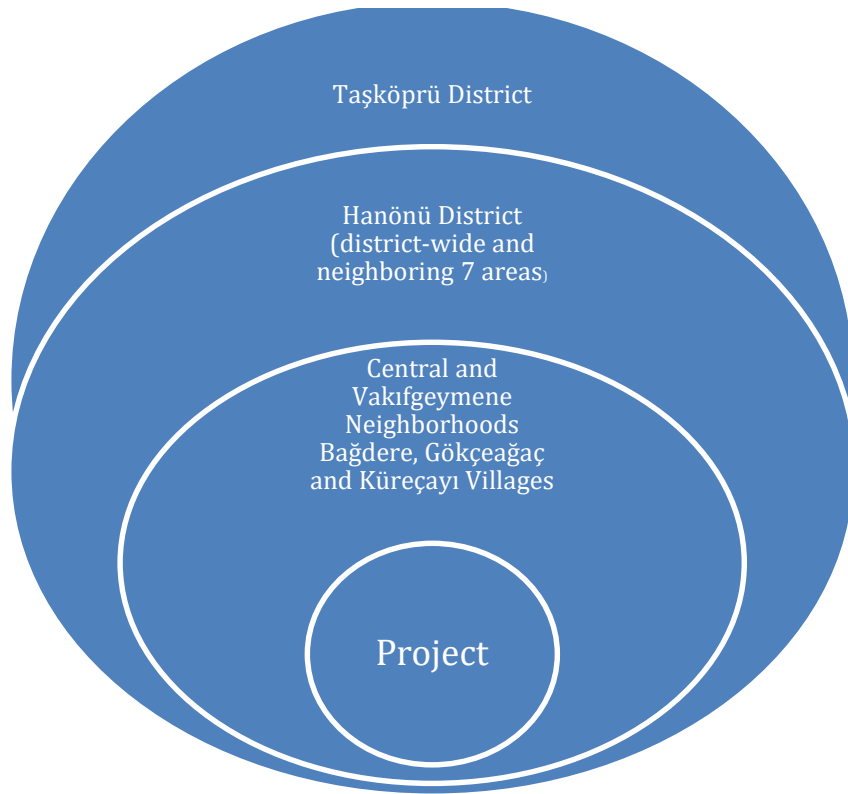
Table 4. Area of Influence Summary

No	Overall Areas Affected from the Project
1	Hanönü Central Neighborhood
2	Küreçayı Village
3	Vakıfgeymene Neighborhood
4	Bağdere Village
5	Gökçe ağaç Village
6	Hanönü District
7	Taşköprü District

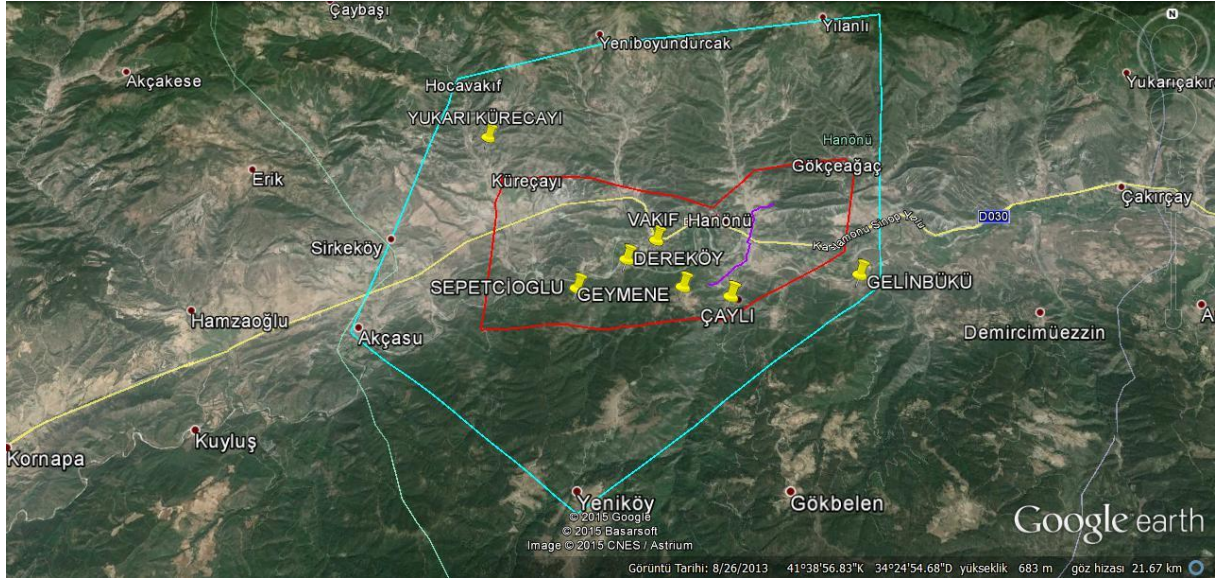
Source: SRM, 2017

The Aol in Hanönü District are illustrated in the map below. The red line indicates the directly affected areas, whereas the blue line indicates neighboring areas.

**Figure 1: Socioeconomic Area of Influence of the Project**



Map 2. Map of Aol in Hanönü District



Source: Acacia Mining, 2015

**Map Legend:** Yellow pins are project affected settlements

**Red line:** Shows the project affected settlements area

**Green line:** Shows the host community area

## 1.4 Methodologyfor SIA

While preparing the SIA, international standards, Environmental and Social Policies and Performance Requirements of IFC and EBRD have been pursued. In order to measure the impact of the project, qualitative and quantitative research methods have been employed. A database was compiled through desk-based research for GCP, data of quantitative reference study conducted in November 2015 through two field studies based on interviews were examined, and these data were expanded through qualitative findings obtained from the field.

The priority of the field studies carried out for the SIA was to observe the potential impacts of the project using participatory methods in order to capture the views of PAPs and all current and potential stakeholders of the Project.

The draft version of SIA was disclosed in May 25, 2016 at Hanonu central district. The meeting was open to public and was widely publicised. The meeting was widely attended by the Mayor, all mukhtars of Project affected settlements and PAPs. All Acacia mining team was present during the meeting in order to respond to any questions varying from technical information to health and safety. The meetings question and answer list is included in Annex I.

### 1.4.1 Methodology

Following methods were used during SIA study;

#### **Quantitative Methods:**

In the studies conducted on the SIA baseline, secondary data on local, district-wide and province-wide population dynamics, economic structure, infrastructure, educational and health indicators were collected for the specified area of influence. Data obtained from secondary sources and data collected during field studies from public authorities- such as

District Directorate of Agriculture-were utilized in order to define income and expenditure structures, agriculture and livestock, education levels, health indicators.

#### ***Qualitative Methods:***

SIA has gathered field baseline data predominantly through qualitative studies. Numerous techniques were used for qualitative data collection. Focus group meetings (such as women, PAPs etc), in-depth interviews with opinion leaders, community-based interviews and stakeholder engagement works were among the qualitative methods used.

The aim of focus group meetings and community-based interviews were to reveal the impacts of the project while providing a platform to participants to recognize the issues, reflect their own experiences, provide solutions, and convey their feelings and opinions.

**Focus group meetings** were held with PAPs, women, seniors, and employees in Vakıfgeymene, Hanönü Central and Gökçe ağaç neighborhoods, and Bağdere village. Separate focus group meetings were conducted with local employees working at the project.

**In-depth interviews** were conducted with the representatives of government and local administration, particularly with the mukhtars. The project has a large stakeholder profile including municipalities, non-governmental organizations, mukhtars and local residents. Interviews were conducted with these stakeholders.

**Meetings with public institutions** were held with the Regional Director of State Hydraulic Works, Regional Directorate of Forestry, Pasture Area Commission of the Provincial Directorate of Agriculture, and Provincial Directorate of Environment and Urbanization in Kastamonu province where Hanönü District is affiliated. Public institutions and organizations (municipalities, district governorships) in Hanönü were also conferred with in order to get their opinions, suggestions and concerns regarding the project.

### **1.4.2 SIA Impact Categorization**

Social impacts of the Project are analyzed depending on the Project's phases. As Project's expected impacts are prone to change according to Project's phase (construction/ operation); the analysis is conducted according to Project's construction and operation phases. While construction phase is expected to take 2 years, operation phase is planned for 12 years. Mine closure and rehabilitation works regarding the mine are not included in the operation phase.

#### **Mitigation measures**

Mitigation measures were devised in order to minimize any potential negative impact identified during the assessment.

#### **Issues Addressed in the Social Impact Assessment**

The following baseline topics are assessed for impacts during construction phase and operation phase:

- Population and population movements
- Local economy (local economy, employment, means of subsistence)

- Land and other assets
- Education services
- Healthcare services
- Public health and safety
- Infrastructure and quality of life
- Cultural heritage
- Vulnerable groups
- Social conflicts and tensions

### Criteria for Social Impacts and Identification of the Significance

The significance level of impacts identified as a result of desk-based research and the accompanying field study were evaluated according to the criteria given below, and the significance level of residual impacts were determined accordingly.

Table 5. Impact Assessment Table

Criteria	Detailed Description of the Criteria	Assessment Thresholds	
		Threshold	Description
Specification of the Characteristics of the Impact	Direction of the Impact	Positive	The impact is a development related with the current situation or is desired
		Negative	The impact worsens the current situation or is undesired
		Neutral	The impact does not exhibit any change within the specified time period
Geographical scope	Defines the area where a specific impact will arise and is related with the spatial boundaries of the assessment	Local	The impact is limited to certain individuals or population groups/communities in the vicinity of the project area
		Regional	The impact is prevalent in an area that covers Kastamonu and Rize provinces
		National	The impact is valid throughout Turkey
		Global	The impact globally transcends national borders
Significance Level	Significance level of the impact	High	Impacts are measurable, continuous, cause a strong concern among the stakeholders, usually lasts for a long time and cannot be managed easily.
		Medium	Impacts are both distinguishable and measurable, can be recognized by or cause concern among stakeholders, and are usually short- or medium-term.
		Neutral	There is no identifiable change in socioeconomic conditions.

Source: SRM, 2017

### 1.4.3 Time-frame for SIA Consultations

Within the framework of the project, Hanönü District was visited between October 26-28, 2015, meetings were held with local bodies and community representatives, and meetings were held with key stakeholders and communities in Aol on November 16-20, 2015 in Kastamonu province. Further meetings were held with Forest cooperatives and muhtars of Kurecayi, Merkez, Bagdere, Vakifgeymene and Gokceagac from 7-11 November 2016 to finalize the potential Project impacts on forestry.

#### 1.4.4 Summary table for SIA Consultations

114 stakeholders including 37 stakeholders from 34 organizations, 65 PAPs, (35 males and 30 female) from local communities, and 12 local employees(3 female and 9 male), were interviewed in these meetings.

Table 6. Total Number of Persons Interviewed During Field Studies

Stakeholder Interviewed	Male	Female	Total
<b>Organizations</b>	30	7	37
<b>Communities</b>	35	30	65
<b>Employees</b>	9	3	12
<b>Total</b>	74	40	114

Source: SRM, 2017

Details on the organizations are given below.

Table 7. Institutional Stakeholders Interviewed During Field Studies

NO	ORGANIZATIONS	TYPE
1	District Gendermarie Command	Security
2	District Security Chief Office	Security
3	Hanönü District Governorship	Public
4	Deputy Director of Special District Administration/Director of Union of Village Delivery Service	Public
5	District SASF	Public
6	District Directorate of National Education	Public
7	District PTC Directorate	Public
8.	District Health Directorate	Public
9	District Directorate of Agriculture	Public
10.	District Directorate of Forestry Operation	Public
11.	District Fiscal Directorate	Public
12	Regional Directorate of State Hydraulic Works	Public
13	Kastamonu Provincial Directorate of Environment and Urbanization	Public
14.	Regional Directorate of Forestry, General Directorate of Nature Conservation and National Parks	Public
15	Regional Directorate of Forestry, Department of Permission and Easement	Public
16	Provincial Directorate of Food, Agriculture and Livestock	Public
17	Hanönü Anadolu Agency	Media
18	Hanönü Ziraat Bank Branch	Private Sector
19.	Hanimeli Sofrası	Private Sector
20	Hanönü Transporters' Cooperative	Coop
21	Hanönü Chamber of Merchants and Craftsmen	NGO
22.	Bağdere Village	Community
23	Hanönü Central Neighborhood	Community
24.	Vakıfgeymene Neighborhood	Community
25.	GCP Employees	Community
26	Akçasu Mukhtarship	Community
27.	Mukhtarship of Bağdere Village	Community
28	Mukhtarship of Gelinbükü	Community
29	Mukhtarship of Gökçe ağaç Village	Community
30	Mukhtarship of Küreçayı Village	Community

<b>31</b>	Mukhtarship of Hanönü Central Neighborhood	Community
<b>32</b>	Mukhtarship of Vakıfgeymene Neighborhood	Community
<b>33</b>	Yeniköy	Community
<b>34</b>	Hanönü Municipality	Local Administration
<b>35</b>	Bagdere Forestry Cooperative	Coop
<b>36</b>	Kurecayi Forestry Cooperative	Coop
<b>37</b>	Gokceagac Forestry Cooperative	Coop

Source: SRM, 2017

The detailed list of stakeholders interviewed during two field visits conducted is given at below.

Table 8. List of GCP Stakeholders Interviewed by SRM Consultancy (October 26-28, November 16-20, 2015)

NO	ORGANIZATION	PERSON	TYPE	PLACE
1	District Gendermarie Commander	Nuh Uğurlu	Security	Hanönü
2	District Gendermarie Station Commander	Harun Tuncay	Security	Hanönü
3	District Security Chief	Ayhan Özen	Security	Hanönü
4	Hanönü Deputy District Governor	Adem Karadaş	Public	Hanönü
5	District Governorship Deputy Chief Clerk	İsmail Erdoğan	Public	Hanönü
6	Deputy Director of Special District Administration/Director of Union of Village Delivery Service	Mustafa Arslan	Public	Hanönü
7	District SASF Director	Birgül Yılmaz	Public	Hanönü
8.	District National Education Director	Serkan Demirkıran	Public	Hanönü
9	District PTC Director	Hayati Acun	Public	Hanönü
10.	District Health Director	Dr. Gülbin Alkan	Public	Hanönü
11.	District Director of Agriculture	Veysel Balcı	Public	Hanönü
12	District Directorate of Agriculture Veterinary	Aydın Doğan	Public	Hanönü
13	District Director of Forestry Operation	Zehra Çakır	Public	Hanönü
14.	District Fiscal Directorate Treasurer	Okan Karakazan	Public	Hanönü
15	Deputy Regional Director of DSI	Çağatay Engin	Public	Kastamonu
16	Regional Directorate of DSI Watershed Management Department Chief	Mevlüt Tutar	Public	Kastamonu
17	Kastamonu Provincial Directorate of Environment and Urbanization EIA and Environmental Permits Department Chief	Ayhan Aydın	Public	Kastamonu
18	Regional Directorate of Forestry, General Directorate of Nature Conservation and National Parks	Ferda Tarhan Duman	Public	Kastamonu
19.	Regional Directorate of Forestry, Chief of Permission and Easement Department	Hasan Buldu	Public	Kastamonu
20	Provincial Directorate of Food, Agriculture and Livestock, Pastureland	Arzu Demirbaş	Public	Kastamonu

	Commission Department Chief			
21	Provincial Directorate of Food, Agriculture and Livestock, Pastureland Commission	Naciye Çeltikçi	Public	Kastamonu
22.	Provincial Directorate of Food, Agriculture and Livestock, Pastureland Commission Pasture Improvement Unit	Mustafa Burkucu	Public	Kastamonu
23	Anadolu Agency Reporter	Hasan Yılmaz	Media	Hanönü
24.	Ziraat Bank Private Customer Relations Officer	Hakkı Hotaman	Private Sector	Hanönü
25.	Hanimeli Sofrası	Business owner	Private Sector	Hanönü
26	Chamber of Merchants and Craftsmen	Hüseyin Öztürk	NGO	Hanönü
27.	Mukhtar of Akçasu	İsmail Baş	Community	Akçasu
28	Akçasu Community Meeting	2 persons (male)	Community	Akçasu
29	Bağdere Village	Hüseyin Tuncal	Community	Bağdere
30	Bağdere Village – Çaylı	5 persons (3 male, 2 female)	Community	Bağdere
31	Bağdere Village – Çayağzı	2 persons (male)	Community	Bağdere
32	Mukhtar of Gelinbükü/Chairman of Hanönü Transporters' Cooperative		Community	Gelinbükü
33	Mukhtar of Gökçeagaç	Mustafa Demir	Community	Gökçeagaç
34	Gökçeagaç Community Meetings	8 persons (5 male, 3 female)	Community	Gökçeagaç
35	Founding Mayor of Hanönü	Mehmet Yücel	Community	Hanönü
36	Meetings with workers	12 persons (9 male, 3 female)	Community	Hanönü
37	Mukhtar of Küreçayı	Yaşar Asar	Community	Küreçayı
38	Mukhtar of Hanönü Central Neighborhood	Yusuf Yılmaz (2 male, 3 female)	Community	Central (Hanönü)
39	Hanönü Central Neighborhood - Vakıf	7 persons (5 male, 5 female)	Community	Central (Hanönü)
40	Hanönü Central Neighborhood - Yılanlı	5 persons (2 male, 3 female)	Community	Central (Hanönü)
41	Mukhtar of Vakıfgeymene Neighborhood	Hüseyin Yücel	Community	Vakıfgeymene
42	Vakıfgeymene Neighborhood Sepetçioğlu Community Meeting	5 persons (4 male, 1 female)	Community	Vakıfgeymene
43	Vakıfgeymene Neighborhood - Dereköy	3 persons (1 male, 2 female)	Community	Vakıfgeymene
44	Yeniköy	2 persons (male)	Community	Yenice
45	Mayor of Hanönü	Serkan Uçar	Local administration	Hanönü
46	Hanönü Marketplace	Interviews with women (Küreçayı,	Community	Hanönü

#### 1.4.5 SIA Steps

The steps of the study comprised of 4 stages.

1. At the first stage a desktop study was conducted in order to assess the current socio-economic baseline at the province, the district and the affected settlements via secondary data.
2. At the second stage, a field study was conducted in order to identify impacts and the current situation analysis was updated accordingly. Measures were proposed based on the identified impacts and a social management plan was drawn up.
3. At the third stage, a final workshop was held in Hanönü district to which stakeholders will be invited in order to assess the findings and proposed measures within the scope of the SIA, and to get the opinions and suggestions of stakeholder representatives.
4. At the final stage of the study, the social management was revised and finalized in line with the opinions, suggestions and information received at the workshops held.

#### 1.4.6 Limitations and Restrictions

The Environment Management Plan (EMP) of the project has been completed by Aecom. Hence, the Social Management Plan (SMP), which will be prepared within the framework of the social impact assessment study, and the EMP should be intertwined. Especially in order to be able to reduce the impacts and risks related with public health and safety as well as infrastructure and quality of life, the measures to be proposed within the scope of EMP must be defined and put into practice.

Within the context of SIA study, SRM has gathered information to take a snapshot of the region, and mostly qualitative findings were elaborated in the field study. Within the scope of the project, there are no households that should be relocated due to physical and economic reasons. The Project has prepared a Livelihood Restoration Plan to depict the impacts of land loss on PAPs.

## Chapter 2. Socio-Economic Baseline

The following section discusses the socio-economic baseline of the project using the information from the quantitative and qualitative data sources described in Chapter 1. Thus where a quantitative measure is given it is based on secondary sources, but may be qualified in the discussion and interpretation using primary information from the qualitative research.

### 2.1. Administrative Structure of the Settlements

There are 20 districts and 1064 villages affiliated to Kastamonu province. The number of villages affiliated to Taşköprü district is 106 and the number of neighborhoods is 15, whereas the number of villages in Hanönü district, where project activities take place, is 20 and the neighborhoods is 3.

Table 9. Settlements Affiliated to Kastamonu Province

Residential Area	Number of Villages	Number of Neighborhoods	Total Settlements
Hanönü	20	3	23
Taşköprü	106	15	121
Kastamonu	1064		1064

Source: TUIK, 2014

### 2.1. Current Demographic Situation

The project is located in Hanönü District, in Kastamonu province. 5 settlements are directly affected from the Project. While 3 of these settlements are categorized as neighborhoods affiliated to the district center, 2 of them are villages. The number of settlements in the vicinity of these 5 settlements, that are approximately 3-5 km air distance from the Project, is 7.

TUIK's 2013, 2014, 2015 and 2016 data were used in demographic indicators, except for some indicators which were obtained through calculations made over available information.

#### a. Main Demographic Indicators

Looking at the main demographic indicators, it is seen that the population growth rate of the province is greater than the Turkish average. Yet, the net migration rate of 11.6 per mille indicates that there is a tendency of migration from the province. The population density is around 1/3 of the national average.

Table 10. Demographic Indicators for 2013	Kastamonu	Turkey
Annual Population Growth Rate (%0) (2012-2013)	22.8	13.7
Net Migration Rate (%0) (2012-2013)	11.6	NA
Population Density (km <sup>2</sup> /population)	28	100

Source: TUIK, 2014

Looking at urban-to-rural population ratio, it is seen that while Hanönü and Taşköprü districts has a higher proportion of rural population, urban population is greater in the province.

Table 11. Urban and Rural Population

Province and Districts	Urban Population (% 2016)	Rural Population (% 2016)	Total Population (2016)
<b>Hanönü</b>	51%	49%	3865
<b>Taşköprü</b>	56%	44%	39847
<b>Kastamonu</b>	63%	37%	376945

Source: TUIK, 2016

## b. Population Sizes and Gender Distribution

As of 2016, Turkey's total population was 79,814,871, and Kastamonu province's population was 376,945. With its population of 3,865, Hanönü comprises approximately 1% of the province, while Taşköprü comprises around 10% with a population of 39,847.

According to TUIK's Address-Based Population Registration System data, the total population of 5 affected settlements in 2016 was 2,324 (Table 12). The area with the largest population size among these areas was the central neighborhood of Hanönü with a population of 1,821. The total population of 7 settlements neighboring PAS was 608, whereas the population of the remaining 11 settlements in Hanönü district was 933.

Table 12. Demographic Information on Project Affected Settlements for 2016

Directly Affected Settlements	Population in 2016	Ratio to the District Population (%)
<b>Hanönü Central Neighborhood</b>	1821	78%
<b>Gökçeagaç Village</b>	140	6%
<b>Küreçayı Village</b>	161	7%
<b>Bağdere Village</b>	122	5%
<b>Vakıfgeymene Neighborhood</b>	80	3%
<b>Total</b>	<b>2324</b>	<b>60%</b>
Neighboring Areas to Affected Settlements in Hanönü (airview 5 km)	Population in 2016	Ratio to the District Population (%)
<b>Hocavakıf Village</b>	114	19%
<b>Sirke Village</b>	103	17%
<b>Yeniboyundurcak Village</b>	79	13%
<b>Yeniköy</b>	97	16%
<b>Gelinbükü Neighborhood</b>	88	14%
<b>Yılanlı Village</b>	77	13%

<b>Akçasu Village</b>	50	8%
<b>Total</b>	<b>608</b>	<b>16%</b>
Population of the Remaining 11 Settlements in Hanönü	<b>Population in 2016</b>	<b>Ratio to the District Population (%)</b>
<b>Çaybaşı</b>	139	15%
<b>Gökbelen</b>	126	14%
<b>Kavak</b>	94	10%
<b>Bölük yazı</b>	85	9%
<b>Çakırçay</b>	94	10%
<b>Yeniboyundurcak</b>	81	9%
<b>Kayabaşı</b>	88	9%
<b>Sarıalan</b>	80	9%
<b>Halkabük</b>	59	6%
<b>Demircimüezzin</b>	57	6%
<b>Yukarıçakırçay</b>	30	3%
<b>Total</b>	<b>933</b>	<b>24%</b>
<b>Total of Hanönü District</b>	<b>3865</b>	<b>100%</b>

Source: TUIK, 2016

### c. Gender Distribution

TUIK does not provide gender data according to neighborhood level hence data on gender distribution was given only at district and province level. There is a balanced population distribution across gender in general.

Table 13. Gender Distribution for Affected Settlements

Directly Affected Settlements	Population in 2016	Male	Female	Ratio of Female Population, %
<b>Hanönü District 2016</b>	<b>3865</b>	<b>1929</b>	<b>1936</b>	<b>50%</b>

Source: TUIK, 2016

### d. Household Size and Number of Households

According to TUIK data, average household size in 2013 was 3.6 in Turkey and 3.2 in Kastamonu province. With an average household size of 2.7, Hanönü district is among the districts with the lowest average household size in the province due its elderly population. Taşköprü district has the highest average household size in the province with 3.6. Due to limited economic resources and restricted livelihood earning potential Hanonu district tends to decline in household size since young population tend to migrate once they come to income earning age.

Table 14. Average Household Size

Settlements	Average Household Size (2013)	District Rank
Hanönü	2.7	14
Taşköprü	3.6	1
Kastamonu	3.2	NA
Turkey	3.6	NA

Source: TUIK, 2016

In the meeting with the mukhtars, it was found out that there is a variance between summer and winter populations. The numbers of households are given according to the information obtained from the mukhtars. The total number of households in Hanönü district was found by dividing the total population of the district in 2016 to the average household size.

Table 15. Seasonal Population and Number of Households in Affected Settlements

Settlements	2016, TUIK	Population During Summer	Population During Winter	Number of Households	Average Household Size According to TUIK Population
<b>Hanönü Central Neighborhood</b>	1821	2500	2500	628	2,9
<b>Gökçeagaç Village</b>	140	300	250	88	1,6
<b>Küreçayı Village</b>	161	265	250	47	3,4
<b>Bağdere Village</b>	122	120	120	76	1,6
<b>Vakıfgeymene Neighborhood</b>	80	110	75	36	2,2
Total	2324	3295	3195	1223	1,9
Total of Hanönü District	3865			1431	2,7

Source: SRM, 2017

The table indicates that the average household size in all settlements is at around 2.7 which is quite low. This implies that the district is facing population decrease with a tendency of aging, with households inhabiting the district are getting smaller gradually.

#### e. Migration and Changes that Occurred in the Population of Settlements by Years

Out Migration from Kastamonu province is on a declining trend. While there had been a high migration from the province between 2008 and 2011<sup>4</sup>, the immigration to the province had been greater than emigration from the province in 2012 and 2013. Accordingly, the net migration rate of the province in 2012-2013 was 11.62%, indicating that the difference between the migration to and from the province was 4,253 persons.

However, the population trend of **Hanönü** district tends to illustrate outmigration especially from villages. While the population of the district was 4,220 in 2010, it dropped to 3,865 in 2016. The population of Hanönü district central has marginally increased whereas the population in villages is in decline.

Table 16. Population Differentials of Affected Settlements Between 2010 and 2016

Settlements	Population (2016, TUIK)	Population (2010, TUIK)	Difference
<b>Hanönü Central Neighborhood</b>	1821	1639	182
<b>Gökçeagaç Village</b>	140	186	-46
<b>Küreçayı Village</b>	161	178	-17
<b>Bağdere Village</b>	122	147	-25
<b>Vakıfgeymene Neighborhood</b>	80	101	-21

<sup>4</sup>The outmigration from Kastamonu has been a defining population trend. According to KUZKA Development Agency data, 541,797 people from Kastamonu were living in Istanbul as of 2011. When this figure is compared to Kastamonu provincial population of 372,633, it is evident that most of the Kastamonu residents have migrated to metropolitan cities.

Total	2324	2251	73
Total of Hanönü District	3865	4220	-355

Source: TUIK, 2016

#### f. Dependent Population Ratio and Population Pyramid

Dependent population ratio is the percentage value indicating the ratio of the population between 0-14 and over 65 years of age. Based on the 2016 population pyramid of Hanönü district, dependent population ratio was calculated.

Accordingly, the ratio of population between 0 and 14 years of age was 14%, and the ratio of the population over 65 years of age was 26%. In other words, the dependent population ratio was 40%, which accounts for almost half of the district's population.

**Kastamonu province has the second oldest population among all provinces in Turkey.** Average age in the province is 37.6<sup>5</sup>. The situation observed in the province in general is valid for Hanönü District as well.

Given the population pyramid, it can be seen that the ratio of the population between 0 and 14 years of age that constitute the base of the pyramid is low with only 14%, while an expansion in the pyramid can be observed with 50 years of age with the ratio of the population equal to and greater than 50 years of age is 48%. The ratio of the population between 15 and 49 years of age in turn is 37%.

**It can be concluded from these data that the population in the district exhibits an ageing tendency and there is a declining trend in population growth.** The age structure pyramid and population groups in the district are shown below.

Table 17. Hanönü District Population Distribution by Age and Gender in 2014

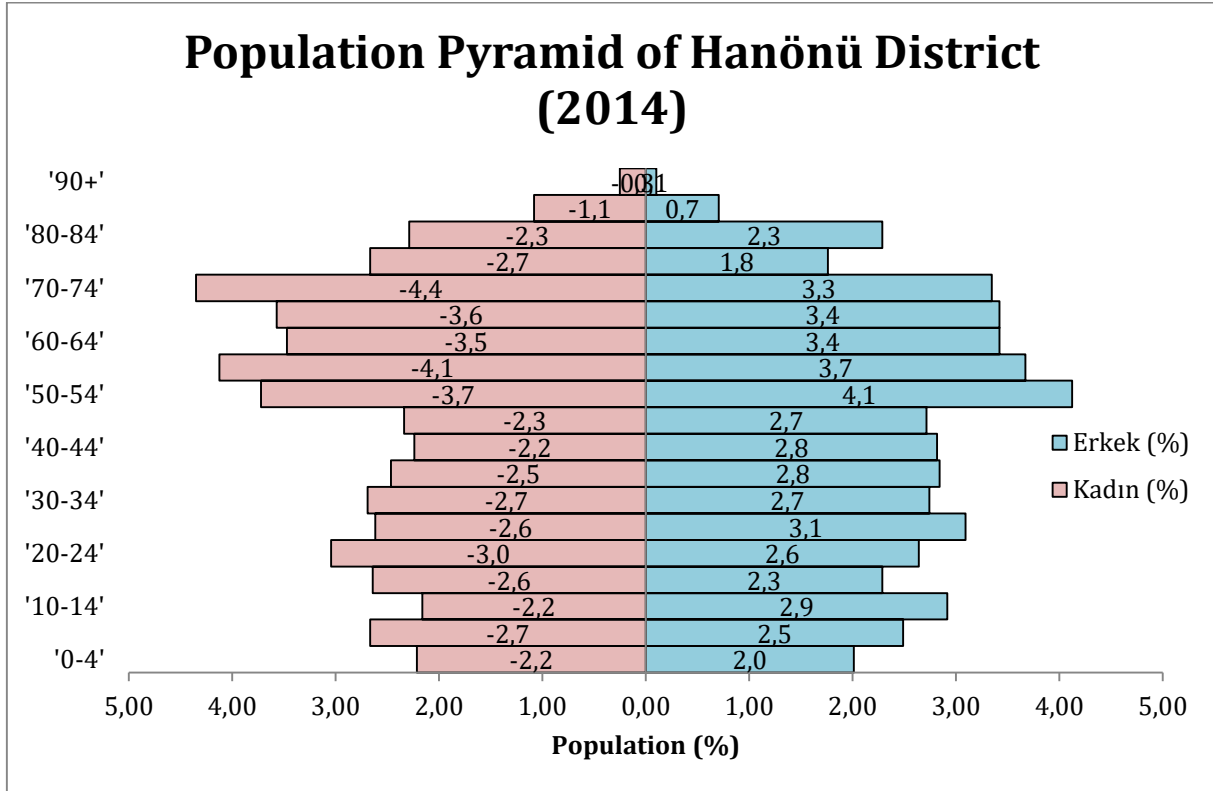
Hanönü Population in 2014	Total	Male	Female	Male (%)	Female (%)	Total (%)
'0-4'	168	80	88	2.0	-2.2	4
'5-9'	205	99	106	2.5	-2.7	5
'10-14'	202	116	86	2.9	-2.2	5
'15-19'	196	91	105	2.3	-2.6	5
'20-24'	226	105	121	2.6	-3.0	6
'25-29'	227	123	104	3.1	-2.6	6
'30-34'	216	109	107	2.7	-2.7	5
'35-39'	211	113	98	2.8	-2.5	5
'40-44'	201	112	89	2.8	-2.2	5
'45-49'	201	108	93	2.7	-2.3	5
'50-54'	312	164	148	4.1	-3.7	8.
'55-59'	310	146	164	3.7	-4.1	8.
'60-64'	274	136	138	3.4	-3.5	7
'65-69'	278	136	142	3.4	-3.6	7

<sup>5</sup><http://www.aciksoz.com.tr/gundem/kastamonunun-yas-ortalamasi-376-h12069.html>

'70-74'	306	133	173	3.3	-4.4	8.
'75-79'	176	70	106	1.8	-2.7	4
'80-84'	182	91	91	2.3	-2.3	5
'85-89'	71	28	43	0.7	-1.1	2
'90+'	14	4	10.	0.1	-0.3	0.4
Total	3,976	1,964	2,012	49.4	-50.6	100

Source: TUIK, 2016

Figure 2. Population Pyramid of Hanönü District



Source: TUIK, 2014

#### g. Estimated Age Distribution of the 5 Affected Settlements Based on the Age Structure Pyramid

There is **no** age distribution data available on the affected settlements. Yet, an estimation was made based on the 2014 population pyramid ratios of the district. Among these 5 settlements, Hanönü central neighborhood is the largest neighborhood of the district and the project (43% of the district population in 2014). Therefore, the relatively large figures obtained are due to the population of Hanönü central neighborhood.

Accordingly,

- the estimated population below school age (ages 0-4) in 4 settlements was 94 persons.
- Total population at elementary school age (ages 5-9) was 116 persons.
- Total population at secondary school age (ages 10-14) was 114 persons.
- Total population at high school age (ages 15-19) was 109 persons.
- Total population between ages 20 and 29 was 253 persons.
- Total population between ages 30 and 39 was 241 persons.
- Total population between ages 40 and 49 was 224 persons.

- Total population at and over the age of 50 was 1081 persons.

The population at working age (718 persons at the age of 20-49) is lower than the population at and over the age of 50 (1081 persons). This indicates that the population exhibits aging tendency.

Table18. Population Distribution by Estimated Age Groups and Gender in Affected Settlements

Settlements	Hanönü Central Neighborhood			Vakıfgeymene Neighborhood			Bağdere Village			Gökçeada Village			Küreçay Village			Total		
Age Groups	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
'0-4'	72	35	38	4	2	2	5	2	2	7	3	4	6	3	3	94	45	49
'5-9'	89	43	46	5	2	2	6	3	3	8	4	4	8	4	4	116	56	60
'10-14'	88	50	38	5	3	2	6	3	2	8	5	4	8	4	3	114	65	49
'15-19'	84	39	45	4	2	2	5	3	3	8	4	4	8	4	4	109	51	58
'20-24'	97	45	52	5	2	3	6	3	3	9	4	5	9	4	5	126	59	67
'25-29'	98	53	45	5	3	2	6	3	3	9	5	4	9	5	4	127	69	58
'30-34'	93	47	46	5	2	2	6	3	3	9	4	4	8	4	4	121	61	60
'35-39'	92	49	43	5	3	2	6	3	3	9	5	4	8	4	4	119	63	56
'40-44'	86	48	38	4	2	2	6	3	2	8	5	4	8	4	3	112	63	49
'45-49'	86	47	39	4	2	2	6	3	3	8	4	4	8	4	4	112	61	51
'50-54'	134	71	64	7	4	3	9	5	4	13	7	6	12	6	6	175	92	83
'55-59'	133	63	70	7	3	4	9	4	5	13	6	7	12	6	6	173	82	92
'60-64'	119	59	60	6	3	3	8	4	4	11	6	6	11	5	5	154	76	78
'65-69'	121	59	62	6	3	3	8	4	4	11	6	6	11	5	6	157	76	80
'70-74'	133	57	76	7	3	4	9	4	5	12	5	7	12	5	7	173	75	98
'75-79'	77	30	46	4	2	2	5	2	3	7	3	4	7	3	4	100	39	60
'80-84'	79	39	39	4	2	2	5	3	3	7	4	4	7	4	4	102	51	51
'85-89'	31	12	19	2	1	1	2	1	1	3	1	2	3	1	2	40	16	25
'90+'	5	2	3	0	0	0	0	0	0	0	0	0	0	0	0	7	2	4
<b>Total</b>	<b>1,717</b>	<b>848</b>	<b>869</b>	<b>88</b>	<b>43</b>	<b>45</b>	<b>112</b>	<b>55</b>	<b>57</b>	<b>161</b>	<b>80</b>	<b>81</b>	<b>154</b>	<b>76</b>	<b>78</b>	<b>2,232</b>	<b>1,103</b>	<b>1,129</b>

Source: SRM, 2017

## 2.2. Land Ownership and Tenure

### a. Land tenure patterns in the area

Kastamonu Province spans to 1,310,800 ha of land. The Province is highly mountainous-75 percent of the Province is mountainous covered with forest, 22 percent is plateau and only 4 percent of the overall land is plain. Due to limited plain size, most agrarian farming is done in available plains of Taskopru and Daday districts. Long winters and high attitudes pose challenges to agrarian economy of Kastamonu, hence land tenure is based on animal feed crop production to support livestock production.

Hanonu District covers an area of 41,191.40 ha encompassing 20 villages. When compared to Kastamonu province, Hanönü comprises only 4% of the total provincial area. Similar to Kastamonu, 80 percent of the land in Hanonu belongs to Forestry, the remaining 20 percent of land is used for farming, agriculture, pastures and settlements.

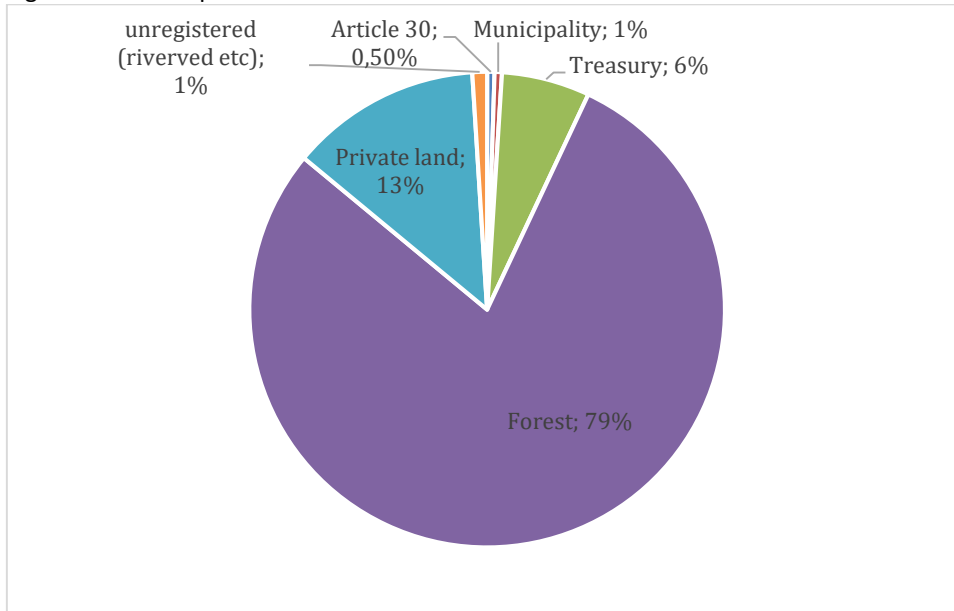
Table 19: Land Tenure in Hanönü

Land tenure	Hanönü District hectares	%
Forestry	32,778.70	80%
Open land	8,412.70	20%
Total area	41,191.40	100%

## b. The Project Facilities

The Project's land acquisition consists of forests, public and private lands. A total of 4,122 decares of land was acquired<sup>6</sup> for all Project's facilities including open pit area, processing plant, tailings facility, waste dump sites, access roads and transmission lines. Majority of the land impacted by the Project belongs to Forestry (79%), followed by Private land (13%).

Figure 3: Land Acquisition at a Glance



Source: Acacia Mining 2017

The area of forest land acquired by GCP within the framework of the project is 3,252 decares.

Table 20. Land Acquisition

	Area in decares	Number of Parcels
Third party institutions	34	22
Treasury	233	35
Forestry	3252	10
Private	537.5	455
Unregistered (riverbed etc)	46	73
Municipality	20	12
total	4122	607

Source: Acacia Mining 2017

<sup>6</sup>Project's land acquisition is analysed in detail at the Livelihood Restoration Plan. Land acquisition includes all land purchased/ leased/ rented in order to fulfil Project's land requirements. Please refer to LRP section 4 for detailed land acquisition data.

Land acquisition of private land comprises of total 538 decares of land acquired for Project's main facilities and transmission line. 299 decares of private land impacting 91 parcels in total in Vakıfgeymene and Merkez neighborhoods were acquired through willing buyer seller negotiations, and 13 decares of private land was impacting 10 parcels was leased for the Project. Acquisition of private parcels for transmission line is predominantly based on right of way, whereby 224 decares of land impacting 357 parcels is acquired through expropriation. Only 2 decares of private land is fully expropriated for transmission line, and for the remaining 222 decares only right of way is obtained by the Project.

## 2.3. Economic Conditions

### a. Provincial Level Economic indicator

The economy of Kastamonu province is mainly based on agriculture. According to the Report on the Status of Provincial Industry in 2014, 40% of the province's gross product was derived from agriculture.

Looking at the sectoral composition of employment throughout Kastamonu province, it is seen that agriculture and service sectors come to the fore as the main line of business with a share of 41%.

Table 21. Sectoral Distribution of Employment in Kastamonu Province

Employment by Sectors in 2014	Kastamonu	Turkey
<b>Agriculture</b>	41%	24%
<b>Services</b>	41%	50%
<b>Industry</b>	18%	26%

Source: TUIK, 2016

Agriculture and livestock activities are the main source of income for the PAPs in the region. As seen in Table 22 the minimum area necessary to generate 31,124 TL<sup>7</sup> of income on dry farm land is given by the Provincial Directorate of Agriculture as 18.5 ha and on irrigated farm land as 9 ha. However, these figures may vary depending on the product pattern.

Table 22. Minimum Agricultural Land Size to Achieve Sufficient Income in Hanönü District

Size of Agricultural Income that Generate Sufficient Income	Decare
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<sup>7</sup>According to "Practices Regarding the Inheritance and Sale of Agricultural Land" leaflet published by Kastamonu Provincial Directorate of Agriculture in August 2015, the agricultural land size that generates sufficient income is 90 decares for irrigated farming, 185 decares for dry farming, 10 decares for orchards, and 3 decares for greenhouse cultivation.

Agricultural land that generates sufficient income is defined as the total land size that would generate at least four times the per capita national income in agricultural sector. Therefore, given the agricultural income per capita of 3,653 USD in 2013 given in TOBB's agriculture report, sufficient income is calculated as 14,612 USD. This is equivalent to 31,124 TL as of 2013 (1 USD = 2.13 TL, Central Bank's December 2013 exchange rates).

<b>Irrigated Farm Land</b>	90
<b>Dry Farm Land</b>	185
<b>Orchard</b>	10
<b>Greenhouse Cultivation</b>	3

Source: Kastamonu Provincial Directorate of Food, Agriculture and Livestock, 2015

The regional gross value added (GVA) per capita of the TRA1 region (Kastamonu, Çankırı and Sinop provinces), which includes Kastamonu province as well, was 6,594 USD in 2011, which was below the national average (9,244 USD).

The unemployment rate (age 15+) in Kastamonu province in 2013 was 6%, the labor participation rate (age 15+) was 44%, and the employment rate was 47% (age 15+). The unemployment rate (age 15+) in Turkey in 2013 was 10%, the labor participation rate (age 15+) was 51%, and the employment rate was 46% (age 15+). According to the “Regional Outcomes of Household Survey, 2004-2013” prepared by TUIK, the province has one of the lowest unemployment rate. Furthermore, it is also among the provinces with the lowest shares in total employment. Additionally, the province has one of the lowest ratios of wage, salary and casual employees to total employment. On the other hand, the province is among those with the highest share of unpaid family workers within total employment.

Table 23. Unemployment, Labor Participation and Employment Rates in Kastamonu Province

2013	Kastamonu	Turkey
<b>Unemployment rate (%)</b>	6%	10%
<b>Labor participation rate (%)</b>	44%	51%
<b>Employment rate (%)</b>	47%	46%

Source: TUIK, 2016

In recent years, especially youth unemployment (ages 15-24) has been increasing nationwide. As of February 2015, while unemployment rate was 11%, youth unemployment climbed to 20%<sup>8</sup>. Current unemployment data at provincial level has not been disclosed by TUIK yet.

Looking at the sectoral composition of employment throughout Kastamonu province, it is seen that agriculture and service sectors come to the fore as the main line of business with a share of 41%.

Table 24. Sectoral Distribution of Employment in Kastamonu Province

Employment by Sectors in 2014	Kastamonu	Turkey
<b>Agriculture</b>	41%	24%
<b>Services</b>	41%	50%
<b>Industry</b>	18%	26%

Source: TUIK, 2016

## b. District Level Economic Indicators

<sup>8</sup><http://www.tuik.gov.tr/HbGetirHTML.do?id=18637>

According to KUZKA Development Agency data, the number of businesses which employ 1-9 workers in Hanönü district was 12, the number of businesses which employ 10 or more workers was 6 in 2012.

Table 25. Number of Businesses and Employment Generated in Hanönü District, 2012

Workplace	Quantity	Employment
<b>Businesses Employing 1-9 Employees</b>	12	17
<b>Businesses Employing 10 or More Employees</b>	6	191
<b>Total</b>	18	208

Source: KUZKA 2012

Once again, according to KUZKA data, there were 40 businesses active in the district as of 2012. 12 of these businesses were private companies, 8 were equity companies, and 20 were cooperatives. Looking at the area of activity of these businesses, it can be seen that forestry cooperatives hold a prominent position, with 13 of the 40 active businesses being forestry cooperatives.

Table 26. Number of Businesses by Economic Activity in Hanönü District, 2012

Area of Activity	Number of Businesses
<b>Agricultural Development Forestry Cooperative</b>	13
<b>Cooperative Housing Society</b>	4
<b>Permanent Timber Production</b>	3
<b>Retail Trade of Motor Vehicle Fuel</b>	3
<b>Village Development and Agricultural Irrigation Cooperative</b>	2
<b>Retail Trade of Haberdashery Goods</b>	1
<b>Wholesale Trade of Construction Materials</b>	1
<b>Banks</b>	1
<b>Motor Carrier Cooperative</b>	1
<b>Manufacturing of Other Outerwear Products</b>	1
<b>Restaurant</b>	1
<b>Domestic Fuel Trade</b>	1
<b>Other Restaurants and Mobile Services</b>	1
<b>Other Freight Haulage Services by Road</b>	1
<b>Wholesale Trade of Tobacco Products</b>	1
<b>Bailment Cooperative</b>	1
<b>Wholesale Trade of Cereals and Seeds</b>	1
<b>Other Minerals</b>	1
<b>Storage of Fruit and Vegetables</b>	1
<b>Gold and Other Precious Metals</b>	1

Source: KUZKA 2012

According to KUZKA 2012 data, the number of businesses registered at the Chamber of Merchants and Craftsmen was 143. The bulk of these were transportation and food service businesses (79 businesses).

Table 27. Number of Businesses Registered at Hanönü District Chamber of Merchants and Craftsmen, 2012

Field of Occupation	Number of
Transportation Services	49
Foodstuffs and Related Services	30
Communication, Recreation, Accommodation and Entertainment Services	14
Metal Goods and Machinery	9
Services Related with Apparels	7
Manufactured Wooden Goods	6
Automobiles and Other Motor Vehicles	6
Foodstuffs	5
Leather and Manufactured Leather Goods	3
All Kinds of Hosiery, Clothing, Textiles and Knitting Goods	3
Healthcare, Cleaning, Beauty Care and Nursing Services	3
Electric and Electronic Appliances	2
Services Related with Paper, Stationery Equipment and Printing	2
Manufactured Glassware	1
Manufactured Goods Other Than Metal Goods	1
Sports Equipment and Sanitary Products	1
Architectural Arts	1
Total	143

Source: KUZKA 2012

### c. Local Economy

Except the neighborhoods among the affected settlements, none of the 3 villages have non-agricultural sector such as coffee shops, grocery stores, maintenance and repair services etc.

There are forestry cooperatives in Bağdere, Gökçeagaç and Küreçayı villages. The neighborhoods are not within the scope of forestry cooperatives. However, non-agricultural cooperatives such as Hanönü Transporters' Cooperative, and many businesses are in operation at the central neighborhood of Hanönü.

The effort to establish a joint irrigation cooperative in Küreçayı village along with Sirke and Akçasu villages has been ongoing. These three villages also sell their dairy products collectively to a merchant at a price of 2 TL per litre of milk. There is no milk collection and cooling tank in the villages. Peasants, who wish to sell their milk, store them in plastic containers and pour them into the milk tanker.

In all 5 of affected areas, income from **stockbreeding and agriculture** comprises an important part of household budgets. Additionally, **pension benefits** also comprise a significant source of income. The interviews conducted with local organizations and communities revealed that

there is a pensioner in almost all households, which helps the households to maintain their income levels due to the regular and stable flow of the pensioner benefits. Details on agriculture and stockbreeding activities are given below along with forestry.

The construction of Demirci HPP and the expansion of Kastamonu-Sinop highway are important investments for the local economy. The construction of Gökırmak Copper Project started while these works were ongoing, which in turn affected the local employment, purchasing power, accommodation and trade positively. While the teacher's lodge was shut down previously due to lack of demand and the district had no facilities for accommodation, Acacia Mining built a guesthouse in the district. Since there are not enough buildings in the district, some Acacia Mining employees started to reside in Taşköprü district. After the construction works of Acacia Mining began, home rental prices in the district has increased; the rent of apartments which was used to rented out at 200 TL have gone up to 500 TL, and construction of new housing units have started. The number of restaurants in the district center has gone up to 6. The distribution of employees by settlements is given in the section on impacts below.

Turkish Labor Agency İŞKUR has been opening employment programs in the district. Accordingly, 100 persons were employed in 2015 within the framework of public work program; more than half of those employed were women. 60 persons were employed in afforestation works of Forestry Operation Directorate, 25 at Hanönü Municipality, 10 at Hanönü District Governorship, and 5 were employed in other works.

## 2.4. Forestry

Forestry is among the most important sources of income in the district. There are 13 forestry cooperatives available in total in the district. The members of forestry cooperatives play an important role in cleaning and rejuvenating forests. In the interview conducted with the Regional Director of Forestry, we were informed that 55,000 m<sup>3</sup> of lumbering was carried out in 2014, which provided 3,212,000 TL of income for forestry cooperatives.

The total forest assets of the district are 32,789 hectares, and the forest wealth is 5,078,000 m<sup>3</sup> in total. The area forestland of which is affected within the scope of the project is 3252 decares, which corresponds to 1% of the total forest wealth. The representatives of the Regional Directorate indicated that the land acquired by the Project is arid forest lands from which no income is generated.

Table 28. Status of Forest Land in Hanönü District	Hectare	%
<b>Forest Lands Affected from the Project</b>	325.2	1%
<b>Total Forest Assets</b>	32,789	100%

Source: Kastamonu Regional Directorate of Forestry, 2015

The forest assets in the district is sufficient for a regular source of income for residents. Yet, two factors may hinder income from forestry activities. The first factors is aging population. Members of forestry cooperatives are ageing, rapidly. Interviews with District Forestry Directorate revealed that there is no member in forestry cooperatives below the age of 40, and age range varies from 40 to 60 years.

The other issue is that the income received by each forestry cooperative from forestry activities varies. The income from forestry activities rises or declines depending on the capacity and labor force of the cooperative. For instance, the male population of Çaybaşı village was 84 in 2014. The number of persons who were affiliated with the forestry cooperative was 55. Çaybaşı Forestry Cooperative generated an income of 728,000 TL from forestry activities in 2014. Accordingly, gross income per member including costs was 13,236 TL per year. Hence, aging population that leads to decreasing capacity for cooperatives, may cause decline in incomes from forestry activities.

There are 13 forestry cooperatives in the district in total and the case is similar for the other cooperatives as well. Dividing the income of 3,212,000 TL generated by all cooperatives in Hanönü district in 2014 to 13 cooperatives, the average income per cooperative is 247,077 TL.

In villages affected from the project, Bağdere Forestry Cooperative has 42, Gökçeagaç has 60, and Küreçayı has 53 members. More than three quarters of the male population is registered in the cooperative. The male population in 2014 according to TUIK and the number of men affiliated to a cooperative in these 3 settlements are shown in the table below.

Table 29. Number of Members at Forestry Cooperatives in Affected Settlements

Residential Area	Number of Forestry Cooperative Members	Male Population in 2014 According to TUIK	% membership in the Coop
<b>Bağdere</b>	42	55	76%
<b>Gökçeagaç</b>	60	71	85%
<b>Küreçayı</b>	53	72	74%
<b>Total</b>	<b>155</b>	<b>198</b>	<b>78%</b>

Source: SRM, 2017

The list of other settlements which has forestry cooperatives is given below.

Table 30. Settlements Which Have Forestry Cooperatives in Hanönü District

No	Residential Area
<b>1</b>	Gökçeagaç Forestry Cooperative
<b>2</b>	Çaybaşı Forestry Cooperative
<b>3</b>	Demircimüezzın Forestry Cooperative
<b>4</b>	Gökbelen Forestry Cooperative
<b>5</b>	Hocavakıf Forestry Cooperative
<b>6</b>	Kavak Forestry Cooperative
<b>7</b>	Kayabaşı Forestry Cooperative
<b>8.</b>	Yeniboyundurcak Forestry Cooperative
<b>9</b>	Yeniköy Forestry Cooperative
<b>10.</b>	Yılanlı Forestry Cooperative

Source: SRM, 2017

## 2.4. Agriculture

According to the information received from District Directorate of Agriculture, there were 259 farmers who were registered to the Farmers Register System (FRS) in 2014. The total population of Hanönü district in 2014 was 3,976; hence, the figure given above corresponds to 7% of the total population. The number of farmers who receive agricultural support in the district is 232, whereas the number of farmers who receive fodder crop supports are 184.

Table 31. Number of Agricultural Producers Registered in Farmers' Register System	2015
<b>Number of Farmers Registered in FRS</b>	259
<b>Number of Farmers Receiving Support</b>	232
<b>Number of Farmers Receiving Fodder Crop Support</b>	184

Source: Hanönü District Directorate of Food, Agriculture and Livestock

#### a. Cultivated Agricultural Area

**Agricultural is an important economic activity for Kastamonu province.** Total cultivated and perennial area in Kastamonu province as of 2013 was 359,407 hectares, which corresponded to 2% of total cultivated area in Turkey. 93% of 19,331 hectares of cultivated agricultural land consists of cultivated agricultural area. Total irrigated area in the district corresponds to approximately 30% of agricultural land. Water used in irrigation is supplied from Gökırmak river, which passes through the district.

Total agricultural area in Hanönü district is 2,631 hectares, which correspond to 2% of agricultural area in Kastamonu province. The agricultural yield in the district is relatively small compared to the production in the province. The most important reason of this outcome is the limited surface area of and cultivation area in the district.

Table 32. Cultivated Agricultural Area in Hanönü District

2013 (hectare)	Turkey	Kastamonu	Hanönü	% (Kastamonu/Turkey)	% (Hanönü/Kastamonu)
Total Cultivated Agricultural Area and Perennial Crop Area (A+B)	23,810,672	149,331	2,631	1%	2%
A. Total Cultivated Agricultural Area	20,578,637	139,466	2,615	1%	2%
The Area of Cereals and Other Plants					
Cultivated	15,618,059	107,709	1,726	1%	2%
Fallow Farmland	4,147,587	26,846	834	1%	3%
Area of Vegetable Gardens	808,488	4,901	55	0.61%	1%
Area of Ornamental Plants	4,504	10	0	0.2%	0%
B. Perennial Crops	3,232,035	9,895	16	0.31%	0%
Other fruit, beverage plants and herbs	1,937,416	9,336	16	0.48%	0%
Vineyards	468,792	514	16	0.11%	3%
Area Covered by Olive Groves	825,827	15	0	0.002%	0%
Area of Fodder Plants*	1,875,271	26,081	274	1%	1%
<b>The area of fodder plants is not included in perennial crops area.</b>					

Source: TUIK, 2016

The fallow farmland area throughout the province is relatively important. 19% of total agricultural area in the province, and 32% of agricultural area in the district in 2013 was fallowed. Since traditional methods are still employed in agriculture in the region, it would be safe to say that productivity of households' agricultural activities is low.

Even though greenhouse cultivation is carried out in the district, its area is quite small. As of 2013, 24 tonnes of tomatoes and 20 tonnes of cucumbers were cultivated in greenhouses.

Contrastingly, 1047 tonnes of tomatoes and 1368 tonnes of cucumbers were cultivated in greenhouses throughout the province. Total greenhouse cultivation area in Hanönü district is 4 hectares, and these are high tunnel systems.

Among grains wheat and beet, among vegetables garlic and field tomato, and among fruit apple and walnut are the most commonly produced crops in terms of output in the district.

Table 33. Yield of Agricultural Crops Grown in Hanönü District

Output in 2013/Tonne			
A. Cereals and Other Crops	Kastamonu	Hanönü	% (Hanönü/Kastamonu)
Maize (corn kernel)	1,444	16	1%
Barley	25,919	164	1%
Potato	18,493	240	1%
Rice	5,239	271	5%
Wheat	100,158	2,304	2%
Beet	123,525	3,088	2%
B. Vegetable Crops	Kastamonu	Hanönü	% (Hanönü/Kastamonu)
Cucumber	10,230	20	0.2%
Tomato	26,420	184	1%
Garlic (Dried)	14,408	240	2%
C. Fruit Crops	Kastamonu	Hanönü	% (Hanönü/Kastamonu)
Cherry	2,165	66	3%
Pear	3,055	108	4%
Walnut	4,713	146	3%
Apple	14,199	164	1%

Source: TUIK, 2016

Analyzing the number of agricultural equipment and machinery, it is seen that there were 335 tractors, 260 cultivators and 305 plows in the district as 2013. It is possible to say that the degree of mechanization of agriculture, hence the level of modern agricultural activities, is at a relatively low level in the district.

Table 34. Agricultural Equipment and Machinery in Hanönü District

Agricultural Equipment and Machinery in Hanönü (2013)	Quantity
Tractors	335
Cultivators	260
Plows	305

Source: TUIK, 2014

The area on which high income generating crops such as beet, rice and garlic is cultivated has been declining in the district. According to the data of the District Directorate of Agriculture, beet was cultivated on 140 hectares of land, garlic on 350 hectares, and rice on 1100 hectares in 2015. Rice farms are mainly closer to the district borders with Boyabat.

Table 35. Selected Crops Grown in Hanönü, 2015  
Decare

<b>Sugar beet</b>	140
<b>Garlic</b>	350
<b>Rice</b>	1100

Source: Hanönü District Directorate of Food, Agriculture and Livestock

In all affected settlements, the main crop is wheat. Other crops cultivated besides wheat are garlic and beet. Rice, on the other hand, is cultivated on in Gökçe ağaç village. Since all of these areas are located on or near the banks of Gökırmak, the farmers are engaged in irrigated farming. There are 3 or 4 households in each residential area that are engaged in greenhouse farming. However, these are usually small (100-120 m<sup>2</sup>) greenhouses. Information on cultivated crops by settlements is given below.

Table 35. Product Pattern in Affected Settlements

Settlements	Product Types
<b>Hanönü Central</b>	Wheat
	Beet
	Garlic
<b>Vakıfgeymene</b>	Wheat
	Garlic
<b>Küreçayı</b>	Barley
	Wheat
	Beet
	Garlic
<b>Gökçe ağaç</b>	Barley
	Wheat
	Rice
	Beans
	Beet
<b>Bağdere</b>	Barley
	Wheat
	Garlic

Source: Hanönü District Directorate of Food, Agriculture and Livestock

The mukhtars of affected settlements informed us that landowners have 20 decares of land to utilize for dry farming and 10 decares of land for irrigated farming in general.

## b. Livestock Production

Most of the businesses in the district currently in operation are small family businesses engaged in production with traditional methods.

Even though both bovine and ovine are bred in Hanönü district, bovine breeding is much more common. While there were 5,204 bovine animals in the district in 2013, the number of ovine animals was 3,830. Sheep is the most common among ovine animals (3520 sheep, 310 goats).

Apiculture and poultry raising is also practiced at small scale by households in the district. 17 tonnes of honey was produced in 2013. The number of poultry was 2,059.

The animal production in the district is between 1% to with 5% of Kastamonu province which indicates that livestock activities carried out in the district have a relatively small share compared to the province.

Table 36. Livestock Size in Hanönü District

2013	Kastamonu	Hanönü	% (Hanönü/Kastamonu)
Number of Cattle	266,501	5,204	2%
Number of Sheep	72,180	3,520	5%
Number of Goats	26,486	310	1%
Milk production (tonne)	332,984	5,802	2%
Honey production (tonne)	418	10	2%
Number of poultry	241,039	2,059	1%

Source: TUIK, 2014

All livestock activities have been declining throughout the district. According to the information received from the District Directorate of Agriculture, the numbers of bovine and ovine animals have significantly declined. For example, while there were 6,670 cattle in 2006, this figure dropped more than half to 3,300.

Table 37. Livestock size in Hanönü District by Years

Animal Species	2006	2010	2013	2015 (October)
<b>Bovine</b>	6,670	4,906	5,204	3,300
<b>Sheep</b>	6,680	5,500	3,520	2,500

Source: TUIK, 2014 and Hanönü District Directorate of Food, Agriculture and Livestock, 2015

According to the information obtained from the District Directorate of Agriculture, currently there are 3,300 bovine animals, 360 livestock businesses, 2,500 ovine animals, 20 apiculturists, and 900 beehives in the district. There are no migratory beekeepers in the district. On the other hand, it came to our knowledge that there are a small number of beehives and households engaged in beekeeping activities as a hobby that are not reflected in the District Directorate of Agriculture records.

Table 38. Number of Livestock and Businesses in Hanönü District in 2015

District	Bovine	Number of Businesses	Ovine	Number of Businesses	Beekeepers	Number of Beehives
<b>Hanönü District</b>	3300	360	2500	30	20	900

Source: Hanönü District Directorate of Food, Agriculture and Livestock

Total number of bovine and ovine animals in affected areas is 3,300 and 2,500 respectively. Livestock activities carried out in the affected areas constitute a small part of livestock farming in the district (35% for bovine animals, 16% for ovine animals). Average numbers of bovine and ovine animals per business are 12 and 9 in the affected areas respectively, whereas these figures are 56 and 83 for the district in general.

Table 39. Number of Livestock and Businesses in Affected Settlements

Settlements	Bovine	Number of Businesses	Business/Average Livestock	Ovine	Number of Businesses	Business/Average Animal	Beekeepers	Number of Beehives
<b>Bağdere</b>	156	21	7	0	0	0	1	40
<b>Gökçeada</b>	140	16	9	0	0	0	2	80
<b>Hanönü Central</b>	440	30	15	160	3	53	5	196
<b>Küreçayı</b>	313	24.	13	200	3	67	0	0
<b>Vakıfgeymene</b>	111	6	19.	30	1	30	0	0
<b>Total</b>	<b>1,160</b>	<b>97</b>	<b>12</b>	<b>390</b>	<b>7</b>	<b>56</b>	<b>8</b>	<b>316</b>
Hanönü District	<b>3,300</b>	<b>360</b>	9	<b>2,500</b>	<b>30</b>	83	<b>20</b>	<b>900</b>
<b>% (Affected Settlements/Hanönü District)</b>	35%	27%		16%	23%		40%	35%

Source: Hanönü District Directorate of Food, Agriculture and Livestock

### c. Pastures

Even though pastures are quite important for livestock farming, both the size and the yield of pasturelands in the district are very small. According to the District Directorate of Agriculture Pastureland Commission data, the area of pastures in the district is 969 decare.

Table 40. Pasture Area in Hanönü District

Settlements	Registered Pasture (Hectare)	Decare
<b>Hanönü Central Neighborhood</b>	16.7	167
<b>Gelinbükü Neighbourhood</b>	5.2	52
<b>Vakıfgeymene Neighbourhood</b>	8.6	86
<b>Akçasu</b>	11.0	110
<b>Bağdere</b>	18.5	185
<b>Bölük yazı</b>	0	0
<b>Çakırçay</b>	0	0
<b>Çaybaşı</b>	4.3	43
<b>Demircimüezzın</b>	0	0
<b>Gökbelen</b>	5.8	58
<b>Gökçeada</b>	0	0
<b>Halkabük</b>	0	0
<b>Hocavakıf</b>	0	0
<b>Kavakköy</b>	5.2	52
<b>Kayabaşı</b>	0	0
<b>Küreçayı</b>	21.6	216
<b>Sarıalan</b>	0	0
<b>Sirkeköy</b>	0	0
<b>Yeniboyundurcak</b>	0	0
<b>Yenice</b>	0	0
<b>Yeniköy</b>	0	0
<b>Yılanlı</b>	0	0
<b>Yukarıçakırçayı</b>	0	0
<b>Total</b>	97	969

Source: Kastamonu Provincial Directorate of Food, Agriculture and Livestock, 2015

The quality of pastures in the district are quite low as well. Pasture yield is calculated as ensuring a cattle of 500 kg to consume hay equal to 1/10 of its weight per day. Accordingly, the yield of 86-decare pasture area in Vakıfgeymene village is only enough to feed a single cattle of 500 kg weight in a year.

Even by simply dividing the current pasture sizes of affected areas to the number of bovine animals, the obtained results reveal that pasture areas are extremely small and insufficient.

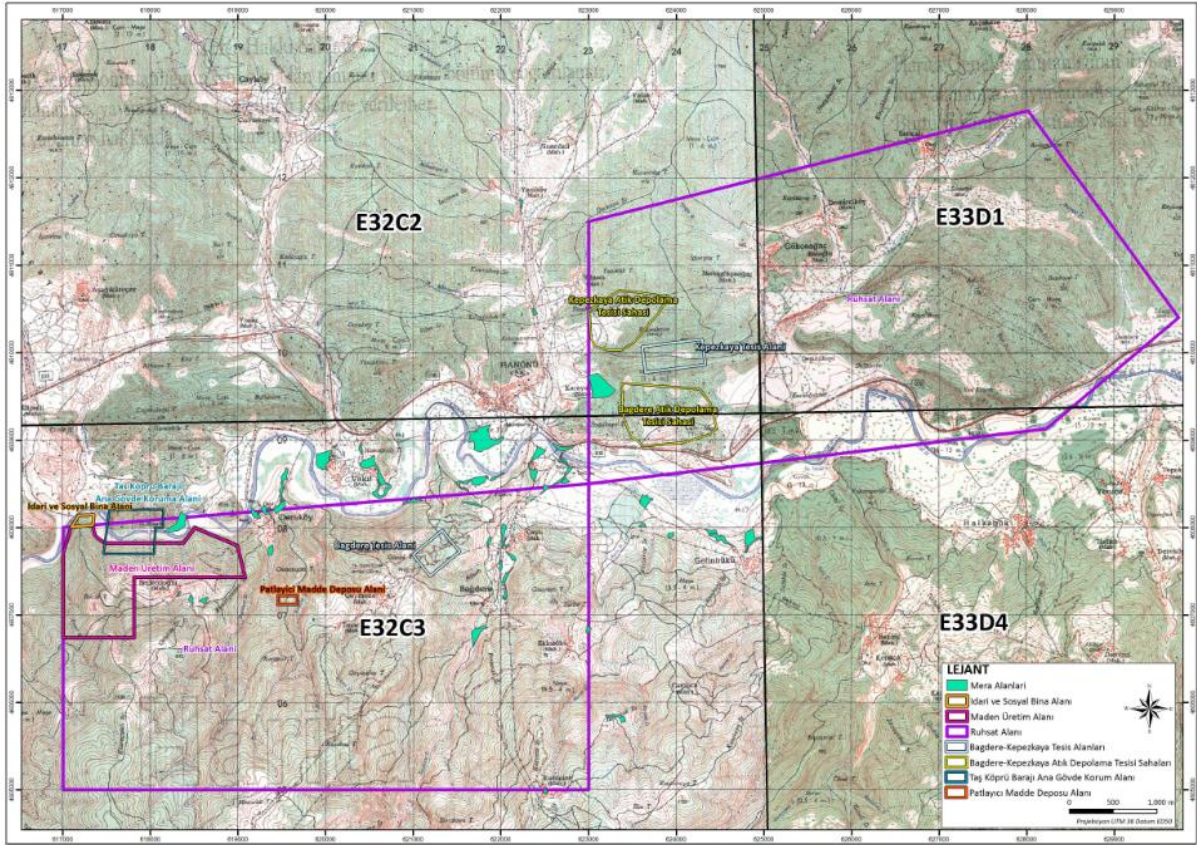
Table 41. Pasture Area in Affected Settlements

Settlements	Registered Pasture (Hectare)	Decare	Bovine Animal Existence	Pasture Area / Bovine Animal (Decare / Bovine Animal)
<b>Bağdere</b>	18.5	185	156	1.2
<b>Gökçeagaç</b>	0	0	140	0.0
<b>Hanönü Central Neighborhood</b>	16.7	167	440	0.4
<b>Küreçayı</b>	21.6	216	313	0.7
<b>Vakıfgeymene Neighbourhood</b>	8.6	86	111	0.8
Total	65	655	1,160	0.6

Source: Kastamonu Provincial Directorate of Food, Agriculture and Livestock, 2015

Within the scope of the project, the permanent pasture status of 8,900 m<sup>2</sup> of the pasture in Vakıfgeymene neighborhood was changed. The Provincial Pastureland Commission reported the mentioned area as infertile land. Nevertheless, AMI acquired a land with the same size within the neighborhood borders to be allocated to the use of stockbreeders as pasture. The locations of pasture areas with respect to the project area are shown in the map below.

Map 3. Project Area and Pasture Areas



Source: EIA, 2014

## 2.5. Industry

According to the “Report on the Status of Industry in 81 Provinces” issued by the Ministry of Science, Industry and Technology in 2014, the industry of Kastamonu province depends on agriculture and forestry. Tosya, İnebolu and Taşköprü are the liveliest districts of the province in terms of economic activity.

There are 3 organized industrial zones (OIZs) with a relatively low occupancy rate of 32% in the province. 1 of these OIZs have been completed, whereas the construction of the other 2 is ongoing. The completed OIZ is at the center of Kastamonu, and the OIZs, constructions of which are ongoing, are in Tosya and Seydiler districts. There is no OIZ in Hanönü district<sup>9</sup>.

There are 13 small industrial estates (SIEs) in Kastamonu province. Even though there is no SIE in Hanönü district, there is 1 SIE in Taşköprü, the closest district. 116 of 120 workplaces are occupied in Taşköprü SIE.

Looking at the sectoral distribution of employment in the province, it is seen that 41% of employment was generated in agriculture, while 19% was generated in industry and 40% in services as of 2013.

<sup>9</sup><http://sgm.sanayi.gov.tr/DokumanGetHandler.ashx?dokumanId=83c1b741-8ad8-4129-b0ec-ba4a03f1f1dc>

Finally, looking at the sectoral shares of employment as of 2014, it is seen that Kastamonu was one of the provinces with the lowest of share of industry in employment <sup>10</sup>.

In terms of employment by sectors, industry takes the last place with 12%, which is rather lower than the Turkish average.

### 2.5.1. Significant Mining and Energy Investments in the District

According to the Directorate of Environment and Urbanization data for 2014, there is no mining investment in the district which obtained licenses at exploration, detailed exploration and operation phases. The size of the area for which license is obtained is 27,154 hectares. 2 copper mines, 1 slate quarry and 1 crushed stone producer have been currently in operation in the district. The details are given in the table below.

Table 42. Mining and Energy Investments in Hanönü District

No	License Phase	License Area (Hectare)	Name of the Mine
1	Exploration	1,994	
2	Exploration	1,999	
3	Exploration	892	
<b>Total</b>		<b>4,885</b>	
1	Detailed Exploration Period	1,998	
2	Detailed Exploration Period	1,996	
3	Detailed Exploration Period	2,000	
4	Detailed Exploration Period	1,600	
5	General Exploration Period	1,996	
6	General Exploration Period	1,816	
7	General Exploration Period	1,997	
8	General Exploration Period	1,697	
9	General Exploration Period	1,936	
10	General Exploration Period	1,049	
<b>Total</b>		<b>18,085</b>	
1	Operation	1,975	Copper
2	Operation	1,950	Copper
3	Operation	200	Slate
4	Operation	60	Sandstone (Crushed Stone)
<b>Total</b>		<b>4,185</b>	
<b>Grand Total</b>		<b>27,154</b>	

Kastamonu Provincial Directorate of Environment and Urbanization, Provincial Environmental Conditions Report, 2014

During the meeting with the Provincial Directorate of Environment and Urbanization EIA Division, we were informed that there were no companies which received EIA authorization and made EIA application in 2015.

<sup>10</sup>[http://www.tuik.gov.tr/basinOdasi/haberler/2015\\_11\\_20150312.pdf](http://www.tuik.gov.tr/basinOdasi/haberler/2015_11_20150312.pdf)

Demirci HPP, the authorization of which was granted in August 2015, is within the borders of Gökçeada. The installed power of the plant is 13 MW, and it is expected to generate 59 GWh electricity<sup>11</sup>.

There is one more dam, the construction of which has already been completed, in the district. A public availability session was held for Taşköprü dam on October 8, 2015<sup>12</sup>. The dam will generate 14 MW of power, and will allow the irrigation of 6,200 hectares of agricultural land. 5,300 hectares of land in Boyabat and Durağan districts of Sinop will be irrigated within this scope. The remaining 900 hectares to be irrigated is located in Hanönü district. Kuyuluş village in Taşköprü district and Küreçayı, Sirke and Akçasu villages in Hanönü district will benefit from the irrigation system.

During the meeting with the officials of Regional Directorate of State Hydraulic Works (DSI) in Kastamonu, we were informed that changes have been made in the dam project with the launching of GCP of Acacia Mining, which caused delays in the project planning horizon of the dam. After the planning phase, surveys will be initiated, which will be followed by the construction phase. The whole process is anticipated to take more than a decade.

Apart from the dam, DSI is building a pond to meet the irrigation requirements of Yenice village in the district<sup>13</sup>. It came to our knowledge that DSI officials submitted a proposal to include the construction of an irrigation pond for drinking and irrigation water requirements of Gökçeada and Sirke villages in the investment program. Provided that these ponds are included in the investment program, their construction is expected to take 4-5 years.

## 2.6. Education

In the assessment of educational indicators, number of students and schools in the 5 affected settlements and basic educational indicators in Hanönü district were taken into consideration.

### 2.6.1 Basic Indicators

#### a. Educational Statistics of Hanönü District

According to TUIK data, there were 399 persons at or above the age of 6 throughout the district who were illiterate as of 2013. This population group mainly consisted of women. While there were 323 women who were illiterate, the number of illiterate men was 76. The proportion of illiterate persons to the population over the age of 15 was 11%, which is quite high. The level of education in the district is rather low. The proportion of those who graduated from high school or a higher educational institution to the population over the age of 15 is 15%.

Table 43. Population by Level of Education in Hanönü District

Population by Level of Education (Age 15+, 2013)	Population	Proportion	Male	Female
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<sup>11</sup>[https://enerjigunlugu.net/demirci-hesin-kabulu-gerceklestirildi\\_14884.html#.VIWPUvnhDWI](https://enerjigunlugu.net/demirci-hesin-kabulu-gerceklestirildi_14884.html#.VIWPUvnhDWI)

<sup>12</sup><http://www.haberturk.com/yerel-haberler/haber/6478273-taskopru-baraji-halkin-katilim-toplantisi>

<sup>13</sup>[http://www.hurriyet.com.tr/yerel-haberler/kastamonu-haberleri/yenice-koyu-golet-insaati-devam-ediyor\\_198765](http://www.hurriyet.com.tr/yerel-haberler/kastamonu-haberleri/yenice-koyu-golet-insaati-devam-ediyor_198765)

<b>Illiterate</b>	399	11%	76	323
<b>Literate but did not graduate from any school</b>	397	11%	131	266
<b>Elementary school graduate</b>	1.434.	41%	723	711
<b>Elementary education graduate</b>	531	15%	308	223
<b>Graduates of secondary school or equivalents</b>	128	4%	107	21
<b>Graduates of high school or equivalents</b>	291	8%	183	108
<b>College or bachelor degree</b>	239	7%	163	76
<b>Graduate degree</b>	12	0.3%	8	4
<b>PhD degree</b>	1	0.03%	0	1
<b>Unknown</b>	57	2%	25.	32
<b>Total</b>	<b>3,489</b>	<b>100%</b>	<b>1,724</b>	<b>1,765</b>

Source: TUIK, 2016

Apart from the educational institutions in Hanönü district center, there is no educational institution in the villages. There is 1 kindergarten, 1 elementary school, 1 secondary school and 1 multi-program high school (MPHL) in the district. The secondary school also functions as a regional boarding secondary school (RBSS). The number of students at all educational levels was 471 in 2015-2016 academic year.

There are 48 pre-school, 176 elementary school and 159 secondary school pupils. The number of students per teacher is 12 for pre-school, 22 for elementary school and 13,5 for secondary school.

Table 44. Educational Indicators by Levels of Education

LEVEL OF EDUCATION	PRE-SCHOOL (Age 3-5)	ELEMENTARY SCHOOL (Age 6-9)	SECONDARY SCHOOL (Age 10-13)
SCHOOL	HANÖNÜ KINDERGARTEN	ŞEHİT FARUK KARAGÖZ ELEMENTARY SCHOOL	ŞEHİT FARUK KARAGÖZ RBSS
Number of students	37	176	159
Number of teachers	3	8	17
Number of classrooms	3	9	9
Number of sections	3	9	12
Number of students per teacher	12.3	22.	13.5
Number of students per classroom	12.3	19.5	16.2
Number of students per section	12.3	19.5	20.25
Net schooling rate	46.15%	100%	100%
Gross schooling rate	46.15%	100%	100%
Number of students in the cohort	48	176	159

Source: Hanönü District Directorate of National Education, 2015

The table below shows the number of students by grade at primary and secondary schools for 2015-2016 academic year.

Table 45. Number of Pupils at Elementary Schools by Grade in Hanönü District

NAME OF SCHOOL	ŞEHİT FARUK KARAGÖZ ELEMENTARY SCHOOL	ŞEHİT FARUK KARAGÖZ RBSS	GRAND TOTAL
1st Grade	38	-	
2nd Grade	28	-	
3rd Grade	35	-	
4th Grade	75	-	
5th Grade	-	41	
6th Grade	-	36	
7th Grade	-	50	
8th Grade	-	32	
Total	176	159	335

Source: Hanönü District Directorate of National Education, 2015

There are 99 students enrolled in high school. The number of high school student who are expected to graduate at the end of 2015-2016 academic year is 20.

Table 46. Number of Pupils at Secondary Schools by Grade in Hanönü District

NUMBER OF SECONDARY EDUCATION STUDENTS BY SCHOOLS	9th GRADE	10th GRADE	11th GRADE	12th GRADE	TOTAL
<b>Hanönü Multi-Program Anatolian High School</b>	30	24.	25.	20	99

Source: Hanönü District Directorate of National Education, 2015

47 elementary school, 47 secondary school and 37 high school students in the district benefit from mobile education.

Table 47. Information on Mobile Education in Hanönü District by Years

ACADEMIC YEAR		2013-2014	2014-2015	2015-2016
Elementary school	<b>Number Of Students Transported</b>	45	40	47
	<b>Total Number Of Students</b>	200	178	176
	<b>Proportion (%)</b>	23%	22%	27%
Secondary school (age 10-13)	<b>Number Of Students Transported</b>	53	50	47
	<b>Total Number Of Students</b>	171	162	159
	<b>Proportion (%)</b>	31%	31%	30%
Secondary education	<b>Number Of Students Transported</b>	31	35	37
	<b>Total Number Of Students</b>	81	88	99
	<b>Proportion (%)</b>	36%	39%	37%

Source: Hanönü District Directorate of National Education, 2015

A high school with 12 classrooms is planned to be built in the district. The reason of building this high school is the prediction that the population of the district will increase due to mining activities, which will in turn increase the number of students.

2 elementary and secondary schools at village/countryside are within the scope of mobile education.

#### **b. Higher Education Institutions**

There is no college and faculty of a university in the district.

#### **2.6.2 Educational Status in Affected Settlements**

According to the information obtained during meetings with the mukhtars of the affected settlements, the number of students in all levels of education except university is predicted at around 200.

Table 48. Number of Pupils in Affected Settlements

Settlements	Number of Students (As Reported by Mukhtars)
<b>Hanönü Central</b>	150
<b>Vakıfgeymene</b>	10
<b>Gökçeagaç</b>	13
<b>Bağdere</b>	6
<b>Küreçayı</b>	5
<b>Total</b>	184

Source: SRM, 2017

Apart from the educational institutions in Hanönü district center, there is no educational institution in the villages.

#### **2.7. Health**

Since statistical information on health indicators at district level are not provided in Turkey, comparisons regarding health indicators were made at provincial and national levels.

Indicators of crude mortality and infants mortality rates of the province is above Turkish average. Crude birth and total fertility rates, in turn, are below Turkish average.

Table 49. Health Indicators of Kastamonu Province

Indicators (2013)	Turkey	Kastamonu
Crude Birth Rate (%)	16.9	1.6
Crude Mortality Rate (%)	4.9	9.2
Total Fertility Rate (per woman)	2.1	1.7
Infant Mortality Rate (%)	7.8	8.9

Source: TUIK, 2014

### 2.7.1 Healthcare Facilities and Personnel

There is no hospital in Hanönü district. There is 1 public health center (PHC), 1 family health center (FHC) in the district. There are 4 beds, which are used for immediate medical response, at the PHC. 2 physicians and 3 nurses perform their duties at the FHC, while 4 healthcare professionals, 3 physicians and 1 nurse, work at the PHC.

Table 50. Number of Healthcare Facilities and Personnel in Hanönü District

Healthcare Facilities	Quantity	Personnel	Number of Beds
<b>Family Health Center (FHC)</b>	1	2 physicians 3 nurses	-
<b>Public Health Center (PHC)</b>	1	3 physicians 1 midwife 1 nurse 1 medical assistant 1 laborant technician 1 emergency dental technician	4

Source: Hanönü District Surgeon General Office, 2015

Since there is no hospital in the district, patients are transferred to the public hospital in Taşköprü district, which is at a 30 km distance. Taşköprü Public Hospital has a capacity of 50 + 25 inpatient bed availability<sup>14</sup>.

A building was constructed in the district to provide integrated healthcare services (integrated hospital), but is allocated to the use PHC and FHC since the population of the district is not large enough. Integrated healthcare services are designed by the Ministry to provide especially primary healthcare at specified locations such as preventive healthcare services, emergency health services, examination, treatment and rehabilitation services, birth, maternal and infant healthcare services, outpatient and inpatient services, surgical operations, environmental health services, medical examiner services, oral and dental care.<sup>15</sup>

In order to provide integrated healthcare services in a district, its population has to be over 9,000; nevertheless, hospitals of type E-3 can be opened at locations with a population up to 9,000.<sup>16</sup> Type E-3 hospitals are integrated district hospitals with less than 25 beds. These are health facilities where primary healthcare services are provided along with diagnostic and treatment services within the same structure.

<sup>14</sup><http://merkezi Hastane Randevu Sistemi/taşköprü-devlet-hastanesi.html>

<sup>15</sup><http://www.saglik.gov.tr/TR/belge/1-14858/saglik-bakanligina-bagli-ilce-devlet-hastanelerinde-ent.html>

<sup>16</sup><http://www.saglik.gov.tr/TR/dosya/1-71022/h/020-hastane-yatak-ve-rolleri-tescil-kriterleri.doc>

There is 1 ambulance in the district, which is steered by the 112 station in the province.

## 2.7.2 Health Information on the Affected Areas

Except the central neighborhood of Hanönü, none of the affected settlements have health facilities. The affected settlements depend on the FHC and PHC in Hanönü district center for healthcare services. When household members experience health problems, they go to the district center and then sent to the public hospital in Taşköprü district when necessary.

Besides the affected neighborhoods, villages are periodically visited by physicians. It came to our knowledge that it is intended to visit the villages at least once in a month.

We were informed that hypertension, diabetes and chronic respiratory diseases are observed more frequently.

## 2.8. Social Security

The population with social security coverage in the province in 2014 was 353,172, which accounted for 96% of the total population; when those under General Health Insurance (GHI) are excluded, this ratio falls to 86%. The ratio of pensioners under social security coverage to the total population of the province is 19%, the ratio of dependents under social security coverage is 44%, the ratio of actively employed under social security coverage to the population of the province is 23%, and the ratio of the population under GI coverage is 10%<sup>17</sup>.

Since social security information at district level is not accessible, calculations were made on the basis of social security data obtained at provincial level and projected to the district. The results of the projection are given in the table below.

Social security information regarding the province are given in the following table.

Table 51. Social Security Indicators of Kastamonu Province

Social Security Indicators of Kastamonu Province	%	Projection to 2014 Hanönü Population
<b>Ratio of the Total Population under Social Security Coverage</b>	96%	3,817
<b>Ratio of the Population under GHI Coverage</b>	10%	398
<b>Ratio of the Population Not Covered by Social Security</b>	4%	159
<b>Ratio of Actively Employed to Total Population</b>	23%	914
<b>Ratio of Pensioners to Total Population</b>	19%	755
<b>Ratio of Dependents</b>	44%	1,749

Source: Kastamonu Provincial Directorate of Social Security and SRM, 2017

As shown in the table, the ratio of pensioners in the population in Hanönü is quite striking.

<sup>17</sup>[http://www.sgk.gov.tr/wps/portal/tr/kurumsal/il\\_mudurlukleri/kastamonu\\_sosyal\\_guvenlik\\_il\\_mudurlugu/il\\_mudurlugu/tum\\_istatistikler/!ut/p/b1/ldBdC4IwFABgX5Q7Zzu5vDQxXWZiktluwJCyOoiiv5904iI6Gt3B553Z3uZZgXTu\\_JUbcpjtd-V22bW9kjBGDh9dCEA4YMKRxE6YxRRgbMDQgwuIFepjxQmA-cNBHCicTfeQCT55RDlqli-C0Pb477NT9kulrW1nlVW2DZQBilci6klF2SbMZ0e8G7\\_3n8C2gKeAZJ1-4bEBPB0IUovYPHG1PPgJBwQhx4z5avK146asGHEsbhvl6zQz2dFpdMVarjXgHOjZlt/dl4/d5/L2dBISEvZ0FBIS9nQSEh/](http://www.sgk.gov.tr/wps/portal/tr/kurumsal/il_mudurlukleri/kastamonu_sosyal_guvenlik_il_mudurlugu/il_mudurlugu/tum_istatistikler/!ut/p/b1/ldBdC4IwFABgX5Q7Zzu5vDQxXWZiktluwJCyOoiiv5904iI6Gt3B553Z3uZZgXTu_JUbcpjtd-V22bW9kjBGDh9dCEA4YMKRxE6YxRRgbMDQgwuIFepjxQmA-cNBHCicTfeQCT55RDlqli-C0Pb477NT9kulrW1nlVW2DZQBilci6klF2SbMZ0e8G7_3n8C2gKeAZJ1-4bEBPB0IUovYPHG1PPgJBwQhx4z5avK146asGHEsbhvl6zQz2dFpdMVarjXgHOjZlt/dl4/d5/L2dBISEvZ0FBIS9nQSEh/)

## 2.9 Infrastructure

### 2.9.1 Transportation

Hanönü is at 70 km distance from the city center. The district is on Sinop-Kastamonu highway. Regional Directorate of State Highways has been carrying on the expansion works of Kastamonu-Sinop highway.

According to KUZKA Development Agency data, the total length of highways in Hanönü is 23 km. This highway is being expanded within the scope of Kastamonu-Sinop highway expansion works.

According to the information obtained from the Special District Administration Directorate, 70 km of the district's road network is paved. The total length of road network is 300 km, 230 km of which is stabilized roads.

There is not any railroad transportation in the district.

Hanönü central and Vakıfgeymene neighborhoods are located in the district center. These settlements generally have asphalt roads. While most of the roads inside the neighborhoods are paved with stone blocks, dirt and stabilized sections still exist. The same goes for the 3 directly affected villages as well. Bağdere village is 3 km, Gökçeğaç is 7 km and Küreçayı is 9 km away from the district center. Even though the roads between the villages and the district center are asphalt, most of the roads connecting the neighborhoods of villages are still dirt roads.

Table 52. Distances of Affected Settlements to the District Center

Settlements	Hanönü (km)
<b>Bağdere Village</b>	3
<b>Gökçeğaç Village</b>	7
<b>Küreçayı Village</b>	9
<b>Hanönü Central Neighborhood</b>	0
<b>Vakıfgeymene Neighborhood</b>	0

Source: EIA Report, 2014

### 2.9.2 Environmental Infrastructure

#### a. Drinking water

All 3 neighborhoods (Vakıfgeymene, Hanönü central, Gelinbükü) in the district center have water supply network.

Bağdere village is connected to the water supply network as well.

Gökçeğaç village, on the other hand, has a 50-tonne water reservoir. The village is connected to water supply network.

Küreçayı also has a 50-tonne water reservoir. The mukhtar pointed out that they chlorinate the reservoirs themselves. The village is connected to water supply network.

There is no village in the district that lacks drinking water.

#### **b. Sewerage system**

According to the information obtained from Hanönü District Municipality, in Vakıfgeymene and Gelinbükü neighborhoods, which are located in the district center, cesspools are used as sewerage. Only in Hanönü central neighborhood has a sewerage system.

According to the information given by the Special District Administration Directorate, sewerage systems are available in Gökçeagaç and Küreçayı villages. The other villages that have sewerage systems in the district are Sirke, Gökbelen, Yeniköy, Yeniboyundurcak and Akçasu.

Hanönü Municipality plans to build additional sewer lines. Special District Administration Directorate, in turn, is planning to build sewerage system in Bağdere.

#### **c. Wastewater treatment**

There is no wastewater treatment facility in the district. Hanönü Municipality plans to build a wastewater treatment facility, which is decided to be physical.

As of 2013, there is not any wastewater facility in operation in the province.

#### **d. Solid Waste**

In 3 neighborhoods affiliated to the district center, garbage collection services are rendered by Hanönü Municipality. According to 2014 data of the Provincial Directorate of Environment and Urbanization, the amount of garbage collected in all seasons was 10 tonnes. The composition of garbage is mainly organic. The garbage collected are stored irregularly. The approximate surface area of the dumpsite is 7,000 m<sup>2</sup>, and the estimated volume of waste is 15,000 m<sup>3</sup>. The dumpsite is at the river bank and next to the cemetery. It is reached through a 150 meters long dirt road. The land that is used as dumpsite belongs to the Treasury. As a refuse reclamation method, the transfer of garbage to Taşköprü is prescribed. Medical wastes are collected by a private company.

#### **2.9.3 Other Infrastructure (Electricity, Communication, Housing etc.)**

According to “Population and Housing Survey” prepared by TUIK in 2011, the number of households residing in dwelling houses in the province is 105,000. The average number of stores is 3.2. 75% of the households are homeowners, which is higher than the Turkish average.

Table 53. Housing Indicators of Kastamonu Province

Housing Indicators	Kastamonu	Turkey	Rank of Kastamonu
Homeowner Households (%)	75	67.3	24
Number of Storeys	3.2	4	
Number of Households Residing in Dwelling Houses (Thousand)	105	19.454	

<b>Average Number of Rooms in Houses</b>	3.6	3.5	
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Source: TUIK, 2011

According to information obtained from Hanönü Municipality, the number of authorized buildings, construction of which is completed, in the district is 260. In the recent year (January 1, 2015 - November 17, 2015) the number of buildings under construction was 8.

According to information obtained from Special District Administration, 10 individuals received home numbers within last year.

According to EIA Report, 49% of the houses in affected areas are reinforced concrete, 25% are wooden, 5% are mud-brick, and the remaining houses are in various forms that are categorized as other. 80% of houses are heated by central heating system, whereas 20% are heated by log burners.

Hanönü Municipality stated that they are planning to build a recreational area, a fitness park, a 30-hectare cemetery, social facilities, commercial and residential buildings in the district. KUZKA Development Agency provided a financial support of 560,000 TL for the construction of the fitness park project.

Hanönü district has a grid circuit, telephone and internet infrastructure. On the other hand, there are areas in Gökçeagaç village where mobile phone signals cannot be received.

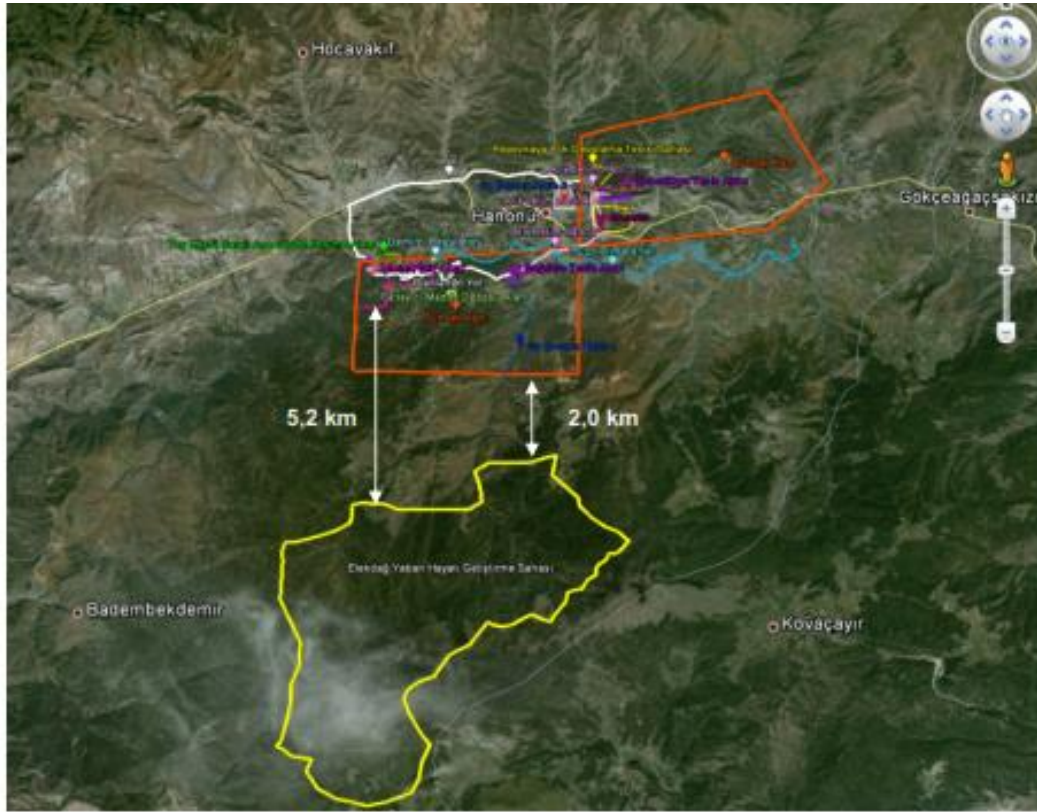
## 2.10. Cultural Heritage

Within the project area, there is no national park, wildlife protection area, wetland, cultural or natural properties within the scope of Code of Protection of Cultural and Natural Properties, protected area, cultural, historical or natural area holding the status of cultural and natural heritage or registered cultural property.

The cultural heritage study has been completed by Reggio. In this study no impact on cultural heritage have been identified.

According to Provincial Directorate of Culture and Tourism data, there are no popular touristic or cultural sites in Hanönü district. The district center hosts only the shrine of Sheikh Şaban-ı Veli, a historical-religious figure.

Map 4. Project Area and Wildlife Protection Area



Source: EIA, 2014

### 2.10.1 Non-Material Cultural Properties, Festivals and Festivities

Every year in the first week of May, Sheikh Şaban-ı Veli Memorial Day is celebrated in the district. Moreover, in the first week of October every year, a funfair is established.

There are no non-material cultural properties (which bear sacred, cultural etc. significance) in the villages affected from the project. Celebrations and activities held in the district center are carried out in Hanönü central neighborhood, which is the largest neighborhood of the district.

### 2.11. Vulnerable Groups

Both IFC and EBRD are concerned to protect vulnerable people. Vulnerable people are individuals and groups that by virtue of certain characteristics may be more severely impacted or require special attention from a project. They may also have more limited capacity to take advantage of project benefits. The disadvantaged or vulnerable status is context specific, and typically may stem from an individual's or group's race, color, sex, language, religion, political or other opinion, national or social origin, property, birth, or other status. The client should also consider factors such as gender, age, ethnicity, culture, literacy, sickness, physical or mental disability, poverty or economic disadvantage, and dependence on unique natural resources<sup>18</sup>.

Vulnerable individuals and/or groups may also include, but not be limited to, people living below the poverty line, the landless, the elderly, women and children headed households,

<sup>18</sup>[http://www.ifc.org/wps/wcm/connect/59fbc7804d8905ab8b94bf48b49f4568/PS\\_Turkish\\_2012\\_Full-Documents.pdf?MOD=AJPERES](http://www.ifc.org/wps/wcm/connect/59fbc7804d8905ab8b94bf48b49f4568/PS_Turkish_2012_Full-Documents.pdf?MOD=AJPERES)

refugees, internally displaced people, ethnic minorities, natural resource dependent communities or other displaced persons who may not be protected through national legislation and /or international law<sup>19</sup>.

Within the project area, there are no ethnic and religious groups with minority status, landless people, refugees, internally displaced groups, natural resource dependent communities or other displaced persons who are not protected through legislation.

Kastamonu province has the second oldest population in Turkey. There are many people among the vulnerable groups who can be considered within the elderly category. The proportion of the population over the age of 50 in the district is 48%. Hence, in the households at settlements affected from the project, there are many individuals older than 50 years of age. The most important area of influence related with the elderly is about the quality of life.

Besides that, there are households that receive support from SASF because of their unfavorable financial situation. Old age pensions allotted to individuals older than the age of 65 is in the first place among the allowances granted by SASF. 136 of the monthly allowances granted to 274 households are old age pensions.

Assessing in terms of poverty, the poor hold the first place among vulnerable groups. According to poverty survey conducted by TUIK in 2013, the ratios of persons with income less than 2.15 USD and 4.3 USD per person were 0.06% and 2.06% respectively<sup>20</sup>.

Table 54. Poverty in terms of Per Capita Income in Turkey

Poverty in terms of Per Capita Income (2013)	Turkey (%)
<b>2.15 USD/day</b>	0.06%
<b>4.3 USD/day</b>	2.06%

Source: TUIK, 2013

Once again, according to income and living conditions survey conducted by TUIK in 2014, average annual equivalent household disposable income in Turkey was estimated as 14,553 TL. The poverty rate in the region estimated according to poverty line calculated in terms of 50% of median equivalent household disposable income is in 8.9-10.7% interval<sup>21</sup>.

Based on the income test results obtained within the framework of general health insurance, poor households receive various in-kind and financial support from SASF, and these households are allowed to benefit from healthcare services within the scope of GHI. The GHI system was introduced in January 2012. In order for an individual to benefit from GHI support, the per capita income of individuals who reside in the same house should be less than 303 TL. While 199 persons applied to GHI support in 2012, this figure was 125 as of the end of October 2015.

Table 55. GHI Applications by Years in Hanönü District

<sup>19</sup><http://www.ebrd.com/downloads/research/policies/esp-final.pdf> (Article 11, footnote 8)

<sup>20</sup><http://www.tuik.gov.tr/PreHaberBultenleri.do?id=16204>

<sup>21</sup> <http://www.tuik.gov.tr/PreHaberBultenleri.do?id=21824>

Type of GHI Application	2012	2013	2014	2015
<b>G0</b>	127	35	44	78
<b>G1</b>	70	15	24	42
<b>G2</b>	2	4	3	5
<b>Total</b>	<b>199</b>	<b>54</b>	<b>71</b>	<b>125</b>

Source: Hanönü SASF, 2015

700 households in the district have SASF files, which corresponds to a population of approximately 2,000 persons.

District SASF Directorate shared information on the population residing in the affected settlements that is within the scope of GHI and benefit from SASF supports. According to this information, total number of households receiving old age pension (194 TL) is 136, number of households receiving disability allowance (305 TL) is 61, number of households receiving disability career allowance is 66, and the number of households receiving allowance for having women (widow) as the householder (250 TL) is 66.

Table 56. Data on Persons Receiving Monthly Payment Pursuant to Law No. 2022 in Hanönü District	
<b>Number of Active Households Receiving Disability Allowance</b>	61
<b>Number of Active Households Receiving Old Age (Age 65+) Pension</b>	136
<b>Number of Active Households Receiving Disability Carer Allowance</b>	11
<b>Number of Households with Women (Widow) as Householder</b>	66
<b>Total</b>	<b>274</b>

Source: Hanönü SASF, 2015

There are persons in the district who receive regular support from SASF other than allowances. The number of these persons by settlements are given below.

Table 57. Number of Persons Receiving SASF Aids in Hanönü District

Directly Affected Settlements	Number of Persons Receiving SASF Aid
<b>Hanönü Central</b>	52
<b>Vakıfgeymene</b>	3
<b>Bağdere</b>	9
<b>Gökçeagaç</b>	10
<b>Küreçayı</b>	8
<b>Total</b>	<b>82</b>
<b>Other Settlements in Hanönü</b>	<b>Number of Persons Receiving Aid</b>
<b>Akçasu</b>	1
<b>Aşağıcakırçay</b>	4
<b>Bölük yazı</b>	9
<b>Çaybaşı</b>	5
<b>Demircimüezzın</b>	8
<b>Hocavakıf</b>	13
<b>Kavak</b>	9
<b>Kayabaşı</b>	13
<b>Sarıalan</b>	7

<b>Sirke</b>	<b>3</b>
<b>Yeniboyundurcak</b>	<b>9</b>
<b>Yenice</b>	<b>8</b>
<b>Yeniköy</b>	<b>5</b>
<b>Yılanlı</b>	<b>14</b>
<b>Yukarıçakırçay</b>	<b>4</b>
<b>Total</b>	<b>112</b>
<b>Grand Total</b>	<b>194</b>

Source: Hanönü SASF, 2015

In order to identify the vulnerable groups to be adversely affected due to the acquisition of private lands within the scope of the project, comprehensive interviews with the households whose lands are affected or acquired should be conducted.

Moreover, when women and schoolchildren are included among the vulnerable groups, it is seen that there are 1,150 women, 184 students, 579 persons over the age of 65, and 82 persons regularly receiving SASF aid in the affected areas.

Table 58. Information on Vulnerable Groups in Affected Settlements

Directly Affected Settlements	Female Population in 2014	Number of Students (As Reported by Mukhtars)	Approximate Elderly (Age 65+) Population	Number of Persons Regularly Receiving SASF Aid	District Total
<b>Hanönü Central Neighborhood</b>	876	150	445	52	Disability Allowance 61 persons
<b>Gökçeagaç Village</b>	90	13	42	3	Disability Carer Allowance 11 persons
<b>Küreçayı Village</b>	82	5	40	9	Old Age Pension 136 persons
<b>Bağdere Village</b>	57	6	29	10	Woman Householder 66 persons
<b>Vakıfgeymene Neighborhood</b>	45	10	23	8	
<b>Total</b>	<b>1,150</b>	<b>184</b>	<b>579</b>	<b>82</b>	<b>274</b>

Source: Hanönü SRM, 2017

## 2.12. Social Component of the Area of Influence and Present Social Conflicts

### a. Social Components of Settlements

The people living in the 5 settlements directly affected from the project are Sunni Muslims and have a homogenous cultural background. There is a mosque in each settlement.

### b. Present Social Conflicts

There is no existing conflicts between the settlements or within the settlements in Projects Aol.

### Chapter 3. Social Impact Assessment

The EIA Report for the “Project on Increasing the Capacity of Copper Mine, Concentration Plant, Tailings Storage Facility (TSF) and Batch Plant” to be carried out by Acacia Mining İşletmeleri A.Ş. was drawn up, and “EIA Approval Certification” of the Ministry of Environment and Urbanization Decision No.3065 of 03.07.2013 was received. Since the General Directorate of State Hydraulic Works (DSİ) plans to build Taşköprü Dam within the area where copper mining is planned, it was decided that copper mine should be operated as an underground mine.

However, pursuant to subsequent assessments of competent authorities, as the copper deposit in the region is more profitable than Taşköprü Dam, upon the unanimous decision of the board on 04.09.2013 and the consent of General Directorate of DSİ, it was decided to shift the axis of Gökırmak - Taşköprü Dam by 2 km. Pursuant to this decision, it was decided to change the project into an open pit mining project to be conducted at the area where it was planned to extract copper through underground mining.

The surveys carried out by Acacia Mining İşletmeleri A.Ş. indicated that it will be more profitable to mine in the area through open pit mining, which led to the decision of increasing the capacity of open pit mining operation.

Within the scope of this project, it is planned to mine to extract run-of-mine ore from the 114 ha of open pit mining site. To this end, in order to allow the benches on the walls of the pit to be secure, the slope angles of the benches to be formed properly, to ensure the safety of the open pit mine before the production of the run of mine ore, and to provide room for the diversion of Gökırmak river, MİGEM allocated the 12.39 ha of land adjacent to the licensed area to AcaciaMining

In order to dump the overburden/waste (decoupage/stripping) to be generated during the operation of the mentioned open pit mining, Çorakoğlu Waste Rock Dump Area with a size of 199 ha, and to temporarily stock the concentrate to be extracted from the mine, a closed concentrate storage area with a size of 1.70 ha have been planned. Furthermore, two Topsoil Storage Areas with sizes of 2.6 ha and 2.19 ha respectively will be used within the scope of the project in order to store topsoil to be stripped before launching overburden stripping operations to be used after mining operation. In addition, an administrative-social building area of 1.17 ha to be used for satisfying the daily needs of workers, a core shed area of 0.4 ha, will be used. Moreover, as the copper ore will be extracted with open pit mining method, and processed in the plant, the tailings will be pumped to the Kepezkaya tailing storage facility.

Since Taşköprü Dam was shifted 2 km to the west pursuant to a Council of Ministers Decision, there has been a change in the entire design of the project, hence in the degree of its impacts. Pursuant to the alteration, it was decided to carry on the project as an open pit rather than an underground mine, and land acquisitions were made accordingly. Hence, changing the location of Taşköprü Dam was an important factor in the specification of the current design.

In order to identify the social impacts, meetings were held with communities and stakeholders of local organizations between October 26-28, 2015, and afterwards, in the light of

information obtained from the field, the second field visit was carried out on November 16-20, 2015. Project's area of influence was defined in the second field visit, interviews with key stakeholders in Kastamonu province apart from those in Hanönü district were conducted, and the framework of the impact assessment was drawn having met women affected from the project as well as workers employed in the project.

Within the context of meetings held so far, interviews were conducted with 34 organizations in total, 65 persons (35 male, 30 female) from local communities, and 12 persons (9 male, 3 female) among local employees.

The proposed measures to be taken as a result of the social impact assessment will be finalized after the workshop to be held with stakeholder representatives in Hanönü district.

The following chapter discusses the socio economic impacts of the project using the methodology described in Chapter 1. The Project is analysed over the life of the Project: Construction and Operation phases.

This section is a summary of identified potential social / socio-economic impacts that might occur during Project construction and operation phases. The potential impacts are presented in summary in Table 96. Summary table of identified and residual impacts.

The impacts are organized under following categories;

- Impacts on population
- Impacts on Economy
- Impacts on Land and other assets
- Impacts on Education
- Impacts on Healthcare
- Impacts on community health and safety
- Impacts on infrastructure and quality of life
- Impacts on cultural heritage
- Impacts on vulnerable groups
- Impacts on Social conflict and tensions

### **3.1. Impacts on the Population**

#### **3.1.1 Population characteristics within project impact area**

There are 5 directly affected settlements from the project, 2 of which are neighborhoods and 3 are villages. In addition to this, there are affected sub-districts affiliated to these settlements.

There are 2 districts affected from the project, which are Hanönü, where the project will be carried out, and the neighboring Taşköprü district, which is at 30 km distance to Hanönü. In comparison to Hanönü district, Taşköprü district has significant advantages due to its economic and social resources. The most prominent of these advantages is the fact that Taşköprü has better accommodation and housing opportunities than Hanönü district.

Table 59. Demographic Information on and Number of Households in Affected Settlements

No	Settlements Affected from the Project	Population (2014)	Estimated Number of Households
1	Hanönü Central Neighborhood	1,717	600
2	Gökçeada Neighborhood	161	100
3	Küreçayı Village	154	45
4	Vakıfgeymene Neighborhood	88	40
5	Bağdere Village	112	70
6	Hanönü District	3976	1473
7	Taşköprü District	38,775	11,100

Source: SRM, 2017

The population in settlements affected from the project and in Hanönü district displays a tendency of ageing. Hence, we learned that close relatives (children, grandchildren etc.) of household members visit their villages or neighborhoods during summer. However, these are short-term visits which does not exceed one month; so, compared to winter, the population does not increase to a great extent during summer. This was also confirmed in the interviews with the Mayor, mukhtars and community representatives.

According to TUIK's 2014 population data in terms of age groups, the ratio of population over the age of 50 was 48%. **All interviewed stakeholders characterized the decline in and the ageing of the population as a serious factor affecting the future of the district.** The gradual ageing of the population also poses a risk to the sustainability of forestry activities. Indeed, the ages of members of 13 forestry cooperatives present in the district vary between 40 and 60.

Along with Hanönü district, which has an ageing population, both during its construction and operation phases, the project will have impacts on Taşköprü district and the affected areas in terms of population movements.

### 3.1.1.1 Population Impacts during Construction Phase

#### *Employment impact on population*

The Project construction phase is on going currently employing 488 people and the peak construction phase workforce will be 798 people for a period of three months, followed by the operational phase workforce of 544 people. Local employment will be prioritized; PAPs with necessary skills and experience who live in the Project Area and are impacted directly by the Project will be given priority for job opportunities in line with AMI local employment procedures.

Project's local employment opportunities are expected to decrease the outmigration from Hanonu, and keep the young population in the District. While construction phase employment is limited to two years, PAPs employed by the Project during construction phase will improve their skill set, and hence may be utilized during operation phase for long-term employment.

During the construction phase, unskilled and skilled labour force was temporarily employed by the Project. While local employment was prioritized during construction phase; separate workers' accommodation was provided on site for workers in camps, and skilled labour was housed in lodging buildings and guest houses. A separate influx management plan (IMP<sup>22</sup>) was prepared in order to depict long term potential population impacts in the Project area.

*Land acquisition impact on population:* A total of 4,122.3 decares of land was acquired<sup>23</sup> for Project's facilities that include open pit area, processing plant, tailings facility, waste dumpsites, access roads and transmission lines. Private land acquisition impacts 117 PAPs only 20 of which are permanent residents. Land acquisition from communal assets impacts 3 settlements with a total population of 363 people. Majority of land acquired for the Project is forestland, and PAPs have stated that with 99 percent of forest resources remaining, they will continue to generate steady income from forestry activities. Pastureland acquired by the Project may have adverse economic impact, since pastureland is critical for livestock production. All private land acquired by the Project was acquired through willing buyer seller negotiations. Most of the PAPs in the Project area are temporary residents who use their village home as a summer/retirement home. While loss of land may not lead to economic resettlement, close proximity to open pit site may lead to decline in population for Sepetcioglu settlement<sup>24</sup>. If in future phases Project requires further land acquisition that involves resettlement, the Project will prepare a Resettlement Action Plan according to EBRD PR 5. Project's land acquisition and commitment to SIA and LRP will be monitored internally and externally. During monitoring and evaluation of the Project status of users will be monitored in order to make sure the impact on users if any are mitigated.

### 3.1.1.2 Population impacts during operation phase

**The operation phase** is expected to take 12 years. Approximately 544 people<sup>25</sup> will be employed during operation phase, and employees from directly affected settlements will be given priority for employment. Hence, the project will assume an important function also during operation phase in keeping the local work force in the district.

Currently the experience is, in particular of young men with secondary levels of education, to leave the Project Area (Hanonu district) to seek work or take seasonal or contract employment when this is available. Nevertheless, an increase occurs in the level of population residing in the residential area where project operations are carried out in the construction and operation phases. Since the operation phase lasts longer and the labour force is more

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<sup>22</sup>Please see Gokirmak Copper Mining Project Influx Management Plan 2016

<sup>23</sup>Project's land acquisition is analysed in detail at the Livelihood Restoration Plan. Land acquisition includes all land purchased/ leased/ rented in order to fulfil Project's land requirements. Please refer to LRP section 4 for detailed land acquisition data.

<sup>24</sup>PAPs living in Sepetcioglu settlement use their homes as summer homes for relaxation and being in nature. Mining activities will lead to disruptions to their routine due to blastings, increased traffic, visual impact and dust. Grievance records illustrate that these PAPs have already filed complaints about blastings and noise.

<sup>25</sup>Influx management plan provides details on Project's labour needs

stationary, the analysis of migration caused by the project and the measures to be defined are usually more comprehensive and significant for the operation phase.

The population increase that the project may lead to might create a negative social impact in social and environmental fields. Project's Influx management plan covers the measures to be applied regarding the negative impacts identified.

Employment of 544 persons implies the need for 500 households. This population will be required to reside in Hanönü district at the beginning, and then in Taşköprü district depending on the conditions. Thinking in terms of nuclear family of 4, 500 households mean 2,000 people, who will stay there for 12 years. Considering the fact that the population of Hanönü district was 3,865 in 2016, the project will ensure a population equivalent to almost half of the present population of the district to reside in the region. In case accommodation and housing opportunities in Hanönü district are not sufficient, these households will settle in the closest district, i.e. Taşköprü, and reside in this district. The population growth that will take place in Hanönü district will lead the budgetary allocations of Hanönü Municipality to increase, which will in turn help the municipal services to improve.

The project has the potential to trigger reverse migration. During the interviews conducted with 12 Acacia Mining employees, it was established that 2 employees returned to the district for work and intend to stay in the district permanently unless working conditions change.

Increased population may also have positive impact on local economy and local procurement and increase the attractiveness of Hanonu to retain the new influx. It can be assumed that employment of such large number of people at the facility as well as the positive effects of other socioeconomic activities to be carried out after mining operations start such as local procurements, auxiliary services etc. on the district's economy will contribute to reduce the rate of migration from the district.

Table 60. Positive and Negative Impacts for Operation phase

Positive Impacts	Negative Impacts
Keeping the population at the locality	Concerns related with the displacement of households (Limited with the affected neighborhoods)
Increase in local employment	Concerns of involuntary resettlement due to adverse effects on the means of subsistence
Improving/increasing accommodation and housing opportunities	The possibility of households (Limited with the affected neighborhoods) adversely affected from construction and operation activities to resettle due to negativities such as dust and noise levels
Population growth	
Reverse migration	
Greater budget of Hanönü Municipality	
Improvement of municipal services	
Rejuvenation of the population (reduction in ageing tendency)	

Source: SRM, 2017

Some of the PAPs consulted during fieldwork have voiced their concern regarding potential adverse impacts of the Project that could enforce them to resettle/migrate. PAPs primarily in **Vakıfgeymene neighborhood**<sup>26</sup> and **Bağdere**, as well as in Küreçayı and sub-districts of Hanönü Central Neighborhood, felt that their livelihoods may be at risk due to Project's construction and operation impacts such as dust, noise etc. Tailings storage area will be built near the borders of Gökçeada village and in Yılanlı neighborhood, this facility will be quite distant from the village even from a bird's-eye view, and the potential impact of the works to be carried out to lead households to migration is very weak because of its geographical location.

Since the populations of Hanönü central neighborhood, Hanönü district and Taşköprü district are anticipated to increase during construction and operation phases, positive impacts related with population growth are expected in these areas.

Table 61. Impacts by Settlements

Main Settlements	Sub-districts	Population Growth		Risk of Population Decline	
		Construction	Operation	Construction	Operation
<b>Hanönü Central Neighborhood</b>	Center	X	X	-	-
	Vakıf			X	X
	Yılanlı	-	-	-	-
<b>Küreçayı Village</b>	Aşağıküreçayı	-	-	X	X
	Küpeli	-	-	X	X
<b>Vakıfgeymene Neighborhood</b>	Dereköy	-	-	X	X
	Sepetçioğlu	-	-	X	X
	Geymene	-	-	X	X
<b>Bağdere Village</b>	Bağdere	-	-	X	X
	Çaylı	-	-	X	X
<b>Gökçeada Village</b>	Nefsigökçeada	-	-	-	-
<b>Hanönü District</b>	District Total	X	X	-	-
<b>Taşköprü District</b>	District Total	X	X	-	-

Source: SRM, 2017

## Proposed Mitigations

- *Population increase:*
  - Project has prime emphasis on local employment. The GCP has an *Human Resources policy* that emphasizes local employment and defines local employment targets. These targets are shared with subcontractors, and contractors and sub-contractors are expected to hire locally. Yet, in cases where local capacity is limited for skilled labour, Project's may employ workers from outside Kastamonu province.
  - In order to mitigate any adverse impact for population increase, the Project has prepared an Influx Management Plan that identifies necessary measures to be taken the workforce load. The influx management plan lays out the figures and responses to increase in the workforce, any additional pressure to local resources/infrastructure and discusses the impacts of migrant workforce with the community.

<sup>26</sup>Vakıfgeymene neighborhood involves Sepetçioğlu, Dereköy and Geymene localities.

- While the blue collar workers have a designated camp site built according to EBRD/IFC Guidance Document on Workers Accommodation, the white collar employees have an option to choose their settlement. During the construction phase, and operation phases workers from outside the region will reside in the workers' camp. As for the white collars, those wishing to reside in Taşköprü or Kastamonu will be provided with a shuttle bus service. The workers camp to accommodate workers during the construction phase should be large enough for 340 workers on average.
- Hanönü District Mayor welcomes population increase, and encourages Project's employees to settle in Hanonu as opposed to Kastamonu central district. Consultations with PAPs and stakeholders reveal that population increase of Hanonu may lead to a higher allocation of budget and better infrastructure services. Yet, due to better education and healthcare facilities, white collar employees may prefer to live in Kastamonu. The Project will emphasize the importance of preferring local housing to all employees, in order to support District's growth.
- *Population decrease:*
  - Households affected from the Project have raised concerns for potential displacement due to Project's activities, impact and/or future potential land acquisition. Project has taken necessary measures to mitigate environmental impacts such as dust, noise and traffic which is explained in detail in EIA Volume 1. Stakeholders will be informed regularly on environmental health and safety; and Project progress. Regular consultations will be held with PAPs to discuss their concerns and respond to their grievances in line with Stakeholder Engagement Plan (SEP). There is an "Advisory Committee" established that includes mukhtars of all Project affected settlements in order to discuss PAPs concerns, share Project information, resolve Project related issues, enhance PAPs engagement with the Project. If the Project plans further land acquisition, the land acquisition will be conducted according to EBRD PR 5. Furthermore, should the Project lead to physical resettlement, a Resettlement Action Plan will be prepared prior to resettlement according to EBRD PR 5.

The proposed measures accordingly are;

- Implementation of the Influx management plan,
- Implementation of the HR Policy and procedures,
- Implementation of **Stakeholder Engagement Plan**, that defines engagement tools (banners, leaflets, meetings, information board, home visits etc.), engagement frequency, and responsible parties
- to **inform the stakeholders** on land acquisition process within the scope of the Stakeholder Relations Management Plan,
- to **designate environmental measures** that will reduce and/or eliminate the risks on public health and safety, and quality of life, to put these measures into practice and to explain them to the public,

- to invite the stakeholders (PAPs, opinion leaders, Public officials) for a site visit during operation phase in order to show production process and mitigation measures applied by the Project,
- to give priority to Hanönü district, especially the 5 settlements affected from the project, in employment policy,
- to establish a **grievance/claim management mechanism** and to publicize the use of grievance mechanism to all PAPs and stakeholders

### 3.2 Impacts on the Economy

Project's impacts on local economy consists of impacts on *local employment, local economy and sources of income*.

#### a. Local Employment

##### *Construction phase*

The population impact section discussed the impact of local employment on population dynamics of the district. Local employment's main impact will be providing PAPs with regular income and social security. Construction works of the project have started in 2015 and recruitment process has been ongoing. During the peak of the construction phase (December 2017-February 2018), 798 people is planned to be employed. While employment was 107 persons in January 2015, it climbed to 353 in April 2017 and is 538 as of August 2017.

Table 62. Employment by Months, 2017

Employment, April 2017	Jan. 2015	April 2017	August 2017
Total	107	353	538

Source: Acacia Mining, 2017

**During construction phase**, the target was to employ 90 percent of unskilled labour force locally. Yet, despite efforts; only 47% of the workers were employed locally. Main reason for low local employment rates is limited labour workforce and aging population. The Project giving priority to employment from Project affected settlements, followed by Hanonu District, Taskopru District and then Kastamonu Province. Below table illustrates local employment figures (Table 63). Female employment is low at overall 6 percent, AMI aims to increase local women's employment in the Project.

Table 63. Employment by Settlements in Hanönü

	Female	Male	Total Number	% total
<b>Total Number of Employees</b>	<b>28</b>	<b>443</b>	<b>471</b>	<b>100%</b>
<b>Total Number of Employees from Project Site (LOCAL)</b>	18	207	225	47%
<b>Total number of employees from project directly affected villages</b>	9	36	45	10%
<b>Other Hanonu villages</b>	8	51	59	13%
<b>Taşköprü</b>	1	56	57	12%
<b>Kastamonu and other districts</b>	0	62	62	13%

<b>Total Number of Employees from Other Provinces</b>	10	236	246	<b>52%</b>
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Source: Acacia Mining, 2017

During the interviews conducted with mukhtars and employees, it was revealed that Acacia Mining representatives informed the people in affected areas that they will give priority to households affected from land acquisitions in employment, that the priorities set in relation to local employment were announced locally and shared with all mukhtars.

On the other hand, as local recruitment has been insufficient so far, priority is given to Taşköprü district in employment. The population of Taşköprü district was 39,847 in 2016, and it is the third largest district of Kastamonu province in this respect. Being close to the project area and Taskopru district has the potential to fulfill necessary work force. Furthermore, additional bus services to Kastamonu allow room for provincial level employees to seek employment in the Project. Hence, PAPs are doubtful about priority to local employment from Directly impacted settlements, since Project's past employment figures does not fully represent strong adherence to targets. Moreover, a key element for local employment is fair compensation. In order for local employment to benefit local economy, compensations need to be fair, and equal pay for equal job should be reflected across positions regardless of where employees are based or gender. Local employees have voiced concerns over lower salaries based on minimum wage compared to higher salaries for employees doing the same jobs from out-of-province. Hence, any salary/compensation difference for payments to local employees versus out of province employees, may have adverse impacts on Project's relations with PAPs.

There has been a dynamism in the employment of local and regional work force in the project. During the interviews with the representatives of Acacia Mining company in the locality, we were informed that the job applications they received exceeded a thousand.

The subcontractors of Acacia Mining in the construction phase, Atilla Makine İnşaat and KöseoğluMadencilik started to provide on-site training courses pursuant to protocols signed with Hanönü Public Training Center (PTC). However, these courses do not include people residing in Hanönü only, but rather include everyone who wish to participate in the trainings. It is important to develop vocational training programs in cooperation with PTC in order to improve knowledge and skills. Yet, it should be taken into account that the priority will be given to affected settlements and Hanönü district.

4 vocational training courses have been organized with PTC so far and 54 persons received vocational training certificates in total. While 3 of the trainees were from the affected areas, the number of trainees from Kastamonu who participated in the courses was 41. The number of trainees from other provinces was 13.

Table 64. Information on Vocational Courses Held in Collaboration with Hanönü Public Training Center

<b>Number of courses</b>	<b>4</b>
<b>Number of trainees</b>	<b>54</b>
<b>Trainees from affected areas</b>	<b>3</b>
<b>Trainees from neighboring areas</b>	<b>31</b>
<b>Trainees from local districts</b>	<b>7</b>
<b>Trainees from provinces other than Kastamonu</b>	<b>13</b>

Source: Hanönü SRM, 2017

The details of vocational trainings provided within the scope of the protocol signed are given below.

Table 65. Information on Trainees Attending to Vocational Courses Held in Collaboration with Hanönü PTC by Settlements

Subject	Date	Settlements	Trainee
<b>Operating Construction Equipment (Lifting and Loading [Forklift] Machinery)</b>	27.04 – 02.6.2013	Ayancık	1
		Daday	1
		Kargı	1
		Kastamonu	1
		Taşköprü	10
		Vakıfgeymene	1
		Total	15
<b>Course on Steel Reconstruction in Hazardous and Highly Hazardous Tasks</b>	05.09 – 11.10.2015	Durağan	1
		Hanönü	1
		Kadıköy	1
		Samsun	2
		Taşköprü	1
		Taşlıoluk	1
<b>Course on Reinforcement Steel, Mold Making and Roofing in Hazardous and Highly Hazardous Tasks</b>	11.05 – 24.05.2015	Total	7
		Domaniç	5
		Horst	1
		Taşköprü	4
<b>Solid Fuel Furnace Stoker</b>	21.03 – 11.04.2015	Total	10
		Bağdere	1
		Boyabat	2
		Demircimüezzın	1
		Devrek	1
		Durağan	1
		Gökbelen	1
		Hanönü	1
		Kastamonu	1
		Ordu	1
		Sivrihisar	1
		Taşköprü	10
		Yılanlı	1
		Total	22.

Source: Hanönü PTC, 2015

### Operation Phase

544 employees are expected to be employed for 12 years during **operation phase**. It is important to sustain the priority given to local employment in construction phase during the operation phase as well. Moreover, unskilled local labour pool utilized by sub-contractors during construction phase, can be hired for long-term employment during operation phase. As the local labour force changes from unskilled to skilled labour, long-term employment offered by the Project will allow transferrable skills to develop for these PAPs. Improved skills will translate to higher incomes for these PAPs and improved livelihoods.

Positive impacts are expected on local employment in Hanönü and Taşkoprü districts, including all affected settlements except Gökçeagaç village due to its demographic characteristics, work force and current situation.

Table 66. Positive and Negative Impacts

Positive Aspects	Limitations
Employment in affected settlements	The lack of local work force at sufficient amount and with necessary skills
Giving priority to affected areas and households in employment	
Organizing training courses to improve occupational skills in cooperation with PTC	
Inclusion of available work force in the district to the project	
The potential to attract work force to the district through reverse migration	

Source: SRM, 2017

Impacts of local employment by settlements are given in the table below.

Table 67. Impacts by Settlements

Main Settlements	Sub-districts	Local Employment	
		Construction	Operation
<b>Hanönü Central Neighborhood</b>	Center	X	X
	Vakıf	X	X
	Yılanlı	-	-
<b>Küreçayı Village</b>	Aşağıküreçayı	X	X
	Küpeli	-	-
<b>Vakıfgeymene Neighborhood</b>	Dereköy	X	X
	Sepetçioğlu	X	X
	Geymene	X	X
<b>Bağdere Village</b>	Bağdere	X	X
	Çaylı	X	X
<b>Gökçeagaç Village</b>	Nefsigökçeagaç	-	-
<b>Hanönü District</b>	District Total	X	X
<b>Taşköprü District</b>	District Total	X	X

Source: SRM, 2017

## b. Local Economy

The impacts of the project on the local economy have become visible even before the construction works reached to their peak. Expected changes in local economy are reflected in emergence of a housing market(housing/real estate), increased capacity in services sector, and impact of Project's local procurement.

### **Construction Phase Local Economy Impacts**

*Impacts on real estate and construction sector*

During construction phase, rents have started to increase owing to the project. During fieldwork it was observed that rental prices of apartments, which used to be rented out for 200 TL previously have risen to 400-500 TL.

The district lacks sufficient housing stock. Hence, taking both construction and operation phases of the project into account, *construction of new housing units has been initiated*. The major reason of building new housing units is the idea that these houses would be sold and/or rented to people who will be employed in the project. Mayor of Hanönü informed us that they signed an agreement with a contractor to build apartment buildings, and the construction of these buildings has started already. Additionally, in an interview conducted with the members of a household who has been constructing a new housing unit at Çaylı locality of Bağdere village, we were informed that the construction building has started this year (2015), he has a separate house, and he intends to rent 3 storeys of the building in expectation of earning 1500-2000 TL of rental income per month.

#### *Impacts on Services Sector*

Another impact on the local economy has occurred on the services sector. There are 6 restaurants currently in business in the district, which has a population of 3,865 as of 2016.

In the interview conducted with Hanimeli Restaurant, the owners discussed how GCP impacted their business. Hanimeli Restaurant was established in 2010, but its business thrived after Acacia Mining started its operations in the district. They have expanded the restaurant and established a kitchen to serve a thousand customers in 2015. All ingredients used to prepare the meals are procured from the district. 6 employees including 2 chefs, 1 assistant chef, 2 dishwashers and 1 pita maker are currently working at the restaurant. Adding 3 family members who are managing the business on that, the number of employees working in the restaurant is 9 people.

As these evidences indicate, apart from its positive impacts on the local economy, the project has been effective in reviving the local economy through the multiplier effects it generates. The multiplier effects in this respect are the employment generated in other businesses that are not employed in the project, and the increase in the purchases of local services and products.

#### *Impacts on Local Procurement*

Total local purchases of Acacia Mining Company between 2012 and October 2015 was 6.124.891 TL. This is an important amount for the district's economy.

Table 68. Local Purchases (2012-October 2015)

Companies	Boyabat	Hanönü	Taşköprü	Kastamonu	Grand Total (2013-October 2015)
Acacia Mining	10.968	1.441.456	686.429	1.470.279	3.609.132
Subcontractors (3 companies)	904.318	1.268.017	107.209	236.215	2.515.759
<b>Total</b>	<b>915.286</b>	<b>2.709.473</b>	<b>793.638</b>	<b>1.706.494</b>	<b>6.124.891</b>
<b>%</b>	<b>15%</b>	<b>44%</b>	<b>13%</b>	<b>28%</b>	<b>100%</b>

Source: Acacia Mining, 2015

### **Operation Phase Local Economy Impacts**

Approximately 544 persons will be employed **during the operation phase as well**. Assuming the size of a household as 4, this implies a population of 2000 persons during the operation phase. In addition to this, Acacia Mining company and its subcontractors and 3<sup>rd</sup> parties (consultants, permanent inspectors and service providers ..etc) /(e.g. Hidrogroup, Piramit Security, Hidrodizayn ...) will continue to procure goods and services from the locality in order to carry out its operations. Therefore, due to the vitality that will be boosted by both operating activities and the population growth, the development of the local economy will be promoted.

In the interviews conducted with the representatives of Acacia Mining company, we were informed that they will need buses for personal services to commute workers to various residence areas around the mine. And they plan to establish a local cooperative in order to procure these services through this cooperative. They also plan to provide various supports required for the procurement of vehicles. We were informed that efforts regarding the inclusion of residents of the affected areas in the cooperative and to safeguard a structure that would be appealing for the entire district are also ongoing.

Considering the fact that the operation phase of the project except the shutting down phase will last 12 years, which might be extended provided that new mineral resources are discovered, it is believed that the project will have positive impacts in terms of giving a boost to and development of the local economy.

Furthermore, during the meeting with Mayor, he stated that they intend to establish a small industrial estate (SIE) with a capacity of 30 businesses, and that they plan the SIE to provide maintenance and repair services to the vehicles in the district, particularly to those in the service of Acacia Mining company. Currently, the closest SIE is in Taşköprü district. Hence, repair and maintenance services that cannot be procured in the district would be provided by Taşköprü SIE. This will also fulfill an important function in the development of the local economy.

Table 69. Positive and Negative Impacts

Positive Impacts	Negative Impacts
<b>Construction of new houses</b>	Increase in rents and house prices
<b>Establishment of new businesses (SIE etc.)</b>	Increase in the prices of goods and services
<b>Increase in the local employment of companies and institutions other than Acacia Mining</b>	
<b>Increase in demand for local goods and services throughout the district</b>	
<b>Increase in the market volume in the district (marketing of agricultural goods, construction works etc.)</b>	
<b>Giving priority to local purchases of goods and services</b>	
<b>Establishing a local cooperative in order to procure personal services to commute workers to various residence areas around the mine</b>	

Development of companies' capacities (products, services, vehicles, personnel etc.)

Keeping the population that will revive the economy in the region

Source: SRM, 2017

It is believed that the increases in house prices and rents will not have adverse impacts on households residing in Hanönü for almost all of the inhabitants of the district live in their own houses. Similarly, it is believed that the adverse effects of increases in the prices of goods and services will also be limited since almost all households cultivate vegetables and other agricultural products for their own consumption.

It is assumed that the development and reinforcement of local economy will not have any reflections only on Küpeli, which is affiliated to Küreçayı. Since the number of households living in this locality is very low, they may not be affected from the developments in the local economy directly.

Table 70. Impacts by Settlements

Main Settlements	Sub-districts	Reinforcement/Development of the Local Economy		Increases in Rents, Prices of Houses, Goods and Services	
		Construction	Operation	Construction	Operation
Hanönü Central Neighborhood	Center	X	X	-	-
	Vakıf	X	X	-	-
	Yılanlı	X	X	-	-
Küreçayı Village	Aşağıküreçayı	X	X	-	-
	Küpeli	-	-	-	-
Vakıfgeymene Neighborhood	Dereköy	X	X	-	-
	Sepetçioğlu	X	X	-	-
	Geymene	X	X	-	-
Bağdere Village	Bağdere	X	X	-	-
	Çaylı	X	X	-	-
Gökçeğaç Village	Nefsigökçeğaç	X	X	-	-
Hanönü District	District Total	X	X	X	X
Taşköprü District	District Total	X	X	X	X

Source: SRM, 2017

### c. Main Sources of income

Field study focused on PAPs sources of income. While agriculture and forestry are the main economic sources in the Projects AoI, the field study revealed that **the most important source of income is pension benefits**. Many households have members who are pensioners. One of the major reasons for aging of the district population is that while the youth tend to migrate from the district in search of employment opportunities, those who are older than the age of 50 tend to stay. Moreover, people who had migrated for work, tend to return to pass their retirement in the district as they reach retirement age.

The average age of the population engaged in activities such as forestry, agriculture and livestock farming is quite high. In fact, during discussions with forestry cooperatives, cooperative revealed that they do not have any member below the age of 40. Young population for working age, could not be observed during field visits made to affected

settlements and neighboring areas. The following sections discuss in detail income from forestry, agriculture and livestock production.

## C1. Forestry

### Construction Phase

Forestlands will be acquired during exploration and **construction phases**, which will continue during operation phase as well, though at a smaller extent. The size of forestlands affected from the project comprises 1 percent (325.2 hectares) of the total forestlands in the district. Considering Project's main land acquisition is from forestry land, field studies focused on how forest is used by PAPs. Due to abundance of forestry, the mukhtars and PAPs stated during consultations that forestland acquisition will not affect their income from forest activities. The only foreseen potential adverse impact may be related to the provision of firewood for winter months; yet PAPs stated that the amount of firewood provided from the forest land acquired by the Project is insignificant to them as it could be obtained from remaining forestland.

There are 13 forestry cooperatives available in total in the district. Dividing the income of 3,212,000 TL generated from forestry activities in 2014 to 13 cooperatives, the average income per cooperative is found as 247,077 TL. Settlements in the project area that have forestry cooperatives are Bağdere, Gökçe ağaç and Küreçayı, and almost all male population in these areas are affiliated with these cooperatives. Dividing the average income generated from forestry activities to the number of members in these 3 settlements, we find that the average income generated from forestry per year is 4,888 TL. The income from forestry activities is not expected to be impacted by land acquisition since remaining 99 percent of forestland will continue to be exploited for forestry activities. Discussions with District Department of Forestry also revealed that they did not expect any adverse impact for incomes of the cooperatives due to land acquired by the Project since land comprises 1 percent of forest resources (Table 71).

Table 71: Acquisition of Forestland Impact

Forestry			
Settlement name	Total forest area (ha)	Acquired forest area (HA)	% acquired over total
Hanönü merkez	7,809	93.2	1%
Bağdere	7,170	6.9	0%
Küreçayı	12,557.50	225	2%
Gökçe ağaç			
<b>Total</b>	<b>27,536.50</b>	<b>325.2</b>	<b>1%</b>

Table 72. Information on Forestry Cooperatives in Affected Settlements

Forestry Cooperative	Number of Forestry Cooperative Members	Total Income in 2014 (13 cooperatives/TL)	Annual Income (13 cooperatives/TL)	Cooperatives in Affected Settlements Average Income
Bağdere	42	3.212.000	247.077	5.883
Gökçe ağaç	60			4.118

<b>Küreçayı</b>	<b>53</b>	<b>4.662</b>
<b>Total</b>	<b>155</b>	<b>4.888</b>

Source: SRM, 2017

### Operation Phase

Forestland acquisitions will continue in the **operation phase** as well. However, since construction works would be completed, the size of forestland that will be required will not be as large as it is in the construction phase. Furthermore, afforestation works will be carried out during the rehabilitation phase, since it is necessary to fulfil the legal requirements and commitments mentioned in the EIA Report during the mine closure phase of the project.

In addition to this, the most important impact of the project in its operation phase on forestry would be to reduce the socioeconomic pressure on the forest, and to put out forest fires in an effective way.

5-6 forest fires occur in the district every year. The Regional Directorate of Forestry in the province informed us that Acacia Mining will cooperate with the District Forestry Department and support fire fighting efforts with its heavy equipment and tools in order to help to put out forest fires in a short time effectively. Hence, putting out forest fires in a short time and effective way may have an impact to avoid households that generate and income from forestry activities to suffer from large losses. Also wood firefighting routes are built by Acacia Mining.

Another impact will be on reducing the human pressure on the forest. As sources of income will develop and increase, local employment and job opportunities will rise in the district, forestry activities will cease to be perceived as a significant source of income on its own, which will play an important part in reducing the human pressure on the forest.

Table 73. Positive and Negative Impacts

Positive Impacts	Negative Impacts
<b>Afforestation works</b>	Impacts on degraded forest lands
<b>Reduction of human pressure on the forest</b>	Reduction in income generated from forestry activities, though at a minimal level
<b>More effective ways of fighting with forest fires</b>	

Source: SRM, 2017

Impacts on forest lands in terms of settlements are expected to be seen in Bağdere, Gökçeagaç and Küreçayı villages, where there are forestry cooperatives, and in the entire Hanönü district.

Table 74. Impacts by Settlements

Main Settlements	Sub-districts	Reduction in Forest Area		Protection of Forest Land (Fire Fighting, Reduction in Human Pressure)	
		Constructio n	Operatio n	Constructio n	Operatio n
<b>Hanönü Central Neighborhood</b>	Center	-	-	-	-
	Vakıf	-	-	-	-

	Yılanlı	-	-	-	-
<b>Vakıfgeymene Neighborhood</b>	Dereköy	-	-	-	-
	Sepetçioğlu	-	-	-	-
	Geymene	-	-	-	-
<b>Bağdere Village</b>	Bağdere	X	X	X	X
	Çaylı	X	X	X	X
<b>Gökçe ağaç Village</b>	Nefsigökçe ağaç	X	X	X	X
<b>Küre çayı Village</b>	Aşağıküre çayı	X	X	X	X
	Küpeli	X	X	X	X
<b>Hanönü District</b>	District Total	X	X	X	X
<b>Taşköprü District</b>	District Total	-	-	-	-

Source: SRM, 2017

## C2. Agriculture and Livestock Income

### C2.1 Agriculture

All 5 settlements that are directly affected from the project are engaged in agricultural activities. In almost all areas, 2-3 greenhouses at around 100m<sup>2</sup> size were observed. Each family cultivates a vegetable garden for their own consumption. Besides, wheat, barley, garlic, beet and beans are grown for commercial purposes. Among the affected settlements, rice is cultivated only in Gökçe ağaç.

The private parcels acquired by Acacia Mining is relatively low with respect to all land acquisitions made for the project. Only 28.61 hectares of land has been acquired for the Project. Even though the abovementioned area is relatively small with respect to agricultural land of sufficient size, it is perceived as important by the households.

### Impact on Agriculture

- *Dust impact on crops:* The dust that is expected to occur during the project's construction and operation phases may damage agricultural products and pose a risk to the households' means of subsistence. During the interviews conducted, this concern was constantly addressed by mukhtars and community members. On the other hand, Acacia Mining experts explained that dust measurements at affected areas do not show anomalies. They are below legal limits. Local residences need to be informed about the measurement results, and Project will continuously monitoring dust levels in nearby cultivated parcels in order to avoid any damage. Dust control mechanisms are also in place to minimize dust impact to nearby parcels.
- *Impact on Gokirmak water source for irrigation:* Another concern related with agriculture is the fear that sources of agricultural income will diminish as water resources have the potential to be contaminated and reduced. There are households that draw water from Gökirmak with water pumps for irrigation. Hydrogeological study does not foresee any reduction in Gokirmak's water/flow capacity hence there is no expected impact for the households that use Gokirmak water resources for irrigation purposes. Never the less the Project will continuously monitor the water capacity of the Gokirmak River through its lifecycle.

- *Impact on underground water sources:* The hydrogeological study presented in ESIA Vol I- Chapter 7 illustrates that the potential current impact of diminished ground water supply is expected only in Sepetçioğlu settlement. However the report also highlights the possibility of declining ground water supply in Kupeli settlement. Since the supply in Kupeli provides irrigation water for agricultural activity in approximately 48 households residing in Kurecay vicinity, the Project will particularly monitor the ground water levels in this settlement and provide necessary mitigation measure if any negative impact occurs. (Such as bringing alternative water supply from other regions, drilling irrigation wells, etc.). Vakıfgeymene is not expected to be impacted by declines in groundwater supply. The Project has already addressed diminishing water resource for Sepetcioglu settlement, and provided the settlement with a new water source.
- *Depletion and contamination of water sources:* There are PAPs in Gökçeagaç and Sirke villages that request DSI to build an irrigation pond. These PAPs are concerned that the mining project will incapacitate or delay this investment by restricting farmlands and irrigation areas. **Many households, on the other hand, are concerned that blastings during construction and operation phases will deplete water table springs and/or cause their locations to change, and chemical substances and wastes derived during drillings and the operations of the facility will leak into water resources and intoxicate agricultural products.** Continuous blasting controls at defined areas will be done during operation. Hydrogeological study will address about water table concerns. In the open pit mining operations no chemicals are used in the mining area and tailing storage. Acacia Mining is regularly doing seismic measurements. In order to decrease the vibration, blastings are controlled (using delay between the holes). There is a mechanism in place for informing PAPs prior to blastings. Moreover, results of seismic measurements will be shared with PAPs.

## **C2.2. Livestock Production**

There are households in the affected areas that are engaged in bovine and ovine breeding. There are only a few households engaged in apiculture. There are 97 households registered in the FRS in the affected areas that are engaged in bovine breeding, and the number of bovine animals per household is 12 on average. Livestock farming has been regressing throughout the district. In fact, while there 6,670 bovine animals in 2006, this figure declined to 3,300 by the end of October 2015.

There is no private practice veterinary tending to livestock in the district. Veterinary services are provided by a single veterinary employed at the District Directorate of Agriculture.

There are households engaged in ovine breeding in 3 of the affected settlements only, and the number of these households is 7, which is quite low.

The same goes for the households that are engaged in apiculture. There are only 8 apiculturists in 3 settlements.

## **Impacts on Livestock Production**

- *Damage to animal health and well-being due to environmental factors:* PAPs are concerned that livestock will be harmed as a result of factors such as dust, noise, contamination of water resources etc. by the Project.
- *Damage to animal health and well-being due to Project's activities and increased traffic:* PAPs are worried that livestock will be harmed during grazing and pasturing because of restriction to be imposed on roads and the vehicle traffic of the mine, and the increased risk of being hit by vehicles. In order to avoid such accidents, there will be underpasses to minimize the traffic risk to PAPs and livestock on the haul road between mine and the processing plant. Mining area will be surrounded by wire fences and concentrate production road will be separated by local village roads.
- *Reduction of pasture land:* The graze and pasture areas will be reduced.
- *Increased demand for livestock and agricultural by products:* Besides these concerns, the project is also expected to have positive impacts on livestock farming. The most important of these positive impacts is that the market volume of the district will increase, expanding the demand for agricultural and animal products. During the meetings held with communities in this regard in the sub-districts of Sepetçioğlu, which is affiliated to Vakıfgeymene, we were told that greenhouse cultivation was much more prevalent in the past, but it declined because of the problems encountered during marketing and sale of products (tomatoes, cucumbers). The population of the district center, excluding the countryside, is 1,869. The consumers of agricultural products in this population is only civil servants and the unemployed. Yet, employees of the HEPP operating in the district, those who are working in road construction etc. also constitute a potential market. Therefore, the market volume is too small for products to be consumed in Hanönü district. It is possible to transfer the goods to Taşköprü district and sell them there, but this would increase the costs. From this point of view, the population to be employed during the project's construction and operation phases, taking their families into account as well, will constitute a sufficient market for agricultural products to be sold in Hanönü district.

Table 75. Positive and Negative Impacts

Positive Impacts	Negative Impacts
Increasing the district's market volume for the sale and marketing of agricultural and animal products	The risk that agriculture and livestock farming is adversely affected
Facilitation of selling and marketing the goods at the locality	The risk that agricultural products and animal existence is harmed because of adverse effects such as dust etc.
Increase in agricultural and livestock income as a result of the reduction in sales and marketing difficulties	Concerns about the reduction of agricultural and livestock income
	Concerns about the reduction of farmlands
	Reduction of grazing areas

Restrictions on grazing and pasturing
The risk of animals being hit by vehicles on roads used for grazing
Cumulative adverse effects on households (Demirci Dam and Taşköprü Dam)
Concerns related with depletion/contamination and intoxication of water resources
Concerns about not being able to carry out irrigated farming activities on the river bank

Source: SRM, 2017

When the impacts are assessed in terms of settlements, the facilitation of sale and marketing of products, the increase in market volume will positively affect all areas including Taşköprü.

The hazard ratio related with grazing and pasturing of animals is particularly higher in settlements affiliated with Vakıfgeymene, Bağdere and Küreçayı, which are on the haul road between the pit and the processing plant.

The 5-km long haul road to be built between the pit and the processing plant has a considerable impact. The road has various potential impacts such as the dust emissions to occur during construction works, risks over human and animal health because of vehicle traffic, the restriction of grazing areas and access to grazing areas by animals, the harming of cultivated agricultural products and crops. Necessary measures will be taken against for prevention of potential dust damage. There will be underpasses on the haul road to minimize traffic risks to people and animals. Settlements affected from the construction of the haul road are Sepetçioğlu, Geymene, Çaylı, Çayağzı and Dereköy.

Moreover, construction works such as the open pit mine or the facility area can also reduce sources of agricultural income by damaging products and crops. There are very limited agricultural activities around open pit and facility area.

Since blastings will be set off in the mine and water resources will be used to process the concentrate in the mining facility, there is a risk that water resources near these facilities are damaged and/or depleted.

Similarly, in the event that any contingencies occur at the tailings storage facility or a problem arises in this area, there is a risk that hazardous chemicals contaminate water resources. Therefore, the level of risk at settlements around these facilities is higher. The tailings storage facility is designed such that all measures are taken to mitigate and absolutely minimize the risk of contamination of the water sources.

Table 76. Impacts by Settlements

Main Settlements	Sub-districts	Damage to Livestock Activities (Accident risk, dust, noise, damage to water resources, etc.)		Damage to Agricultural Activities (Dust, reduction in crops, damage to or depletion of water resources, etc.)		Cumulative Impact (Demirci HPP, Taşköprü Dam, Acacia Mining)		Sale and Marketing of Products in the Locality, Increase in Market Volume	
		Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation
Hanönü Central Neighborhood	Center	X	X	X	X	-	-	X	X
	Vakıf	-	-	-	-	-	-	X	X
	Yılanlı	-	-	-	-	-	-	X	X
Vakıfgeymene Neighborhood	Dereköy	X	X	X	X	X	X	X	X
	Sepetçioğlu	X	X	X	X	X	X	X	X
	Geymene	X	X	X	X	X	X	X	X
Bağdere Village	Bağdere	X	X	X	X	-	-	X	X
	Çaylı	X	X	X	X	-	-	X	X
Gökçeada Village	Nefsigökçe ağaç	-	-	X	X	-	-	X	X
Küreçayı Village	Aşağıküreçayı	X	X	X	X	X	X	X	X
	Küpeli	X	X	X	X	-	-	X	X
Hanönü District	District Total	-	-	-	-	-	-	X	X
Taşköprü District	District Total	-	-	-	-	-	-	X	X

Source: SRM, 2017

### C3. Pasture

Pasture affected from the project is small with respect to the size of areas that possess the pasture characteristics and considered as pasture by the Provincial Pasture Commission. There is 97 hectares of pasture area throughout the district, and 65 hectares of pasture area in the affected area. Thus in a situation of limited pastureland the majority of pasture area is within the impacted area. Dividing pasture area to the number of bovine animals in affected areas, it is found that there is 0.6 decares of pasture area per bovine animal in the region. This implies that families engaged in livestock farming utilize their own lands, village plateaus, and meadows with proper characteristics to graze their animals.

We were informed that the pasture quality in the district is low. As a matter of fact, members of the Provincial Pasture Commission informed that the majority of pasture areas in the district are considered as pasturelands only “on paper and legally”. Moreover, the qualification of forested pasturelands was changed into forest lands once again as a result of the cadastral work carried out in the district. This, in turn, has been effective on the reduction of pasture areas. The Provincial Agricultural Directorate recently initiated representative pasture rehabilitation works in the province. Yet, Hanönü district was not included in pasture rehabilitation works. The major reasons of this decision is that the pasturelands in the district are not representative, there are no young farmers in the district and the animal existence in is low. The closest district chosen for pasture rehabilitation was Taşköprü.

The qualification of the pasture utilized by Dereköy, which is affiliated with Vakıfgeymene, has been permanently changed within the scope of the project. This decision was due to the fact that the 8,900 m<sup>2</sup> pasture here was required, since the location of Gökırmak river had to be changed with a diversion tunnel. No further pasture area is envisaged to be acquired within the context of planned works.

In exchange for the affected pasture area, Acacia Mining purchased a farmland of the same size within the borders of the same neighborhood and submitted to the use of the inhabitants. An agreement was signed with the mukhtar of Vakıfgeymene on April 1, 2015 on the subject matter. According to this agreement, the costs of cultivation and land arrangements with regard to making the purchased field more suitable for the grazing of animals will be reimbursed by Acacia Mining. The affected pasture area and the location purchased to be utilized as pasture are illustrated in the map below. Acacia Mining also leased the parcel next to the newly acquired pasture for Dereköy in order to provide access road to the pasture land. The Company is planning a long term solution for access road to the livestock either via purchasing the leased parcel or devising an alternative mechanism to access this pasture.

Map 5. Affected Pastureland and the Pastureland Substituted for It



Source: Acacia Mining, 2017

No further land acquisition related with pasture areas is envisaged in the construction phase. Nevertheless, there are pasture areas within the borders of the area for which mining license is obtained. There is a possibility that these areas will be drilled during the operation phase. However, since these areas are considered as pasturelands legally, legal procedures must be observed while making changes in these areas and the loss of pasture areas should be compensated.

Table 77. Positive and Negative Impacts

Positive Impacts	Negative Impacts
Allocation of lands in return for the affected pasture areas	Impact on the pastureland used by Dereköy affiliated with Vakıfgeymene (plot 101/1, 8,900 m <sup>2</sup> )

Including local communities to decision-making processes regarding changes to pasture areas (the agreement with the mukhtar of Vakıfgeymene and carrying this agreement into effect in 2015)	Possible impacts on pasture areas due to drilling works to be carried out during the operation phase
Compensation of pastureland losses	

Source: SRM, 2017

Looking at the issue in terms the affected areas, the residential area pastureland of which will be affected during the construction phase is Dereköy, which is affiliated to Vakıfgeymene. However, Bağdere, Küreçayı, Hanönü central and Vakıfgeymene are located within the area for which mining license was obtained.

Table 78. Impacts by Settlements

Main Settlements	Sub-districts	Risk of reduction of pasture areas	
		Construction	Operation
<b>Hanönü Central Neighborhood</b>	Center	-	X
	Vakıf	-	X
	Yılanlı	-	X
<b>Vakıfgeymene Neighborhood</b>	Dereköy	X	X
	Sepetçioğlu	-	X
	Geymene	-	X
<b>Bağdere Village</b>	Bağdere	-	X
	Çaylı	-	X
<b>Gökçeada Village</b>	Nefsigökçeada	-	-
<b>Küreçayı Village</b>	Aşağıküreçayı	-	X
	Küpeli	-	X
<b>Hanönü District</b>	District Total	X	X
<b>Taşköprü District</b>	District Total	-	-

Source: SRM, 2017

## Proposed Mitigations

The measures proposed are related with the issues of contribution to the development of local economy, and improvement of livelihoods.

### Mitigations for local employment

- In terms of employment, it is necessary **to give priority to local employment** in Hanönü district, particularly to the affected settlements, both during construction and operation phases. To this end, Acacia Mining prepared a Local Recruitment Policy that emphasized recruitment of local labour force and especially PAPs directly impacted by the Project. Acacia mining aims **to contribute to the preparation of local work force through vocational training courses** to be organized by relevant institutions such as District Governorship, Municipality, Public Training Center etc. by sharing information with these bodies.
- In order to increase local employment, **vocational knowledge and skills of local employees can be improved by continuing to provide them on-the-job trainings** in

cooperation with Hanönü PTC. By this means, their employability especially during the operation phase can be improved.

- In line with local recruitment policy, give priority to the affected areas, then to Hanönü, to Taşköprü, and then to other districts of the province respectively in employment,
- develop cooperation programs between organizations in order to recruit the work force required from the locality, providing support to organizations in initiating new vocational training courses,
- organize on-the-job training programs to improve vocational knowledge and skills of the personnel to be employed,
- organize vocational training programs intended for training skilled miners during the operation phase<sup>27</sup>,
- inform all stakeholders about the local recruitment policy,
- set a wage policy in order to avoid problems and conflicts between local employees and employees who come from other regions because of wage differences, and
- to ensure that subcontracting companies are committed to abide by the local employment policy both during construction and operation phases, and that the local employment practices of subcontractors are audited by Acacia Mining.
- emphasizes equal pay for equal work policy in order to ensure that local PAPs are fairly compensated for the job done.

#### Mitigation for local economic development:

- There are two main issues regarding the promotion of local economic development, which are related **with local procurement** and the **transportation (service for the workers) cooperative** that is planned to be established.
  - The requirement for local procurement need to be defined. Suppliers and their representatives (Chamber of Merchants and Craftsmen etc.) will be informed on issues such as how each material will be procured, certain advantages are granted to local companies during procurements, and a local procurement policy is established. It is also recommended that key stakeholders, particularly the district governorship and the mayoralty, are regularly informed on the local procurements.
  - The effort to have a transportation cooperative established in the district especially by individuals from affected areas is a significant issue. In this regard, before having a new cooperative established, Hanönü Transporters' Cooperative should be contacted and the capacity, functioning and membership structure of the latter should be taken into consideration. Currently, the cooperative has 17 members and hauls forest products (logs, timbers, etc.). It is recommended to assess the capacity and business skills of local organizations primarily, and then decide to establish a new cooperative

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<sup>27</sup> Çayeli Copper Mine Enterprise provides mining trainings to 10 persons selected among unemployed high school graduates every year within the framework of Social Capacity Building Program, and employs the trainees deemed appropriate who finish the course successfully. <http://www.Miningcilik-turkiye.com/dosyalar/edergi-1382527584.pdf> p. 10.

or to provide support to the present cooperative depending on the results of this assessment.

- Providing **support to social responsibility projects** intended for social benefit would also be useful. To this end, it is recommended to allocate a budget for social responsibility works and to inform relevant organizations on the properties sought in projects that will be supported, areas of activity which can be supported, and the budget that can be granted. AMI has prepared a Community Development Framework which will be transformed into a full Community Development Plan (CDP), in order to prioritize need based social responsibility works and improve livelihoods.
- *Community Development Framework (CDF);*
  - Community development plan will be prepared via participatory approach. Creating participatory mechanisms and entities to specify issues such as the content of social responsibility works that can be supported, how requests would be evaluated etc. would even set an example for the region. For instance, a Hanönü Platform can be established after a workshop held with the participation of local organizations and community representatives. Even though its intentions were different, a similar effort was put forth in Taşköprü, and a workshop was held on November 7-8, 2015 in order to determine the vision and future objectives of the district and include the outputs in the CDF. It is recommended to create a participation mechanism that would function through a Community Advisory Panel (CAP) in order to evaluate and monitor grievances and measures taken, applications made for the benefit of the community, and to inform communities as well as local stakeholders. Implementing social responsibility efforts in areas other than mining that will promote the development of the district economy would be a factor that will improve the inhabitant's embracement of the project.

In order to implement the above measures following steps need to be fulfilled:

- implement the local procurement policy,
- provide advantages to local companies in procurements,
- specify which goods and services (food, shuttle service etc.) will be locally procured,
- inform suppliers, their representatives and key stakeholders in the district on procurements and realizations,
- allocate social investment budget in order to support projects and activities for the benefit of the community that will promote the development of district economy,
- strengthen cooperation and coordination among institutions, organizing a workshop in order to create a Hanönü Platform,
- develop and implement a Community Development Plan and establish a Community Advisory Panel (CAP) to ensure good governance and transparency in implementation of these social projects
- monitor grievances received and the measures taken by the company through SEP, evaluate the requests made for the benefit of the community and informing the stakeholders,

- establish local cooperative for the workers transportation
- analysis, and informing all stakeholders on this decision, and giving priority to Hanönü district on the housing and accommodation of employees, promote accommodation opportunities such as public housing, guesthouses etc. in the district.

### **Mitigations for improving livelihoods**

In order to assess the impact on PAPs livelihoods, the Project has prepared a Livelihood Restoration Plan. Sepetçioğlu, Dereköy and Geymene sub-districts of Vakıfgeymene neighborhood as well as Bağdere village and Çaylı sub-district of the latter are the areas that are impacted from land acquisition of the Project. LRP assures that mitigation measures are in place to restore livelihoods of PAPs who may be adversely impacted by the Project. The measures that are proposed to be taken on this issue are;

- AMI has acquired replacement pasture land to ensure that livestock production is not impacted by Project's land acquisition. Replacement pastureland for the communal users aims to enable sustainable livestock production. In addition to this AMI will also implement a pasture improvement program which will be detailed in Community development plan
- implement and monitor the Livelihood Restoration Plan,
- prepare a community development program within the framework of this plan on the issues of developing agriculture, livestock farming, apiculture, forestry, handicrafts and local skills and work force, women's economic integration
- support local procurement especially agricultural products from Project affected areas,
- track and analyze reported grievances in line with grievance management mechanism,
- take occupational health and safety, and environmental measures for issues related with public health and safety concerning means of subsistence as well as infrastructure and quality of life.

### **3.3 Impact on Land and other Asset Acquisition**

The total impacted land forms the project including the transmission line is 6593 decares, 634 parcels. Land acquired by willing buyer seller is 276 decares, 84 parcels. Land acquisition by expropriation was only done for the transmission line.

Majority of the land acquired for the Project belongs to public ownership (91 percent). Public land comprises of forest land (90 percent of total land acquisition) and pasture land (1 percent of total land acquisition). 9 percent of total acquisition is from private parcels. The consultations with PAPs focused on users of public land; especially how the PAPs utilized forest resources, and used pastures. Forestry land acquired by the Project comprises 1 percent of the total forest area of the settlements; and consultations with PAPs, District Directorate for Forestry revealed that loss of forest land is not expected have adverse impact on PAPs livelihoods since PAPs will continue to generate forestry income from remaining 99 percent of forest resources; and there are alternative forest areas to gather firewood for PAPs

subsistence heating. Livestock production is a significant income source for Derekoy village (Vakifgeymene); and loss of pasture and proximity to open pit site may have adverse impacts on these PAPs livelihoods. Project's private land acquisition impact varies according to settlement and ownership types. Most of the PAPs impacted from private land acquisition are temporary residents (Sepetcioglu settlement) and did not cultivate their land prior to the Project. Permanent resident PAPs impacted from Project's land acquisition (Yilanli settlement) revealed that land was used to cultivate animal feed and provided an in-kind income source for livestock production

Table 79. Land Acquisition

Settlements	Land Acquisition (Decares)	No of Parcels	Project Location
<b>3. Institutions (Municipality, etc.)</b>	18	6	TML + Project Facilities
<b>Treasury</b>	1,013	25	TML + Project Facilities
<b>Pasture</b>	51	21	TML + Project Facilities
<b>Forest</b>	4,963	68	TML + Project Facilities
<b>Without land Registration (Road, creek, etc)</b>	46	73	TML
<b>Private land acquisition by willing buyer seller</b>	276	84	Project Facilities
<b>Private land acquisition by expropriation</b>	226	357	TML
<b>Private land acquisition total</b>	503	441	TML + Project Facilities
<b>Total</b>	<b>6,593</b>	<b>634</b>	

Source: Acacia Mining, 2017

Payments of land acquisition were made according to land ownership. Approximately 5 million TL was paid for compensation during willing buyer seller negotiations of 84 private parcels.

Necessary permits and authorizations for land acquisitions were received from the Ministry of Finance, Regional Directorate of DSI, Special Provincial Administration, Regional Directorate of Highways, Regional Directorate of Forestry and Hanönü Municipality.

There is no immovable property (house, animal shelter, barn, shed etc.) on the affected lands (private, public and forest) acquired for the project. Hence the Project does not induce involuntary resettlement. However, should the Project require additional land take during operations, the AMI ensures that Project's land acquisition policy, and EBRD PR5 will be followed for asset census, land valuation, livelihood restoration and any potential resettlement in the future.

Table 80. Positive and Negative Impacts

Positive Impacts	Negative Impacts
<b>Acquisition of private lands consentingly</b>	Reduction in the utilized forest and public lands
<b>Relatively low degree of affected private lands</b>	Concerns that means of subsistence will be affected adversely

<b>Absence of physical resettlement effect</b>	Impact on the municipal recreational area
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Source: SRM, 2017

Additional lands can be acquired depending on the existence of mine concentrates to be discovered in the future. In the present case, the most affected area in terms of private land acquisition is Sepetçioğlu, which is affiliated to Vakıfgeymene. Since the size of land acquisitions to be made during operation phase is not known, it is assumed according to the current situation that no acquisitions will be made.

Table 81. Impacts by Settlements

Main Settlements	Sub-districts	Private Land Acquisition		Reduction in Utilized Public and Forest Lands	
		Construction	Operation	Construction	Operation
<b>Hanönü Central Neighborhood</b>	Center	-	-	X	X
	Vakıf	-	-	X	X
	Yılanlı	X	-	X	X
<b>Vakıfgeymene Neighborhood</b>	Dereköy	-	-	X	X
	Sepetçioğlu	X	-	X	X
	Geymene	-	-	X	X
<b>Bağdere Village</b>	Bağdere	-	-	X	X
	Çayağzı	-	-	X	X
	Çaylı	-	-	X	X
<b>Gökçeagaç Village</b>	Nefsigökçeagaç	-	-	X	X
<b>Küreçayı Village</b>	Aşağıküreçayı	-	-	X	X
<b>Hanönü District</b>	District Total	X	X	-	-
<b>Taşköprü District</b>	District Total	-	-	-	-

Source: SRM, 2017

### Proposed Mitigation Measures:

GCP devised a Livelihood Restoration Plan (LRP) with an entitlement matrix that addresses additional compensation measures put forth by the Company in order to avoid any potential adverse livelihood impact of the Project due to land acquisition. Private land acquisitions are relatively low in the project, and the public and forest lands acquired are locations that are not utilized intensely and make a minor contribution to income generating activities. However, even though the current situation is as such, the impacts of land acquisitions on the sources of income and livelihood of households should be monitored, and if a negative impact on the means of subsistence is detected, it would be necessary to develop measures and practices to minimize their adverse effects. GCMP has prepared a Land Acquisition policy that assures any additional land acquisition triggered by the Project will conform with EBRD PR 5.

The measures proposed in this regard are;

- continue willing buyer seller negotiations
- prepare a full asset census for new land that will be acquired by the Project, including valuations done by a Third party
- implement and monitor the livelihood restoration plan targeted to PAPs whose livelihoods may be impacted by the Project

- monitor vulnerable groups, especially the elderly as their mobility may be restricted and they may be adversely impacted by the Project.
- Ensure that PAPs impacted by land acquisition benefit from community investment program which will be prepared in the future.
- Continue stakeholder engagement as defined in SEP,
- Monitor the grievances to assure that grievances for land acquisition and livelihood restoration are recorded and responded.
- Prepare a Resettlement Action Plan according to EBRD PR 5 if the Project entails physical displacement.

### 3.4 Impact on Education

There are educational institutions only at Hanönü Central neighborhood within the project's area of influence. Apart from this, in the affected area, there is no school building which is affected even if it is not in service. The RPBS at Yılanlı locality of Hanönü Central neighborhood is in the project's area of influence. In fact, the school is right across Kepezkaya Tailings Storage Facility, which is planned to be built. The RPBS has 159 pupils between the ages of 10 and 13.

#### *Construction Phase*

**During the construction phase of the project,** the students of the RPBS are expected to be affected from noise and dust generated by construction works. As the facility is close to the school, education may be adversely affected. The school is not only close to Kepezkaya tailings storage facility that is planned to be built, but it will also be exposed to the adverse effects of the construction works of the tailings storage facility.

#### *Operation Phase*

**During the operation phase of the project,** it is vital to take safety, health and environmental measures around the tailings storage facility and to take the public health and safety precautions and carry out necessary inspections to prevent any adverse event such as leakage, floods etc. in this area. In the event that a flood occurs and/or the tailings storage facility is destroyed by landslide, chemical wastes will directly leak to the RPBS and its surroundings. The waste storage facility risk assessment report has been prepared. Acacia Mining also has stability reports, and the facility has been built on the findings of these reports.

The impacts of the project on education, in turn, will become evident during its operation phase. Hanönü District Directorate of National Education has already launched the required planning and preparations assuming that the activities of Acacia Mining will trigger population growth in the district, which will in turn lead to an increase in the number of students. In this context, the construction of a high school with 12 classrooms has been included in the investment program of Ministry of Education. The estimated cost of the high school is expected to be around 2 million TL. The tender for the high school will be made in 2015, and the construction is intended to be completed until 2017.

District Director of National Education, informed that the Directorate is considering launching vocational training programs that will provide input to mining activities. The District Director of National Education decided to launch a "machinery maintenance and repair" department after the meetings held with Acacia Mining officials. They applied to the Ministry of National

Education in order to open this department at the multi-program high school in the district, but an official decision has not been made yet.

The project already had a positive impact pursuant to the decision of opening a school with 12 classrooms with public funding in the district.

Table 82. Positive and Negative Impacts

Positive Impacts	Negative Impacts
<b>Contribution to the development of education services in the district</b>	The students in the district may directly suffer harm <b>in case any adverse event such as floods</b> etc. occur at the Kepezkaya tailings storage facility

Source: SRM, 2017

It is possible to claim that positive and negative impacts related with education affect the entire district, because households from all other settlements send their children to the educational institutions at the Hanonu district center. Therefore, potential impacts would affect the entire district.

Table 83. Impacts by Settlements

Main Settlements	Sub-districts	Contribution to the development of education services		Risk of education activities and students to be negatively affected	
		Construction	Operation	Construction	Operation
<b>Hanönü Central Neighborhood</b>	Center	-	-	-	-
	Vakıf	-	-	-	-
	Yılanlı	-	-	-	-
<b>Vakıfgeymene Neighborhood</b>	Dereköy	-	-	-	-
	Sepetçioğlu	-	-	-	-
	Geymene	-	-	-	-
<b>Bağdere Village</b>	Bağdere	-	-	-	-
	Çayağzı	-	-	-	-
	Çaylı	-	-	-	-
<b>Gökçeagaç Village</b>	Nefsigökçeagaç	-	-	-	-
<b>Küreçayı Village</b>	Aşağıküreçayı	-	-	-	-
<b>Hanönü District</b>	District Total	X	X	X	X
<b>Taşköprü District</b>	District Total	-	-	-	-

Source: SRM, 2017

### Proposed Mitigation

The measures proposed in relation to education are;

#### Construction Phase

- taking the necessary safety, health and environmental measures during design and construction of tailings storage facility,
- designating and implementing measures to prevent dust and noise generation during activities,
- supporting social responsibility works related with the improvement of education services rendered in the district,

## Operation Phase

- take the necessary safety, health and environmental measures during operation of tailings storage facility as stated in EIA Volume 1,
- including the safety of students in the Contingency Plan to be prepared for this region and to take measures accordingly, and
- inform students and teachers on what they should do in case any contingency arises in relation to the tailings storage facility.
- Continue close ties with the school to enhance their technical capacity for maintenance and repair department and mining related subjects.

### 3.5 Healthcare Services

Health care services are only available in Hanonu District Central. Except Hanönü Central neighborhood, none of the settlements that are within the scope of the project have healthcare facilities that are rendering services. The Family Healthcare Center (FHC) and Public Healthcare Center providing healthcare services in the district are located in Hanönü Central neighborhood. The activities to be carried out during construction and operation phases of the project are not in the nature to disturb and/or hinder healthcare services.

There is no hospital in the district. Healthcare services that require hospitalization are referred to Taşköprü district.

The coordination of ambulance services is ensured by 112 Emergency Service in the province. There is 1 ambulance vehicle allocated to the district.

The work load of healthcare personnel in the district will possibly increase as a result of population growth due to the project. Moreover, the population growth will increase the applications to the hospital in Taşköprü district, which may in turn intensify the work load of the hospital. Nevertheless, the impact of the project on health is rather related with public health and safety.

The project may have an impact in the long-run that will lead an integrated hospital to be opened in the district. Currently, FHC and PHC are rendering their services in a building that was intended to be an integrated hospital. However, as the population of the district is low, the building was allocated to the use of other healthcare facilities instead of an integrated hospital. As the district's population may grow in the long-run owing to the project, the opening of an integrated hospital is possible.

Table 84. Positive and Negative Impacts

Positive Impacts	Negative Impacts
<b>The possibility that an integrated hospital is opened in the district as a result of population growth</b>	The increasing work load of healthcare services and personnel because of population growth in the district

Source: SRM, 2017

The impacts by settlements will rather involve Hanönü and Taşköprü districts.

Table 85. Impacts by Settlements

Main Settlements	Sub-districts	The Possibility that A Hospital Is Opened in the District in the Long-Run		The Increase in Applications to Available Healthcare Services and Work Load of Healthcare Facilities due to Population Growth	
		Construction	Operation	Construction	Operation
<b>Hanönü Central Neighborhood</b>	Center	-	-	-	-
	Vakıf	-	-	-	-
	Yılanlı	-	-	-	-
<b>Vakıfgeymene Neighborhood</b>	Dereköy	-	-	-	-
	Sepetçioğlu	-	-	-	-
	Geymene	-	-	-	-
<b>Bağdere Village</b>	Bağdere	-	-	-	-
	Çayağzı	-	-	-	-
	Çaylı	-	-	-	-
<b>Gökçe ağaç Village</b>	Nefsigökçe ağaç	-	-	-	-
<b>Küreçayı Village</b>	Aşağıküreçayı	-	-	-	-
<b>Hanönü District</b>	District Total	X	X	X	X
<b>Taşköprü District</b>	District Total	-	-	X	X

Source: SRM, 2017

### Proposed Mitigations

The proposed measures related with healthcare services are;

- providing trainings to the employees on healthcare within the scope of safety, health and environment works in order to reduce the intensity of current healthcare services,
- employing a workplace doctor and allied health personnel,
- establishing an infirmary to be used during construction and operation phases.

These measures are already implemented by Acacia Mining.

## 3.6 Community Health and Safety

Issues related community health and safety and mitigation mechanism in place for ensuring community health and safety is explained in detail in the EIA Volume I prepared by AECOM. The impacts and mitigations reflected here discuss social aspect of community health and safety depending on review of secondary information, and extensive fieldwork in line with EIA Volume I report.

**Unless measures are taken in both the construction and operation phases of the project regarding the design and operational safety of the Kepezkaya TSF and associated public health and safety issues, there are factors that will pose risk and threat.** These factors are related with drilling works, construction works of the facility, and operation of the TSF, the initiation of mining activities in the operation phase.

Issues that concern community health and safety also overlap with the issues that affect infrastructure and quality of life. Yet, the issues addressed here are also related with the management of environmental impacts, and constitute the intersection set of environmental and social impacts.

Issues regarding public health and safety are,

- Blasting
- Dust
- Noise
- Drinking water quality and access to water
- Prevention of infrastructure from damage
- Traffic safety
- Transportation and preservation of materials hazardous to human health
- Floods, landslides
- Prevention of the occurrence and spread of diseases
- Emergency management

### **Blasting**

EIA Volume I report section 7.7 details the studies done to measure the impact of noise and vibration due to blasting, etc. 250 kilograms of explosives per day were used during the construction of diversion tunnel for construction purposes. However, during the operation phase the explosives will be used just to extract ore and nothing else. The noise and dust to be generated by explosive materials, as well as the landslides they may trigger are important impacts that concern public health and safety. Geotechnical study and operational readiness report is recently completed.

Regarding the issue of landslides, **Sepetçioğlu locality of Vakıfgeymene neighborhood** is approximately 500 meters (birds eye view) close to the open pit mine where blastings will take place. There are 16 households who own summer houses in this locality. Due to the geological formation and tectonic structures around the perimeter of planned open pit, landslide or any slope failure in this region cannot be a risk for Sepetçioğlu.

Structural Damage Detection study was carried out for these building structures by Paye Engineering and the faculty members of METU Civil Engineering Department in February 2017.

Within the scope of this study :

- The current status of the building structures has been determined by land and structure baseline teams,
- The existing damage was documented from outside the building high-resolution photographs have been taken,
- Unmanned aerial vehicles were used to document the region, details of the buildings and the surrounding areas with footage and photographs,
- The existing damages on the structures were determined by these observations. Throughout this study Vakıfgeymene neighborhood structures were documented.

**Overall 94 structures in 73 parcels in Dere Kümeevler settlement; and 40 structures in 28 parcels in Sepetçi Kumeevler were examined as part of this study.** These report will be used as pre-project baseline evidence in the future in case of potential claims /complaints about house damages. Sepetçioğlu, Vakıfgeymene and Dereköy are currently out of the health and safety protection of the mining operations.

There were households who were complaining about the blastings carried out for diversion tunnel. As the amount of blastings during the operation phase will be higher, such grievances will probably increase.

### **Dust**

EIA report volume I 7.5.1.1 details the environmental studies and assessments done to measure the impact of dust. The construction works to be carried out and the construction of the haul road between the facility and the open pit mine will be effective in the generation of dust during the construction phase.

During the operation phase, on the other hand, the use of the haul road between the open pit mine and the facility, and the extraction, storage and haulage of overburden are the activities that will cause dust emissions. Related dust measures are identified in Air Quality Management Plan.

### **Noise**

Construction works during the construction phase, and mining operations and the operations of the facility, blastings, heavy duty vehicles and 4 axle trucks during the operation phase are significant sources of noise. 4 axle trucks, the unloading, storage and loading of the concentrate aboard will generate noise. 4 axle trucks make less noise than haulage trucks. Exposure to high-level of noise for a long time may lead to various adverse effects related with public health, particularly to psychological disorders. However Acacia Mining has decided to transport concentrate from the open pit only during the day. The noise and vibration levels will be monitored as stated in the Noise and Vibration management Plan.

### **Drinking water quality and access to drinking water**

Mining operations include risks such as damaging available water resources, reduction of water resources, and hampering access to drinking water. In this regard, especially dewatering operations to be carried out at the open pit mine and the amount of water to be used while obtaining the concentrate at the facility are of concern. **The contamination of water resources with chemicals is a significant risk as well unless necessary measures are taken and controls are performed.**

### **Damage to Infrastructure**

Potable water reservoirs and water supply networks used by households may be exposed during the construction and operation phases, which may affect households adversely. It is also possible that the roads are damaged by heavy duty machinery and trucks (These will be used only in the open pit area). There is a possibility that these threats are realized.

Consequently, it is possible that drinking and utility water resources of affected settlements are damaged, access to water is hampered, road infrastructures are damaged, and diseases occur and spread as a result. Hydrogeology study reveals that Sepetcioğlu settlement's water supply system will be impacted during operation phase of the Project. Moreover, Küpeli settlement's water supply **may be** impacted in Project's future operation phases. According to results of the study, Vakıfgeymene settlements are not expected to be affected from declining water supply.

### Drilling

Approximately 200 drilling works have been executed so far. Drillings will continue in the operation phase as well, since the exploration of new mineral deposits will be continue. Drillings carried out so far did not have adverse effects on public health and safety. Drilling works will continue during the operation phase of the project as well. Since drilling works were carried out in non-settlements, disturbances to households such as noise etc. did not occur. The release of such substances to nature are banned both by Turkish regulations and by international organizations. Hence, chemical substances and wastes generated during drillings are stored. Yet, unless measures are taken to prevent the hazardous impacts of these operations, there is a possibility that they may jeopardize water resources, human and animal health.

### Traffic

There will be an upsurge in traffic on roads both during construction and operation phases. This will in turn require increasing road safety and security measures. Below is the summary of expected traffic figures during construction. During construction traffic management was done by AMI health and safety department. Contractors and subcontractors were regularly monitored and supervised by AMI H&S team during construction.

Settlement	Associated Facility	Type of vehicle	Number
Yılanlı	ADT	work/excavation trucks	60 trucks
Vakıfgeymene	Open Pit	work/excavation trucks	
Bağdere	Processing plant	work/excavation trucks	
Hanönü Center	Management offices	Cars	20 cars

During operations, it will be required to transport the concentrate (product) to Samsun port during the operation phase, the transportation of materials hazardous to human health, hence risks, will continue. The planned amount of concentrate to be hauled is between 80-150.000 tonnes per year. Accordingly, 8-16 on-road trucks, weighing 25 tonnes each, will set off per day. The low number of trucks has not big the risk of traffic.

There is a risk of damage to highways because of heavy tonnage vehicles. In order to prevent such damage, a legal limit of 25 tonnes was set on haulage on highways. This limit will not be exceeded during freighting. The legal limit loading/hauling will be implemented in concentrate transportation

### Transportation and Storage of Hazardous Substances

In general, hazardous substances can be categorized as chemicals and explosive materials.

Explosive materials used during the construction phase arrive from Çankırı. They will be obtained from Çankırı during the operation phase as well. During the construction phase, explosives are not stored, but used on a daily basis. The same method will be utilized during the operation phase, and the explosives brought to the mine will be used as planned. There is no planned explosive magazine in GCP. All projects will be carried on a daily explosive transport.

Vehicles loaded with explosives will be travelling in traffic especially during the operation phase when the amount of explosives to be used will increase. This, in turn, necessitates, 250 kilograms of explosives per day are being used for the diversion tunnel. However, during the operation phase the explosives to be used to extract mine per day. The noise and dust to be generated by explosive materials, as well as the landslides they may trigger are important impacts that concern public health and safety. Currently the diversion tunnel has been completed. The blastings are taking place for waste storage and open pit areas.

### **Floods and Landslides**

In the project, it was decided to extract the mine with open pit mining method by shifting the location of Taşköprü Dam 2 km to the west. In this regard, it became necessary to change the course of the sections of Gökırmak river at the mine site with diversion tunnels, and to take measures against possible flooding of the river by building a spillway. During the interviews conducted with DSI officials, we were told that the spillway was built according to Q10,000 in terms of regional flood frequency. This indicates the amount of precipitation per km<sup>2</sup> in the last ten thousand years. In the EIA Report, including both base flow and snowfall rate in the flood flow rate, the flood flow rate of the project was calculated as 4720.50 m<sup>3</sup>/sec.

The other area where there is a flood risk is the tailings storage facility. A Tailings Storage Risk Analysis Study and Emergency Preparedness Plan was undertaken and prepared by Golder Associates that is intended to mitigate and address these concerns.

There are two separate landslide risks associated with the project. These are landslide risks due to blastings around the open pit mine and risks that may emerge at the area of tailings storage facility. The Risk Assessment for the Kepezkaya Tailings Storage Facility Report was prepared by Golder including the landslide risk is very low waste storage.

Impacts related with the project that pose a risk in the construction and operation phases are listed below.

Table 86. Positive and Negative Impacts

Positive Impacts	Negative Impacts
Various measures taken against adverse effects (escape ramps, carrying out the blastings at night etc.) (There will be no night and sunday blastings)	Adverse effects that could be caused by blastings

	Dust
	Noise
	The potential risk of damage to drinking and utility water resources
	Low traffic risks
Structural measures against flooding of Gökırmak river (spillway according to Q10 thousand)	Might possible landslides
	Increasing risks of harm to human and animal health
	Concerns and risks due to hazardous chemical and explosive substances

Source: SRM, 2017

When impacts and risks in terms of settlements affected from the project are analyzed, in the interviews conducted with households, disturbances especially due to blastings were observed in Küreçayı, **Sepetçioğlu** and **Dereköy**. Questions related with dust emissions during construction and operation phases emerged in localities affiliated to Bağdere, Vakıfgeymene and Küreçayı. The issue of noise is similar to dust emissions. Flood and landslide risks, and the works related with spillway on Gökırmak River, pose a risk to settlements around the open pit mine and tailings storage facility. Traffic and transportation of chemical and substances are issues that concern Hanönü. Concerns related with hazards to drinking and utility water exist in the entire Hanönü district.

That situation is explained in the Risk Assessment study which was prepared by Golder for the Risk Assessment for the Kepezkaya Tailings Storage Facility Report.

Table 87. Impacts by Settlements

Main Settlements	Sub-districts	Explosion		Dust		Noise		Landslide-Flood Risk		Traffic-Road Transportation of Construction/Chemical/Explosive Substances		Damage to the Infrastructure-Concerns Related with Drinking and Utility Water Resources	
		Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation
<b>Hanönü Central Neighborhood</b>	Center	-	-	X	-	-	-	-	-	X	X	X	X
	Vakıf	-	-	X	X	X	X	-	-	X	X	X	X
	Yılanlı	-	-	X	-	-	-	-	X	-	-	X	X
<b>Vakıfgeymene Neighborhood</b>	Dereköy	X	X	X	X	X	X	X	X	X	X	X	X
	Sepetçioğlu	X	X	X	X	X	X	X	X	X	X	X	X
	Geymene	-	-	X	X	X	X	X	X	X	X	X	X
<b>Bağdere Village</b>	Bağdere	-	-	X	X	X	X	-	-	X	X	X	X
	Çayağzı	-	-	X	X	X	X	-	-	X	X	X	X
	Çaylı	-	-	X	X	X	X	-	-	X	X	X	X

<b>Gökçeğaç Village</b>	Nefsigök çeğaç	-	-	-	-	-	-	-	-	-	-	-	X	X
<b>Küreçayı Village</b>	Aşağıkür eçayı	X	X	X	X	X	-	X	X	X	X	X	X	X
<b>Hanönü District</b>	District Total	-	-	-	-	-	-	X	X	X	X	X	X	X

Source: SRM, 2017

### Grievances Received (Hanönü District Governorship and Municipality)

Two grievances were sent to Hanönü Municipality from Vakıfgeymene neighborhood, which is one of the affected settlements, in September 2015. 17 persons reported their concerns in these petitions on damage to roads and means of subsistence, indicated that the works are not carried out at night, and Gökırmak bridge was damaged because of the vehicles in use, asked for the redress of this damage, and that the road between the mine and the facility not to be built.

The petitioners submitted a bill of claims to Hanönü District Governorship in September 2015 as well. In its reply issued on 20.10.2015, the District Governorship delivered an opinion stating that vehicles passing through road in the neighborhood damage crops and products around, hence necessary measures should be taken to reduce dust emissions, that vehicles should not be speeding and the road should be paved.

### Proposed Measures

Issues related with public health and safety will remain essential during both construction and operation phases.

- *Safe access to water supply:* Underground and surface water resources will be needed for drilling, construction and operating activities. The amount of water utilization will be low for drilling works, moderate for construction works, and high for operating activities (except the loading phase). Therefore, the depletion of underground and surface resources which provide the drinking water supply of households, and even worse the risk of contamination of drinking and utility water resources with chemicals would cause irreversible public health and safety problems. Hence, any possible adverse effect of the project on drinking water resources might lead to an adverse social impact. The hydrogeology report reveals that only Sepetçioğlu settlement's water supply access will diminish due to Project's impacts. Hence, AMI will ensure that alternative water supplies will be provided to Sepetçioğlu to avoid adverse impacts. The hydrogeology report also states that Küpeli may be impacted by the declining water supply was well. AMI will continuously monitor water supply in Küpeli, and devise alternative water supply mechanisms should the water supply illustrate a declining trend. Hydrogeology report does not envision adverse water supply impact in Derekoy and Vakiygeymene settlements. Nevertheless, the water supply will be closely monitored as was discussed in ESIA Vol I- Chapter 7. AMI has confirmed that wells will be used to supply the processing plant with water required for Project's needs during the initial production. AMI will later use recycled water from Tailing Storage Facility for processing plant, will no longer need water from the wells. Nevertheless, AMI assured that the amount of water withdrawn by the Project will be in close control of SHW and will not pose as a threat to PAHs that use water resources.

- *Traffic management:* Traffic density may increase because of the works to be carried out during construction and operation phases, which will possibly increase accident risk. Transportation of hazardous substances will be limited to operation phase of the Project. AMI assured that hazardous substances will not be transported during construction phase. Moreover, the transportation during operation phase will be conducted only with vehicles certified for carrying hazardous material.

Detailed measures are presented in the Traffic Management Plan and Water resources Management Plan

The proposed measures to be taken in this regard are;

- It is necessary to be prepared for tackling the problems by drawing up a Contingency Plan that include both construction (including drilling works) and operation phases and conducting various drills.
- Acacia Mining does not discharge any waste or chemical substance to external environment (river, nature etc.) during drilling works. Wastes will be collected during the operation phase as well, and their discharge to natural environment will be avoided.
- No substance will be released to natural environment with the facility. Contaminated rain water will be collected and disposed through the waste discharge line.
- The tailings pipeline will be checked at regular intervals.
- If the Project requires the acquisition of any additional land or assets (Houses in Sepetcioglu near mine open pit area) AMI will prepare a RAP according to EBRD PR5.
- Dust and noise levels and mitigations will be monitored. Stakeholder groups will be informed at regular intervals on the measures taken and developments on their implementation, and regular field visits will be organized.
- All necessary areas within the project site will be enclosed with wire fences.
- A grievance mechanism will be established in order to review complaints on the issue and to monitor the problems arising.
- A Stakeholder Engagement Plan is developed to specify communication and notification mechanisms on the measures taken and activities carried out.

Regarding water resources;

- A hydrogeological study is conducted and included in the ESIA as ESIA Volume I- Chapter 7.

Regarding the blastings;

- A blastings procedure will be prepared,
- Vibrations caused by blastings will be constantly measured and recorded, and the commitments made in the EIA Report will be fulfilled,
- Noise and vibration management plan specifies measures that will be taken during blastings,

- In order to identify the current conditions of houses around the mine, construction survey reports for designated houses is prepared by Paye Engineering,
- Blasting will not be carried out at nights and on Sundays.

Regarding dust;

- Throughout the project, Acacia Mining will check dust levels through measures carried out, check the effectiveness of the measures taken, and fulfill the commitments in the EIA. Please refer to Vol 1 for detailed dust control mechanisms.
- Dust emission measurements will be carried out inside and outside of the project area.
- Measures regarding dust emissions will be put into practice as soon as the construction works start. There is no dust problem due to drilling works, but dust problem will emerge during construction and operation phases.
- The wheels of the vehicles are cleaned while entering and exiting the facilities (concentrate processing plant,).
- Since dust emissions due to vehicle traffic will be high at locations close to settlements, roads should be sprinkled regularly.
- Roofing the areas with high dust emissions (ore crushing and sieving) it is planned to install dust collection unit in these sections..
- Crushing and Screening will be in closed buildings and with dust collection units.

Regarding noise;

- The noise measurements will be monitored.

Regarding vehicle traffic, it is recommending to

- train the employees of the company and the subcontractor on traffic, defensive driving techniques etc. in order to reduce traffic accident risks,
- specify speed limits and establish control mechanisms to determine whether these limits are abided, A radar was already purchased and currently in use at mine site.
- design protocols regarding the haulage of mine concentrate and hazardous substances, and
- Escape ramps will be built on the haul road between the open pit mine and the mining facility, which will reduce accident risks.
- Two underpasses will be built in the entrance and exit of the same road in order to prevent vehicles, people and animals on the road. Accident risks will be reduced owing to these underpasses.
- Measures to prevent the entrance of pedestrians and animals will be taken on the haul road.

Regarding the hauling and storing of hazardous substances;

- drawing up procedures regarding the hauling and storing of hazardous substances,
- holding toolbox meetings with relevant personnel is recommended.

Regarding landslide and flood risks;

- Open pit mine and tailings storage facility will be checked against flood and landslide risks with geo-radar (in the open pit), and measurements will be performed.
- The spillway on Gökırmak river is built according to Q10 thousand.
- In order to identify the current conditions of houses around the mine, construction survey reports for designated houses is prepared by Paye Engineering,

### 3.7 Impact on Infrastructure and Quality of Life

The project will have negative and positive impacts on the quality of life. First of all, as an important part of positive impacts, Hanönü Municipality will receive a “mining share” from Acacia Mining pursuant to legislation. Accordingly, .02% of annual sales will be given to the municipality. In addition to this, population growth that will occur in the district owing to the project will cause the budget allocated to Hanönü Municipality to increase. With greater revenues, the municipality will be able to allocate greater resources for the works it will carry out regarding infrastructure and the improvement of quality of life accordingly.

In terms of adverse effects, risks that pose a threat to public health and safety are also valid as regards infrastructure and quality of life. Issues posing threat to health and safety are also key components of quality of life such as access to solid infrastructure, safe and quiet environment. Issues related with infrastructure which may influence quality of life are,

- *Damage to drinking water infrastructure* (mains and reservoir), reduction of water resources, and degradation of water quality,
- *Damage to and dysfunction of irrigation water infrastructure*: The only different issue than those addressed under impacts on public health and safety is about the irrigation water infrastructure. Among the affected settlements, there are water reservoirs in Gökçeagaç and Küreçayı. All 5 of the affected areas are connected to the water supply network, and there are households who are concerned that the water supply network will suffer damages due to project activities.
- *Damage to road infrastructure and highways*: Another issue related with infrastructure is damage to roads. According to road transport regulation, the maximum amount of weight that is allowed to be hauled is 25 tonnes. Mine concentrate will be transported to Samsun port by trucks, will be stored there, and then loaded on ships and delivered. High traffic congestion is not expected due to additional 8-16 trucks per day carrying concentrates to the Samsun port by obeying legal weight limits. Highway limit will be abided during the hauling of mine concentrate from the facility to Samsun port. Hence, highways to be used are not expected to be damaged. Yet, in case village and urban roads are used, there is a risk that these roads are damaged. Roadworks have been ongoing at two locations within the framework of the project. One of these roads is the haul road built between the open pit mine and the facility for the use of trucks, which is 5 km long.. The length of the latter is rather short, i.e. 200 meters.
- *Adverse effects of dust and noise due to blasting*, freight and hauling activities on the quality of life. Besides the issue infrastructure, the main adverse effect of the project on the quality of life will be experienced through dust and noise emissions, and

blastings. Low-tonnage (250 k etc.) explosives are used in the construction of the diversion tunnel. When mining starts in the open pit mine, the explosives to be used. At most 2 blasts will be carried out per day. These blastings and the dust generated from these blastings, the noise generated by construction works and operating activities will reduce the quality of life of especially the households residing nearby considerably. Hence, taking and strictly implementing measures regarding these matters is utterly important. Unless necessary measures are taken, the resulting dust and noise emissions may significantly reduce the quality of life of households in Hanönü.

The issues addressed with respect to the construction phase of the project are also valid for its operation phase. Nevertheless, adverse effects are long-term rather than short-term impacts since it is possible that they will continue during the operation phase apart from the construction phase of the project.

Damage to drinking water resources, reduction in water quantity, dust and noise emissions will continue to be significant risk factors directly affecting the quality of life during operation phase as well. In addition to these, blastings will aggravate the concerns of households. Therefore, the measures that should be taken regarding these risks should also be maintained during the operation phase.

In addition the interviewed households have stated that their water resources have decreased because of Demirci HEPP. These households have mentioned concerns about affects on water resources by Mining activities.

Table 88. Positive and Negative Impacts

Positive Impacts	Negative Impacts
<b>Hanönü Municipality will receive a Mining Share (.02% of annual sales)</b>	Adverse effects of noise, dust and blastings on the quality of life of households living in areas nearby
<b>Increase in the annual budget of Hanönü Municipality because of population growth</b>	Concerns related to infrastructure such as damage to water resources and roads
<b>Acceleration of infrastructure investments due to increase in funds</b>	

Source: SRM, 2017

Evaluating in terms of affected settlements, it was seen that there are households in Aşağı Küreçayı locality of Küreçayı and Sepetçioğlu locality of Vakıfgeymene who complain about tunnel blastings during the construction phase.

When blastings in open pit mine will be initiated during the operation phase, the most adversely affected residential area will be Sepetçioğlu locality of Vakıfgeymene.

The most adversely affected settlements from dust and noise during both construction and operation phases will be Sepetçioğlu, Dereköy and Geymene, which are affiliated to

Vakıfgeymene, and Bağdere, Çaylı and Çayağzı, which are affiliated to Bağdere. The haul road between the open pit mine and the facility will be used intensely during the operation phase. According to the operation chart, mine will be extracted from the open pit, stored, hauled to the facility by trucks, processed in the plant, the concentrate produced will be stored and transferred to Samsun port by trucks, then they will be stored there, and loaded onto ships. Dust and noise generated throughout this process have impacts that reduce the quality of life, hence necessary measures must be taken.

The expected impacts by settlements are given below.

Table 89. Impacts by Settlements

Main Settlements	Sub-districts	Increase in Municipal Infrastructure Investments and Services the Will Affect Quality of Life		Adverse Effects of blastings, Dust and Noise on the Quality of Life	
		Construction	Operation	Construction	Operation
<b>Hanönü Central Neighborhood</b>	Center	-	-	X	-
	Vakıf	-	-	X	-
	Yılanlı	-	-	-	-
<b>Vakıfgeymene Neighborhood</b>	Dereköy	-	-	X	X
	Sepetçioğlu	-	-	X	X
	Geymene	-	-	X	X
<b>Bağdere Village</b>	Bağdere	-	-	X	X
	Çayağzı	-	-	X	X
	Çaylı	-	-	X	X
<b>Gökçeada Village</b>	Nefsigökçeada	-	-	-	-
<b>Küreçayı Village</b>	Aşağıküreçayı	-	-	X	X
<b>Hanönü District</b>	District Total	X	X	X	X
<b>Taşköprü District</b>	District Total	-	-	-	-

Source: SRM, 2017

### Proposed Measures

Construction and operation phases of the project can be categorized in 4 groups. Main issues which would affect infrastructure and quality of life according to this categorization and the realization possibility of which are high in terms of activity types are given below.

Table 90. Issues Which Have an Impact on Quality of Life in terms of Project Phases

Issues/risks	Construction Phase		Operation Phase	
	Drilling	Construction	Explosion	Loading
<b>Dust</b>	Minimum	High	High	High
<b>Noise</b>	Minimum	Normal	Transiently very high	Normal
<b>Water Use</b>	Low	Medium	High	NA

Source: SRM, 2017

The measures to be taken in relation to infrastructure and quality of life are mostly the same with the measures to be taken in relation to public health and safety.

- There are risks which may affect quality of life adversely associated with the risk of reduction in drinking water, blastings, dust, noise and traffic density, and these risks can be mitigated by measures to be taken. Especially, effective measures should be taken regarding dust and noise emissions.
- In order for the 5-km haul road, which is currently built, not to generate dust, it is recommended to pave its surface with particles or watered that would prevent dust emission,
- There will be no blastings on nights and on sundays. It is also necessary to monitor drinking water resources regularly, to track whether there is a reduction in water resources, and to counteract any effect inflicting damage on water resources and infrastructure.
- If roads are damaged because of the project, they should be repaired **by the project** .
- It is important to support projects intended for common interest, which will affect the residents' quality of life positively.

### 3.8 Cultural Heritage

Reggio consulting has prepared a cultural heritage assessment report as part of the EIA studies. In this study no impact on cultural heritage have been identified. Within the project area, there is no registered or yet unregistered cultural or natural property, protected area, historical or natural area holding the status of cultural and natural heritage or registered cultural property.

#### Proposed Mitigations

Currently there is no affected cemetery in the current project area. In the case that Bagdere ADT takes place as an alternative waste dumpsite in future relocation of Bagdere cemetery is possible and will be done in accordance with the measures defined in Livelihood restoration plan (LRP) which has been prepared for the Project.

During the field studies conducted, no festival, festivity or non-material cultural property that might be affected adversely from project activities were detected either. Therefore, there is no measures that should be taken in this respect.

### 3.9 Vulnerable Groups

The most important adverse effects that will occur during construction and operation phases of the project are those that will affect the quality of life negatively such as dust and noise. On the other hand, there are households that have various concerns about possible damage to their livelihood, or to human and animal health.

The project, as it stands, may lead to adverse effects on vulnerable groups in terms of public health and safety, infrastructure and quality of life. It is believed that the impacts of the project on vulnerable groups will be minimized provided that the measures taken regarding these issues are implemented.

In order to identify the vulnerable groups to be adversely affected due to the acquisition of private lands within the scope of the project, comprehensive interviews with the households whose lands are affected or acquired should be conducted.

Table 91. Positive and Negative Impacts

Positive Impacts	Negative Impacts
<b>Physical and economic displacement, resettlement effect does not exist</b>	Reduction in quality of life because of negative impacts such as dust, noise etc.
	Concerns about possible damages to public health and safety, infrastructure and quality of life

Source: SRM, 2017

The level of vulnerable groups' exposure to negative impacts will be higher in areas where construction and operating activities are much more intense. In this respect, the level of exposure among vulnerable groups in the localities affiliated to Bağdere and Vakıfgeymene, which are intensely affected from the project, will be higher, for these are the areas where project activities such as mine construction, facility construction, road construction etc. are carried out the most intensely. Yet, the impacts are assumed to be prevalent throughout the district since students of the RBPS near the tailings storage facility are also among vulnerable groups.

Table 93. Impacts by Settlements

Main Settlements	Sub-districts	The lack of physically and economically displaced		Concerns related with the idea that quality of life, public health and safety will deteriorate	
		Construction	Operation	Construction	Operation
<b>Hanönü Central Neighborhood</b>	Center	X	X	X	X
	Vakıf	X	X	X	X
	Yılanlı	X	X	X	X
<b>Vakıfgeymene Neighborhood</b>	Dereköy	X	X	X	X
	Sepetçioğlu	X	X	X	X
	Geymene	X	X	X	X
<b>Bağdere Village</b>	Bağdere	X	X	X	X
	Çayağzı	X	X	X	X
	Çaylı	X	X	X	X
<b>Gökçe ağaç Village</b>	Nefsigökçe ağaç	X	X	X	X
<b>Küre çayı Village</b>	Aşağıküre çayı	X	X	X	X
<b>Hanönü District</b>	District Total	X	X	X	X
<b>Taşköprü District</b>	District Total	-	-	-	-

Source: SRM, 2017

### Proposed Mitigations

The measures that should be taken concerning vulnerable groups and the measures set forth regarding to risks related to public health and safety, infrastructure and quality of life coincide at a large extent.

The other measures that are proposed to be taken are;

- AMI will follow a proactive approach to ensure that vulnerable groups are not adversely impacted by Project's activities. Social team has already identified vulnerable groups in the settlements, and is in close engagement in order to ensure their overall wellbeing.
- measuring and checking the exposure levels of vulnerable groups from project activities through monitoring and evaluation studies; in case vulnerable groups that are adversely affected during project activities are identified, developing measures for these households,
- if there are households, the livelihood of whom are adversely affected from project activities, preparing livelihood restoration plans for and providing support to these household, and
- carrying out communication and information studies in order to update vulnerable groups about project activities.

### 3.10 Social Conflicts and Tensions

#### a. The Potential of Social Conflict

Acacia Mining has been carrying out operations in Hanönü district since 2007. About 200 drillings have been carried out so far. Currently, construction works are also ongoing. Any social event or protest which may create social tensions within the context of the ongoing works has not occurred in the meantime. The field studies conducted did not indicate any existing social conflict, protest or tension related with the operations of Acacia Mining or between communities either. Yet, there are issues which may cause social conflict and tensions, which are;

- negative impacts on quality of life (dust, noise, etc.) and infrastructure (roads, water supply network, etc.),
- negative impacts that would occur in the event that risks that may endanger public health and safety are materialized (contamination of drinking and utility water with chemical substances, traffic accidents related with pedestrians and animals caused by the vehicles used in the mine),
- human rights violations and issues in which security personnel of Acacia Mining are involved,
- potential social conflicts between workers who come from other regions and local residents because of cultural differences,
- potential tensions and conflict risk between local employees and personnel who come from other regions due to social polarization,
- ethnic, cultural, sexist, sectarian, economic etc. discrimination between employees and suppliers,
- tensions which may arise due to wage differences between local employees and personnel who come from other regions,
- potential reactions to layoffs made as the mining operations are drawing to an end, and

- the behaviors of employees who come from other regions to women in the district, which could be deemed provocative.

***Conflicts related to quality of life (dust, noise, etc.) and infrastructure (roads, water supply network, etc.),***

Dust and noise emissions due to project activities may cause households to take a negative stance against the project and to initiate social protests. Especially blastings, and dust and noise emissions are among the mining operations which will disturb the households in these settlements the most, and thus, they have the potential to create social tensions.

Issues such as damage to infrastructure and reduction in water resources because of project activities, impacts which may endanger public health and safety, the occurrence of traffic accidents involving deaths are among the threats which may directly lead to social conflicts and tensions.

***Conflicts related to security personnel***

Procurement of private security services is an important issue, because there is a slight possibility that the private security personnel, who, besides military personnel and law enforcement, are the only section authorized to carry and use guns, may abuse the power and authority granted to them. Hence, in all services which require the employment of private security personnel, it is utterly important to develop a strict and effective control mechanism and to prevent any infringement due to security personnel.

***Conflicts related employment, non discrimination and gender***

Another important issue which may cause social conflict is employment. Problems may arise between employees who come from other regions and local employees because of cultural differences and miscommunication. In this respect, the reactions due to the employees from other regions words or jokes that might be perceived as insulting or humiliating by the local residents are an issue of conflict.

Any sort of discrimination between employees and suppliers is a source of conflict as well. In case differential wages are paid to the same job in an environment where such discriminating practices exist, significant conflicts may break out between local employees and those from other regions.

Gender sensitive behavior on account of employees who come from other regions is utterly important. In this respect, any event such as abduction, verbal and/or physical harassment in which employees from other regions are involved may cause tensions. In some cases, even unintentional acts can cause misunderstandings because of cultural differences.

During interviews conducted with women who live in the project's area of influence, especially during the interviews with women from Çayağzı and Çaylı localities of Bağdere, where the number of workers from other regions in these areas is high, that they were afraid to walk around alone where they used to walk around freely before, and they were uncomfortable while grazing their animals in this region.

Besides these, layoffs that will be made when the job is about to be completed during both construction and operation phases may also cause social disturbances.

Practices and studies that will prevent social conflicts and tensions to arise, to protect human and employee rights, to improve and strengthen relationships and communication with local stakeholders will also be carried out. These studies will, in a sense, constitute the positive impacts of the project, and assume an important function in mutually strengthening the relationships with internal and external stakeholders.

Table 93. Positive and Negative Impacts

Positive Impacts	Negative Impacts
Strengthening communication with internal and external stakeholders	The possibility of cultural conflict between local residents and employees from other regions
Establishing a Community Advisory Panel among local stakeholders	The possibility of conflict on issues related with employment
Human Rights Impact Assessment Study	The difficulties faced by women living in areas close to construction sites
Monitoring& Evaluation programs	
Strengthening the public relations team	
Setting the prevention of discrimination as a human rights policy	

Source: SRM, 2017

In terms of affected areas, the possibility of social tension and conflict is valid for Hanönü district. In addition to this, with the size of its population and the presence of a high number of local employees, Hanönü central neighborhood, and settlements affiliated to Vakıfgeymene and Bağdere, which are the closest areas to the project area, are among important settlements with their potential of social tensions.

Table 94. Impacts by Settlements

Main Settlements	Sub-districts	The possibility of community based protests and tensions		The possibility of protests and tensions between employees	
		Construction	Operation	Construction	Operation
<b>Hanönü Central Neighborhood</b>	Center	X	X	X	X
	Vakıf	-	-	-	-
	Yılanlı	-	-	-	-
<b>Vakıfgeymene Neighborhood</b>	Dereköy	X	X	X	X
	Sepetçioğlu	X	X	X	X
	Geymene	X	X	X	X
<b>Bağdere Village</b>	Bağdere	X	X	X	X
	Çayağzı	X	X	X	X
	Çaylı	X	X	X	X
<b>Gökçe ağaç Village</b>	Nefsigökçe ağaç	-	-	-	-
<b>Küre çayı Village</b>	Aşağıküre çayı	-	-	-	-
<b>Hanönü District</b>	District Total	X	X	X	X

<b>Taşköprü District</b>	District Total	-	-	-	-
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Source: SRM, 2017

### b. Social Assistance Provided by Acacia Mining

In the current situation, various social supports have been granted in order to develop the relationships with stakeholders. In this respect, 271,700 TL of social support was provided between 2015-October 2016 . Besides that, 57,000 books were donated to Kastamonu Governorship and Provincial Directorate of National Education.

Table 95. Social Support Provided by Acacia Mining

Stakeholders	Social Supports	Total Cost (TL)
<b>Bağdere Village</b>	Painting works of the mosque and village house	2.500
<b>Hanönü Directorate of Land and Registry</b>	1 air conditioner, 1 refrigerator, 1 laptop computer	3.000
<b>Hanönü District Directorate of Special Administration</b>	Renovation of office heating system	1.500
<b>Hanönü District Gendermarie Command</b>	Spherical mirror, stationery equipment support, procurement of printer cartridges.	1.000
<b>Hanönü District Police Department</b>	1 laptop computer, 1 television set, 1 heater, spherical mirror.	3.500
<b>Hanönü Municipality Sports Team</b>	Hanönü Municipality Team supports	11.000
<b>Hanönü District Governorship</b>	Usage of 4x4 pick-up truck by the district governorship for transportation to villages that are difficult to reach, caterpillar provision for road opening works during winter. Spherical mirror, furniture for the office of the district governor	10.000
<b>Hanönü District Police Department</b>	Second hand generaor	7.500
<b>Hanönü Chamber of Merchants and Craftsman</b>	Furniture for the office	2.500
<b>Hanönü Primary and Secondary School</b>	Paving stone for the school garden	12.500
<b>Hanönü Primary School</b>	Kite distribution on April 23rd	3.000
<b>Hanönü Women Entrepreneurship Association</b>	Transportation and Publication support	12.000
<b>Hanönü Central Mosque</b>	Wood and crane for the construction	5.200
<b>Hanönü Municipality</b>	Construction machinery for road repairements	57.000
<b>Hanönü Municipality</b>	Open-air Sports Equipment at the District Center	20.500
<b>Hanönü Municipality</b>	Picnic tables	5.500
<b>Hanönü Municipality</b>	Pipes for infrastructure works	9.000
<b>Hanönü Municipality</b>	Şeyh Şaban-ı Veli Commemoration	2.000
<b>Hanönü Municipality</b>	Rice Dinner for Three Months (Religious)	1.000
<b>Hanönü Municipality</b>	Procurement of 4 laptop computers, 2 office chairs, printers and cartridges. Construction equipment provision, ensuring funeral vehicle provision to serve to villages, creek rehabilitation works, excavation operations	50.000
<b>Hanönü District Forestry Operation Directorate</b>	Construction Machinery for Forestry Operations	18.500

<b>Hanönü Middle School</b>	Horseback Riding for Middle School students on May 19th	4.500
<b>Office of Hanönü Mufti</b>	Support to excavation works for Hanönü mosque construction	3.000
<b>Local communities</b>	Ramadan Month Iftar Dinners for 10 days	8.000
<b>Local communities</b>	Ramadan Activities (Shadow Plays etc.)	7.500
<b>Yılanlı Neighborhood Irrigation Cooperative</b>	Donation to the cooperative	10.000
	<b>Total</b>	<b>271.700</b>

Source: Acacia Mining, 2017

### Proposed Mitigations

It is important to take measures related to the issues in question in order to prevent social conflicts and tensions that may arise due to the impacts of project activities. The content of these measures are specified under the chapter regarding impacts on the economy, public health and safety, infrastructure and quality of life.

Establishing an effective stakeholder relations management mechanism is also among the proposed measures. It is important to build and maintain an effective communication with stakeholders in order to prevent social conflicts and eliminate tensions. NGOs in the district center, local administrations, public institutions, households affected from the project, as well as other NGOs such as various townsmen associations and federations related with Hanönü in Istanbul should be included in these stakeholders. Even though these associations were established in Istanbul, their members have active and organic relationships with Hanönü. Therefore, the communication with such associations should also be addressed in the stakeholder relations management plan. Furthermore, setting a comprehensive public relations policy and taking mitigating measures would reduce the possibility of social conflicts to arise.

Moreover, the establishment of a Community Advisory Panel (CAP) is recommended.<sup>28</sup> Representatives of local administration, public institutions, NGOs, universities, affected communities and Acacia Mining may take part in this panel. Issues such as sources of social conflicts and tensions, and positive and negative impacts of mining operations could be monitored and evaluated by this panel. The panel may also decide on which issues to launch social responsibility works. However, it is recommended to resort to a participatory approach to determine issues such as duties and competences, the member composition of the panel etc., and to this end, to organize a workshop in the district so as to provide a basis for establishing a Hanönü Residents Platform and to specify the vision of the district. Acacia Mining has already established a smaller Advisory Panel with representatives of the

<sup>28</sup>Mining companies operating in accordance with international standards make the establishment of such panels obligatory. For instance, The Mining Association of Canada obliges its members to establish CAPs, and selects successful examples from the panel practices of member mining companies every year. <http://mining.ca/towards-sustainable-mining/community-interest-advisory-panel> The number of members in CAP varies between 12 and 15. Opinion leaders of affected areas, representatives of NGOs, public institutions, media, etc., representatives of relevant institutions and communities are involved as members, panel members take office for a specified term, mining operations are evaluated in biannual meetings, and the report prepared is published and shared with the stakeholders. For more on the structure and functioning of the panel see: [http://mining.ca/sites/default/files/documents/COI\\_Panel\\_Terms\\_of\\_Reference\\_2015.pdf](http://mining.ca/sites/default/files/documents/COI_Panel_Terms_of_Reference_2015.pdf)

Mukhtars of each settlement. This panel is an important step towards engagement through regular meetings.

In order to prevent any sort of social and economic discrimination both at the level of employees and suppliers, policies should be developed to protect human and employee rights, human rights impact assessment studies should be conducted besides social impact assessments, and project activities should be monitored and evaluated.

The Public Relations Department of Acacia Mining company will play a crucial part in the identification and resolution of social conflict and tension potentials, and particularly in the relationships with stakeholders at local level. Therefore, it is important to employ the required social specialists as soon as possible in order to ensure this unit to function effectively.

In this regard, the proposed measures concerning social conflicts and tensions are;

- employing the planned number of experts in the Public Relations Unit as soon as possible,
- taking the measures specified as regards public health and safety, and infrastructure and quality of life,
- establishing and effectively running an internal and external complaints procedure,
- establishing a monitoring & evaluation system and putting it into practice,
- preparing a Stakeholder Relations Management Plan and putting it into effect,
- establishing a Community Advisory Panel (CAP),
- providing trainings on cultural differences, gender sensitivity, and prevention of miscommunication to new recruits within the scope of orientation trainings,
- providing training to drilling personnel who work outside the plant and the mine at locations close to settlements on their own on issues regarding cultural behaviors to be respected,
- providing training to especially those who work at Bağdere Çayağzı locality and the workers at the workers' camp near the open pit mine on gender sensitivity and related topics,
- providing training to security personnel on topics such as rules of conduct etc.,
- conducting human rights impact assessment studies regularly,
- including the prevention of any sort of discrimination in human rights policy,
- preparing annual work force mobilization plan by including also the divisions related with work force and subcontractors, leaving the local employees to last during dismissals,
- carrying out community-based, corporate social responsibility projects for common interest,
- creating scholarship programs, which have particularly positive impacts before communities, for university students whose place of registry is Hanönü and who reside here,

- building a video surveillance system within the project area, improving the existing systems

### 3.11 Cumulative Impacts

The cumulative effects of the Project and other potential developments are considered in this section. The assessment considers cumulative impacts of the Project in combination with impacts from other present and reasonably foreseeable developments as well as unplanned but predictable activities enabled by the project that may occur later or at a different location, as required by the EBRD Performance Requirements Cumulative impacts of the Project are defined in detail in a separate Cumulative Impacts Plan, which is attached this SIA Volume II as Annex 5.

Existing and foreseeable projects in the Project area are as follows;

#### Existing Projects

Current projects are defined as projects under construction or in operation as of 2015. The selection of current projects is based on distance from Asia Mining domain and interaction with stakeholders of Gökirmak Copper Project.

- Regional Directorate of Highways, Taşköprü-Hanönü State Highway (Construction Phase)
- Hanönü Municipality's 30-house Construction Project (Construction Phase)
- Hanönü Municipality-Kuzka Healthy Living Park Project (Construction Phase)
- Hanönü District Directorate of Food, Agriculture and Livestock Walnut Farming Development and Dissemination Project (Implementation Phase)
- Türkerler Enerji, Demirci HPP (in operation)
- Boyabat Dam

#### Projected / Planned Projects

Foreseeable future projects are defined as projects at pre-feasibility/feasibility/design phases of 2015.

In the selection of projects planned to be realised in the foreseeable future importance has been given to major hydro electric and construction projects that may have potential to cause cumulative impacts.

- Regional Directorate of State Hydraulic Works (DSI )Taşköprü Dam (Feasibility Phase)
- DSI Regional Directorate Gökçeğaç Pond (was not taken into the investment program)
- DSI Regional Directorate Sirke Pond (was not taken into the investment program)

Key social elements that are likely to create cumulative effects and social issues of the projects expected to lead to potential cumulative impacts together with Gökırmak Copper Mine Project are as follows:

### ***Economy (agriculture, service sector and employment)***

#### **Construction Phase Impacts**

Construction phase may have a negative cumulative effect on the agricultural and livestock production. Animal health and safety may also pose a problem and damaging the livestock will cause adverse effects on PAP, the main source of income of whom is livestock production.

There is also the possibility of impact on access to grazing land. Also, adverse effects are expected due to the use of pasture areas by construction activity.

#### **Operation Phase Impacts**

In the short term (5-year forecasts), there will be a negative impact on agricultural income because irrigation from the hydro/dam projects will not be possible. Also transport services which will increase due to transportation projects will positively affect the business in the district.

In addition, new roads and bridges to be built under the project will facilitate the transport of residents of villages to the marketplace and thus contribute to the marketing activities of their products, in this way they will have a positive impact on the income generating activities of the farmers already busy with farming activities in the area. Hydro / dam projects and transportation projects will also provide all the necessary food and building materials from local sources, which would increase the local production and trade capacity of SMEs. Thus, the direct impact and multiplier effects can be significant.

In the long-term (20-year projections), the planned irrigation projects are expected to provide a significant increase in the amount of arable land and to contribute to the improvement of existing agricultural land. In this way, various hydro / dam due to transportation projects and it will be possible to compensate the lost agricultural land and livelihoods.

### ***Land and other immovable assets***

#### **Construction Phase Impacts**

Hydro/dam projects will have a cumulative impact on temporary and permanent acquisition of land and houses and on land and other assets. However, it may have limited effect on land ownership as the persons affected by the project (PAP) at the first stage of construction will be able to use their land and property until the mine extraction area enters into their land.

The more land is received for various projects, the more critical will become the possibility of finding suitable land for agricultural use. Possible pressure on local people should be

managed carefully.

### **Operation Phase Impacts**

Hydro/dams and transportation projects may cause cumulative impacts on land and other assets due to temporary or permanent acquisition of land and houses in large work areas. Because the region is mainly dependent on agriculture and livestock production, the degree of impact on the livelihoods of the local population that are exposed to higher land acquisition will be high.

With water retention in the hydro project, land acquisition in large areas will be more intense. This impact will negatively affect the possibility of replacement land for many PAPs to be affected by the physical and economic resettlement due to other projects. The loss of more land will be triggered by transportation projects.

PAPs who lost their land and immovable assets due to Hydro/dam projects and transportation projects will either acquire other land or move to another area and they will lose their temporary and permanent livelihoods under both conditions.

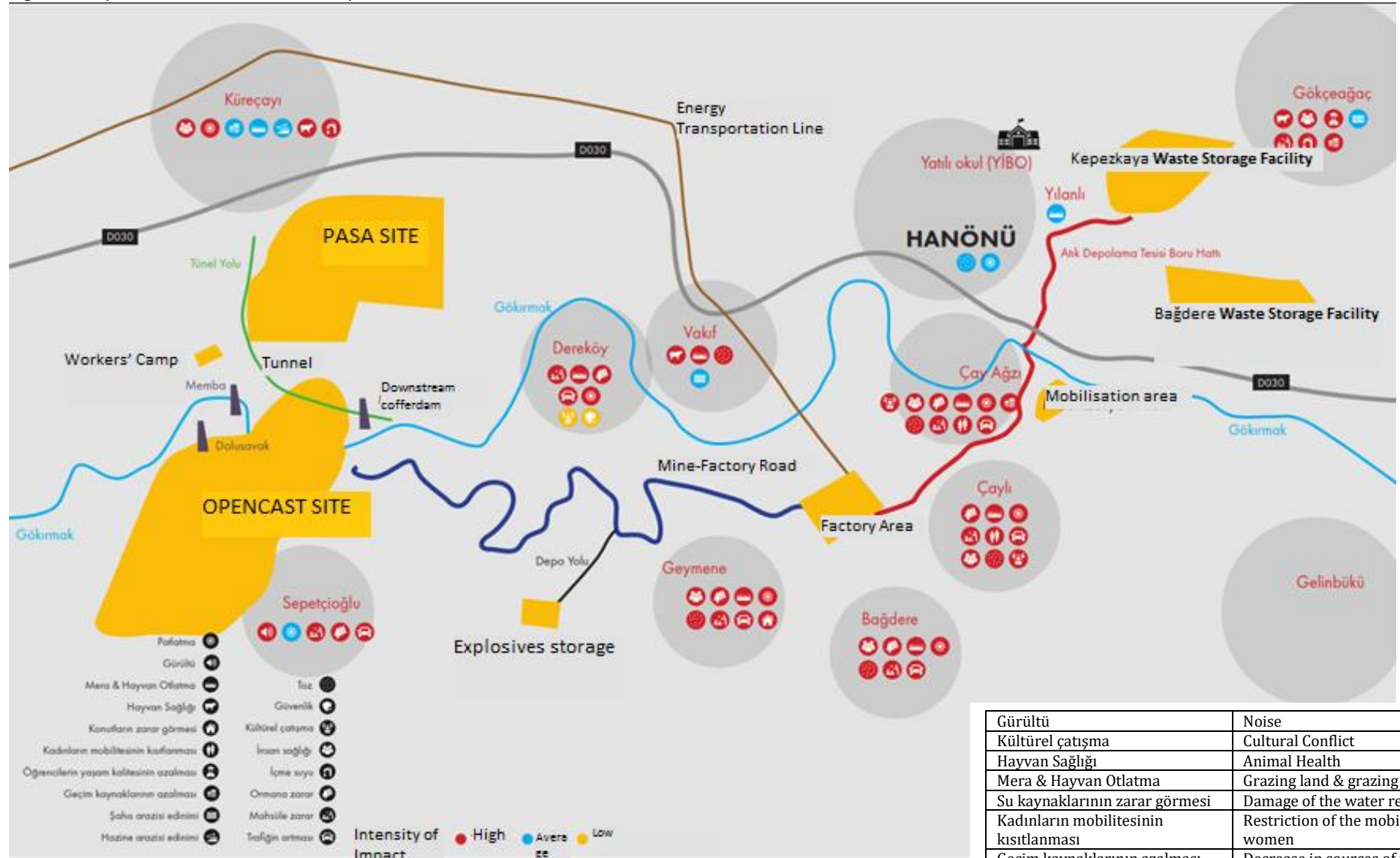
### ***Proposed Mitigations***

- In cases where cumulative projects cause land acquisition and resettlement within the project area, losses of affected people will be compensated within the scope of Livelihood Restoration Framework (LRP) and Community development plan (CDP).
- Loss of landowners who suffered a temporary loss of income will be compensated within the scope of Livelihood restoration Framework.
- Temporarily affected land and pastures will be brought to the pre-construction condition through replacement/improvement. With regards to additional temporary land purchases, appropriate mitigation measures will be determined and implemented.
- The Project will use already developed Local Employment Management Plan and Local procurement plans in order to manage cumulative impacts on local employment and procurement.
- Environmental and social impact assessment of the project describes various mitigation measures so that the Project's impacts on quality of life are mitigated. These measures and careful planning of regional development will prevent or restrict any possible cumulative effect on people's quality of life.
- The project's environmental and social impact assessment and public health and safety procedures describe various measures to prevent the impact on public health and safety. Compatibility of these measures with Hydro projects and transportation projects (marking new roads and taking the necessary measures etc to prevent people/animals from falling in dams and surrounding water channels and waterways.) and developing new measures will prevent or restrict any possible cumulative effects on community health and safety.

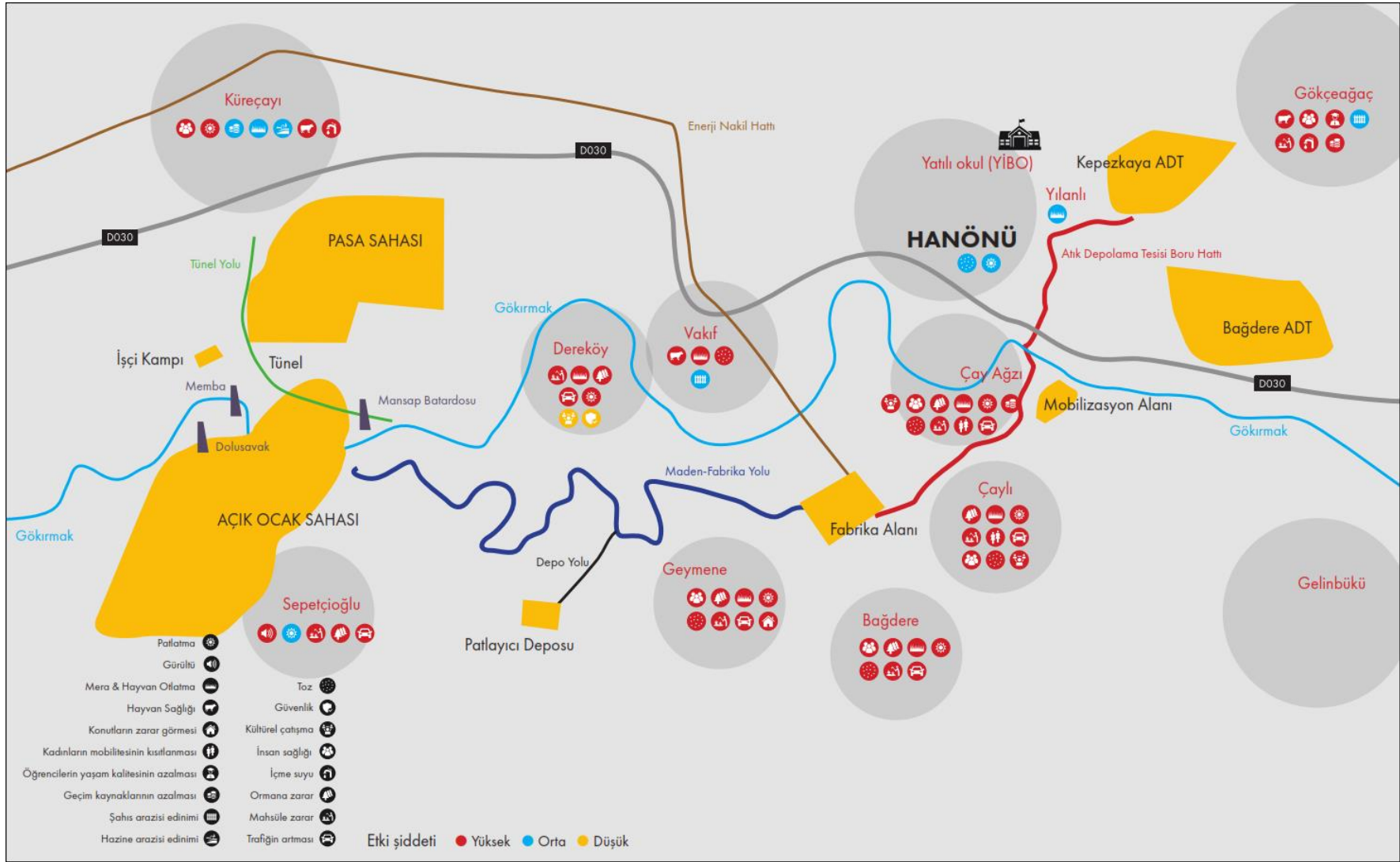
## **Chapter 4. Summary of Identified and Residual Impacts**

The identified and anticipated impacts during construction and operation phases are specified below in terms of settlements. The characteristics (positive/negative/neutral) and significance (high/medium/low/neutral) of potential impacts identified as a result of current situation analysis and the field studies carried out, as well as the proposed measures and the level of impact remaining after these measures are taken are shown in separate table.

Figure 4. Impacts of Construction Phase by Settlements

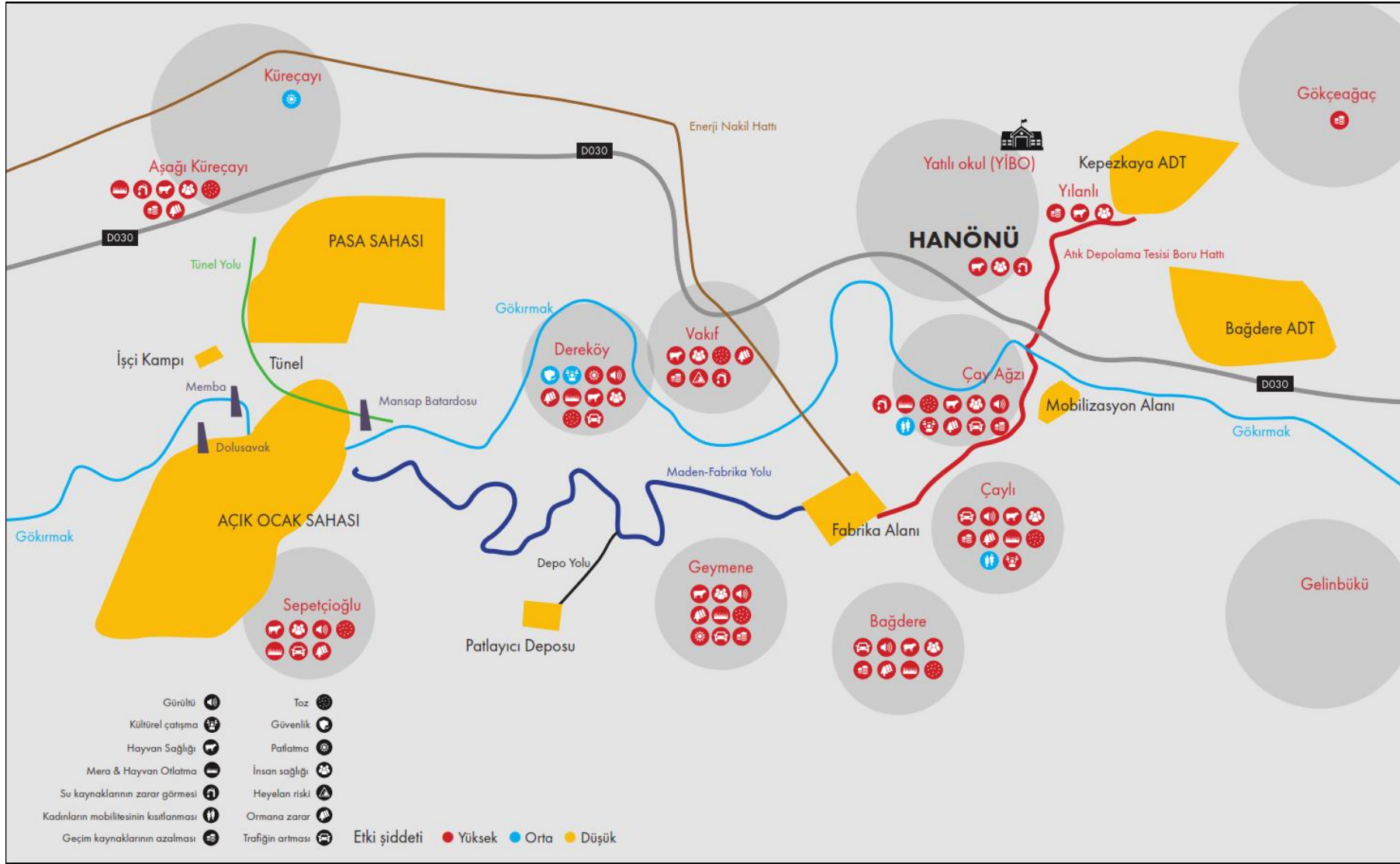


Gürültü	Noise
Kültürel çatışma	Cultural Conflict
Hayvan Sağlığı	Animal Health
Mera & Hayvan Otlatma	Grazing land & grazing
Su kaynaklarının zarar görmesi	Damage of the water resources
Kadınların mobilitesinin kısıtlanması	Restriction of the mobility of women
Geçim kaynaklarının azalması	Decrease in sources of income
Toz	Dust
Güvenlik	Security
Patlama	Explosion
İnsan Sağlığı	Human Health
Heyelan Riski	Landslide risk
Ormana Zarar	Damage to the forest
Trafiğin Artması	Increase in traffic jam



Source: SRM, 2017

Figure 5. Impacts of Operation Phase by Settlements



Source: SRM, 2017

Table 96. Summary Table of Identified and Residual Impacts

Main Topics	Impacts	Project Phases	Affected Settlements	Potential Impact	Significance	Proposed Measures	Residual Impact	
							Impact	Significance
Population Movements	Population Growth	Construction	Hanönü Central Hanönü District Taşköprü District	Positive	High	<ul style="list-style-type: none"> <li>Preparing a Stakeholder Relations Management Plan,</li> <li>Specification and implementation of tools and methods of information dissemination,</li> <li>Implementing the measures related with public health and safety, and infrastructure and quality of life,</li> <li>Giving priority to settlements affected from the project and Hanönü district in employment,</li> <li>Grievance/claims management procedure</li> </ul>	Positive	High
		Operation	Hanönü Central Hanönü District Taşköprü District	Positive	High		Positive	High
	Risk of Population Decline	Construction	Hanönü Vakıf Vakıfgeymene Dereköy Vakıfgeymene Sepetçioğlu Vakıfgeymene Geymene Bağdere Bağdere Çaylı Küreçayı Aşağıküreçayı	Negative	High		Negative	Low
		Operation	Hanönü Vakıf Vakıfgeymene Dereköy Vakıfgeymene Sepetçioğlu Vakıfgeymene Geymene Bağdere Bağdere Çaylı Küreçayı Aşağıküreçayı	Negative	High		Negative	Low
Local Economy	Local Employment	Construction	Hanönü Central Hanönü Vakıf Vakıfgeymene Dereköy Vakıfgeymene Sepetçioğlu Vakıfgeymene Geymene Bağdere Bağdere Çaylı Küreçayı Aşağıküreçayı Hanönü District Taşköprü District	Positive	High	<ul style="list-style-type: none"> <li>Setting an employment policy,</li> <li>Local employment policy and management plan conditions will be binding for subcontractors,</li> <li>Giving priority to settlements affected from the project and Hanönü district in employment,</li> <li>Supporting vocational training courses to be offered by relevant institutions,</li> </ul>	Positive	High

Main Topics	Impacts	Project Phases	Affected Settlements	Potential Impact	Significance	Proposed Measures	Residual Impact	
							Impact	Significance
		<b>Operation</b>	Hanönü Central Hanönü Vakıf Vakıfgeymene Dereköy Vakıfgeymene Sepetçioğlu Vakıfgeymene Geymene Bağdere Bağdere Çaylı Küreçayı Aşağıküreçayı Hanönü District Taşköprü District	Positive	High	<ul style="list-style-type: none"> <li>Organizing on-the-job training programs for local employees,</li> <li>Organizing miner training programs,</li> <li>A wage policy balanced between employees from other regions and local employees,</li> </ul>	Positive	High
	<b>Reinforcement/Development of the Local Economy</b>	<b>Construction</b>	Hanönü Central Hanönü Vakıf Hanönü Yılanlı Vakıfgeymene Dereköy Vakıfgeymene Sepetçioğlu Vakıfgeymene Geymene Bağdere Bağdere Çayağzı Bağdere Çaylı Gökçe ağaç Nefsigökçe ağaç Küreçayı Aşağıküreçayı Hanönü District Taşköprü District	Positive	High	<ul style="list-style-type: none"> <li>setting a local procurement policy,</li> <li>providing advantages to local companies in procurements,</li> <li>specifying which goods and services (food, shuttle service etc.) will be locally procured,</li> <li>Informing suppliers, their representatives and key stakeholders in the district on procurements and realizations,</li> <li>Establishing a corporate social responsibility policy,</li> <li>Supporting social responsibility projects which will contribute to the development of local economy,</li> </ul>	Positive	High

Main Topics	Impacts	Project Phases	Affected Settlements	Potential Impact	Significance	Proposed Measures	Residual Impact	
							Impact	Significance
		<b>Operation</b>	Hanönü Central Hanönü Vakıf Hanönü Yılanlı Vakıfgeymene Dereköy Vakıfgeymene Sepetçioğlu Vakıfgeymene Geymene Bağdere Bağdere Çayağzı Bağdere Çaylı Gökçe ağaç Nefsigökçe ağaç Küreçayı Aşağıküreçayı Hanönü District Taşköprü District	Positive	High	<ul style="list-style-type: none"> <li>Organizing a workshop to create a Hanönü Residents Platform,</li> <li>Creating a Community Advisory Panel (CAP) as a result of this workshop and electing its members,</li> <li>Evaluating the requests received and informing the stakeholders through CAP,</li> <li>Supporting to establish service cooperative for the workers transportation,</li> <li>Supporting an/or promoting public house, guesthouse and other accommodation investments for company employees in the district</li> </ul>	Positive	High
		<b>Construction</b>	Hanönü District Taşköprü District	Negative	High		Negative	Medium
		<b>Operation</b>	Hanönü District Taşköprü District	Negative	High		Negative	Medium
	<b>Reduction in Forest Area</b>	<b>Construction</b>	Bağdere Bağdere Çaylı Gökçe ağaç Nefsigökçe ağaç Küreçayı Aşağıküreçayı Hanönü District	Negative	Medium	<ul style="list-style-type: none"> <li>Conducting a household based impact assessment study for Livelihood Restoration Plan,</li> <li>Drawing up a Livelihood Restoration Plan,</li> <li>Preparing a community development program in the framework of this plan,</li> <li>Supporting income generating forestry activities, agricultural activities intended for getting more efficiency from unit area, and income generating programs for women,</li> <li>Supporting the procurement of the affected areas agricultural products,</li> </ul>	Negative	Low
		<b>Operation</b>	Bağdere Bağdere Çaylı Gökçe ağaç Nefsigökçe ağaç Küreçayı Aşağıküreçayı Hanönü District	Negative	Medium		Negative	Low

Main Topics	Impacts	Project Phases	Affected Settlements	Potential Impact	Significance	Proposed Measures	Residual Impact	
							Impact	Significance
	Protection of Forest Land (Fire Fighting, Reduction in Human Pressure)	Construction	Bağdere Bağdere Çaylı Gökçe ağaç Nefsigökçe ağaç Küreçayı Aşağıküreçayı Hanönü District	Positive	Medium	<ul style="list-style-type: none"> <li>Establishing a monitoring &amp; evaluation system,</li> <li>Grievance management procedure,</li> <li>Taking occupational health and safety, and environmental measures regarding public health and safety, and infrastructure and quality of life issues,</li> <li>Cooperating with the District Directorate of Forestry to put out forest fires,</li> <li>Effective monitoring of the water resources of the AOI settlements including ground water supply and river water levels.</li> </ul>	Positive	High
		Operation	Bağdere Bağdere Çaylı Gökçe ağaç Nefsigökçe ağaç Küreçayı Aşağıküreçayı Hanönü District	Positive	High		Positive	High
	Damage to Livestock Activities (Accident risk, dust, noise, damage to water resources, etc.)	Construction	Hanönü Central Vakıfgeymene Dereköy Vakıfgeymene Sepetçioğlu Vakıfgeymene Geymene Bağdere Bağdere Çayağzı Bağdere Çaylı Küreçayı Aşağıküreçayı	Negative	High		Negative	Medium
		Operation	Hanönü Central Vakıfgeymene Dereköy Vakıfgeymene Sepetçioğlu Vakıfgeymene Geymene Bağdere Bağdere Çayağzı Bağdere Çaylı Küreçayı Aşağıküreçayı and Kupeli	Negative	High		Negative	Medium

Main Topics	Impacts	Project Phases	Affected Settlements	Potential Impact	Significance	Proposed Measures	Residual Impact	
							Impact	Significance
	Damage to Agricultural Activities (Dust, reduction in crops, damage to or depletion of water resources, etc.)	Construction	Hanönü Central Vakıfgeymene Dereköy Vakıfgeymene Sepetçioğlu Vakıfgeymene Geymene Bağdere Bağdere Çayağzı Bağdere Çaylı Gökçe ağaç Nefsigökçe ağaç Küreçayı Aşağıküreçayı	Negative	High		Negative	Medium
		Operation	Hanönü Central Vakıfgeymene Dereköy Vakıfgeymene Sepetçioğlu Vakıfgeymene Geymene Bağdere Bağdere Çayağzı Bağdere Çaylı Gökçe ağaç Nefsigökçe ağaç Küreçayı Aşağıküreçayı	Negative	High		Negative	Medium
	Cumulative Impact (Demirci HPP, Taşköprü Dam, Acacia Mining)	Construction	Vakıfgeymene Dereköy Vakıfgeymene Sepetçioğlu Vakıfgeymene Geymene Küreçayı Aşağıküreçayı	Negative	Medium		Negative	Low
		Operation	Vakıfgeymene Dereköy Vakıfgeymene Sepetçioğlu Vakıfgeymene Geymene Küreçayı Aşağıküreçayı	Negative	Medium		Negative	Low
	Risk of reduction of	Construction	Vakıfgeymene Dereköy Hanönü District	Negative	Medium		Negative	Low

Main Topics	Impacts	Project Phases	Affected Settlements	Potential Impact	Significance	Proposed Measures	Residual Impact	
							Impact	Significance
	pasture areas	Operation	Hanönü Central Hanönü Vakıf Hanönü Yılanlı Vakıfgeymene Dereköy Vakıfgeymene Sepetçioğlu Vakıfgeymene Geymene Bağdere Bağdere Çayağzı Bağdere Çaylı Küreçayı Aşağıküreçayı Hanönü District	Neutral	Neutral		Neutral	Neutral
Land and Other Assets	Private Land Acquisition	Construction	Hanönü Yılanlı Vakıfgeymene Sepetçioğlu Hanönü District	Negative	Medium	<ul style="list-style-type: none"> <li>Preparing a land acquisition procedure,</li> <li>Giving priority to the acquisition of land consentingly,</li> <li>Calculating the price appraisal over the perfect substitute value,</li> <li>Preparing a livelihood restoration plan for households whose private lands are affected.</li> </ul>	Negative	Low
		Operation	Hanönü District	Neutral	Neutral		Neutral	Neutral
	Reduction in Utilized Public and Forest Lands	Construction	Hanönü Central Hanönü Vakıf Hanönü Yılanlı Vakıfgeymene Dereköy Vakıfgeymene Sepetçioğlu Vakıfgeymene Geymene Bağdere Bağdere Çayağzı Bağdere Çaylı Gökçe ağaç Nefsigökçe ağaç Küreçayı Aşağıküreçayı Hanönü District Taşköprü District	Negative	Medium		Negative	Low

Main Topics	Impacts	Project Phases	Affected Settlements	Potential Impact	Significance	Proposed Measures	Residual Impact	
							Impact	Significance
		<b>Operation</b>	Hanönü Central Hanönü Vakıf Hanönü Yılanlı Vakıfgeymene Dereköy Vakıfgeymene Sepetçioğlu Vakıfgeymene Geymene Bağdere Bağdere Çayağzı Bağdere Çaylı Gökçe ağaç Nefsigökçe ağaç Küreçayı Aşağıküreçayı	Negative	Medium		Negative	Low
Education	Contribution to the development of education services	<b>Construction</b>	Hanönü District	Neutral	Low	<ul style="list-style-type: none"> <li>Taking health and safety measures at tailings storage facility area,</li> <li>Designating and implementing measures to prevent dust and noise emission during activities,</li> <li>Supporting social responsibility works related with the improvement of education services rendered in the district,</li> <li>Integrating students' safety in the Contingency Plan to be prepared for this region,</li> <li>Informing students and teachers on states of emergency</li> </ul>	Positive	High
		<b>Operation</b>	Hanönü District	Positive	Medium		Positive	High
	Risk of education activities and students to be negatively affected	<b>Construction</b>	Hanönü District	Negative	High		Negative	Medium
		<b>Operation</b>	Hanönü District	Negative	High		Negative	Medium
Health	The Possibility that A Hospital Is Opened in the District in the Long-Run	<b>Construction</b>	Hanönü District	Neutral	Neutral	<ul style="list-style-type: none"> <li>Providing health trainings to employees,</li> <li>Employing a workplace doctor and allied health personnel,</li> <li>Establishing an infirmary to be used during construction and operation phases,</li> <li>Keeping a patient transport vehicle available all the time on site</li> </ul>	Neutral	Neutral
		<b>Operation</b>	Hanönü District	Positive	Medium		Positive	High

Main Topics	Impacts	Project Phases	Affected Settlements	Potential Impact	Significance	Proposed Measures	Residual Impact	
							Impact	Significance
Public Health and Safety	Blasting, Dust, Noise etc. Adverse Effects of Activities on Public Health	Construction	Hanönü Central Hanönü Vakıf Vakıfgeymene Dereköy Vakıfgeymene Sepetçioğlu Vakıfgeymene Geymene Bağdere Bağdere Çayağzı Bağdere Çaylı Küreçayı Aşağıküreçayı Hanönü District	Negative	High	<ul style="list-style-type: none"> <li>Preparing a Stakeholder Relations Management Plan,</li> <li>Establishing a monitoring &amp; evaluation system,</li> <li>Grievance/claims management procedure,</li> <li>Preparing a Contingency Plan,</li> <li>Adopting and implementing international standards on public health and safety issues,</li> <li>Avoiding the disposal of wastes and chemical substances to nature and showing zero tolerance to such act,</li> </ul>	Negative	Medium
		Operation	Vakıfgeymene Dereköy Vakıfgeymene Sepetçioğlu Vakıfgeymene Geymene Bağdere Bağdere Çayağzı Bağdere Çaylı Küreçayı Aşağıküreçayı Hanönü District Samsun Province İlkadım District Vicinity of the Port	Negative	High	<ul style="list-style-type: none"> <li>Acquisition of houses near the mine on a consenting basis in the long-run,</li> <li>Measuring and recording noise and dust emissions, and blastings,</li> <li>Implementing the Environmental Management Plan noise and dust measures,</li> <li>Conducting field visits related with the measures taken,</li> <li>Enclosing all areas within the project site with wire fences</li> </ul>	Negative	Medium
	Explosion	Construction	Vakıfgeymene Dereköy Vakıfgeymene Sepetçioğlu Küreçayı Aşağıküreçayı	Negative	High	<ul style="list-style-type: none"> <li>Preparing an explosion procedure,</li> <li>Fulfilling the commitments in the EIA report,</li> <li>Informing the mukhtars, the municipality and households before blastings,</li> </ul>	Negative	Medium
		Operation	Vakıfgeymene Dereköy Vakıfgeymene Sepetçioğlu Küreçayı Aşağıküreçayı	Negative	High	<ul style="list-style-type: none"> <li>Avoiding blastings at nights,</li> <li>Abiding by international standards,</li> </ul>	Negative	Medium

Main Topics	Impacts	Project Phases	Affected Settlements	Potential Impact	Significance	Proposed Measures	Residual Impact	
							Impact	Significance
	Dust	Construction	Hanönü Central Hanönü Vakıf Hanönü Yılanlı Vakıfgeymene Dereköy Vakıfgeymene Sepetçioğlu Vakıfgeymene Geymene Bağdere Bağdere Çayağzı Bağdere Çaylı Küreçayı Aşağıküreçayı	Negative	High	<ul style="list-style-type: none"> <li>Performing dust emission measurements,</li> <li>Fulfilling the commitments in the EIA report,</li> <li>Carrying out dust emission measurements inside and outside of the project area,</li> <li>Implementing the Environmental Management Plan noise and dust measures,</li> <li>Conducting dust collection studies,</li> <li>Covering the concentrate transport trucks beds with tarpaulin,</li> <li>Cleaning the wheels of vehicles while entering and exiting the facilities (concentrate processing plant, cargo handling area),</li> </ul>	Negative	Medium
		Operation	Hanönü Vakıf Vakıfgeymene Dereköy Vakıfgeymene Sepetçioğlu Vakıfgeymene Geymene Bağdere Bağdere Çayağzı Bağdere Çaylı Küreçayı Aşağıküreçayı Samsun Province İlkadım District Vicinity of the Port	Negative	High	<ul style="list-style-type: none"> <li>Preventing dust generation by regularly watering with water truck ,</li> <li>Roofing the areas with high dust emissions (concentrate crushing, sieving, storing),</li> <li>Crushing and Screening will be in closed buildings</li> <li>Measures will be taken to reduce dust emissions for 5-km long haul road between the facility and the open pit mine</li> <li>No transportation of concentrate during the night</li> </ul>	Negative	Medium

Main Topics	Impacts	Project Phases	Affected Settlements	Potential Impact	Significance	Proposed Measures	Residual Impact	
							Impact	Significance
	Noise	Construction	Hanönü Central Hanönü Vakıf Hanönü Yılanlı Vakıfgeymene Dereköy Vakıfgeymene Sepetçioğlu Vakıfgeymene Geymene Bağdere Bağdere Çayağzı Bağdere Çaylı Gökçeaağaç Nefsigökçeaağaç Küreçayı Aşağıküreçayı Hanönü District Taşköprü District	Negative	High	<ul style="list-style-type: none"> <li>Establishing fixed or mobile noise measurement systems,</li> </ul>	Negative	Medium
		Operation	Hanönü Vakıf Vakıfgeymene Dereköy Vakıfgeymene Sepetçioğlu Vakıfgeymene Geymene Bağdere Bağdere Çayağzı Bağdere Çaylı Samsun Province İlkadım District Vicinity of the Port	Negative	High		Negative	Medium
	Landslide-Flood Risk	Construction	Vakıfgeymene Dereköy Vakıfgeymene Sepetçioğlu Vakıfgeymene Geymene Küreçayı Aşağıküreçayı Hanönü District	Negative	High	<ul style="list-style-type: none"> <li>Monitoring the mine with georadar,</li> <li>Building the spillway on Gökırmak river according to Q10 thousand (completed),</li> <li>Preparing construction survey reports for houses around the mine</li> </ul>	Negative	Medium
		Operation	Hanönü Yılanlı Vakıfgeymene Dereköy Vakıfgeymene Sepetçioğlu Vakıfgeymene Geymene Küreçayı Aşağıküreçayı Hanönü District	Negative	High		Negative	Medium

Main Topics	Impacts	Project Phases	Affected Settlements	Potential Impact	Significance	Proposed Measures	Residual Impact	
							Impact	Significance
	<b>Traffic-Road Transportation and Storage of Chemical/Explosive Substances</b>	<b>Construction</b>	Hanönü Central Hanönü Vakıf Vakıfgeymene Dereköy Vakıfgeymene Sepetçioğlu Vakıfgeymene Geymene Bağdere Bağdere Çayağzı Bağdere Çaylı Küreçayı Aşağıküreçayı Hanönü District Taşköprü District	Negative	High	<ul style="list-style-type: none"> <li>• Training Acacia Mining and subcontractor employees on traffic, defensive driving techniques etc.,</li> <li>• Checking whether speed limits are abided by,</li> <li>• Designing protocols regarding the haulage of mine concentrate and hazardous substances,</li> <li>• Building escape ramps on the haul road between the open pit mine and mining facility,</li> <li>• Placing traffic warning signs within the facility and surrounding areas,</li> <li>• Building two underpasses on the entrance and exit of the same road and bringing them into service of local residents,</li> </ul>	Negative	Medium
		<b>Operation</b>	Hanönü Central Hanönü Vakıf Vakıfgeymene Dereköy Vakıfgeymene Sepetçioğlu Vakıfgeymene Geymene Bağdere Bağdere Çayağzı Bağdere Çaylı Küreçayı Aşağıküreçayı Hanönü District Taşköprü District	Negative	Low	<ul style="list-style-type: none"> <li>• Taking measures to prevent the entrance of pedestrians and animals to the haul road,</li> <li>• Providing toolbox trainings to the personnel,</li> <li>• Avoiding to keep explosives in the explosives storage for more than a day</li> </ul>	Negative	Low

Main Topics	Impacts	Project Phases	Affected Settlements	Potential Impact	Significance	Proposed Measures	Residual Impact	
							Impact	Significance
	<b>Damage to the Infrastructure-Concerns Related with Drinking and Utility Water Resources</b>	<b>Construction</b>	Hanönü Central Hanönü Vakıf Hanönü Yılanlı Vakıfgeymene Dereköy Vakıfgeymene Sepetçioğlu Vakıfgeymene Geymene Bağdere Bağdere Çayağzı Bağdere Çaylı Gökçeaağaç Nefsigökçeaağaç Küreçayı Aşağıküreçayı Hanönü District	Negative	High	<ul style="list-style-type: none"> <li>Monitoring water resources according to ESIA Vol I- Chapter 7</li> <li>Monitoring &amp; evaluation studies,</li> </ul>	Negative	Medium
		<b>Operation</b>	Hanönü Central Hanönü Vakıf Hanönü Yılanlı Vakıfgeymene Dereköy Vakıfgeymene Sepetçioğlu Vakıfgeymene Geymene Bağdere Bağdere Çayağzı Bağdere Çaylı Gökçeaağaç Nefsigökçeaağaç Küreçayı Aşağıküreçayı Hanönü District	Negative	High		Negative	Medium
<b>Infrastructure and Quality of Life</b>	<b>Increase in Municipal Infrastructure Investments and Services the Will Affect</b>	<b>Construction</b>	Hanönü District	Neutral	Neutral	<ul style="list-style-type: none"> <li>Implementing public health and safety measures,</li> <li>Taking effective measures regarding especially dust and noise emissions,</li> <li>Avoiding blastings at nights,</li> <li>Preparing a Stakeholder Engagement Plan,</li> <li>Implementing grievance mechanism</li> <li>Building roads exclusively for the use of the facility if necessary,</li> </ul>	Neutral	Neutral

Main Topics	Impacts	Project Phases	Affected Settlements	Potential Impact	Significance	Proposed Measures	Residual Impact	
							Impact	Significance
	Quality of Life	Operation	Hanönü District	Positive	Medium	<ul style="list-style-type: none"> <li>Supporting projects intended for common interest, which will affect quality of life in the district positively</li> </ul>	Positive	High
	Adverse Effects of blastings, Dust and Noise on the Quality of Life	Construction	Hanönü Central Hanönü Vakıf Vakıfgeymene Dereköy Vakıfgeymene Sepetçioğlu Vakıfgeymene Geymene Bağdere Bağdere Çayağzı Bağdere Çaylı Küreçayı Aşağıküreçayı Hanönü District	Negative	High		Negative	Medium
		Operation	Vakıfgeymene Dereköy Vakıfgeymene Sepetçioğlu Vakıfgeymene Geymene Bağdere Bağdere Çayağzı Bağdere Çaylı Küreçayı Aşağıküreçayı Hanönü District Samsun Province İlkadım District Vicinity of the Port	Negative	High		Negative	Medium
Cultural Heritage	No Negative Impact Was Detected	Construction	Not available	Neutral	Neutral	There is no proposed measure	Neutral	Neutral
		Operation	Not available	Neutral	Neutral		Neutral	Neutral

Main Topics	Impacts	Project Phases	Affected Settlements	Potential Impact	Significance	Proposed Measures	Residual Impact	
							Impact	Significance
Vulnerable Groups	Concerns related with the idea that quality of life, public health and safety will deteriorate Concerns related with subsistence	Construction	Hanönü Central Hanönü Vakıf Hanönü Yılanlı Vakıfgeymene Dereköy Vakıfgeymene Sepetçioğlu Vakıfgeymene Geymene Bağdere Bağdere Çayağzı Bağdere Çaylı Gökçe ağaç Nefsigökçe ağaç Küreçayı Aşağıküreçayı Hanönü District	Negative	High	<ul style="list-style-type: none"> <li>Measures regarding risks related with public health and safety,</li> <li>Measures regarding risks related with infrastructure and quality of life,</li> <li>Conducting a household based impact assessment study for Livelihood Restoration Plan,</li> <li>Drawing up a Livelihood Restoration Plan,</li> <li>Preparing a community development program in the framework of this plan,</li> <li>Preparing a Stakeholder Engagement Plan,</li> <li>Establishing a monitoring &amp; evaluation system,</li> <li>Grievance/claims management procedure</li> </ul>	Negative	Medium
		Operation	Hanönü Central Hanönü Vakıf Hanönü Yılanlı Vakıfgeymene Dereköy Vakıfgeymene Sepetçioğlu Vakıfgeymene Geymene Bağdere Bağdere Çayağzı Bağdere Çaylı Gökçe ağaç Nefsigökçe ağaç Küreçayı Aşağıküreçayı Hanönü District	Negative	High		Negative	Medium

Main Topics	Impacts	Project Phases	Affected Settlements	Potential Impact	Significance	Proposed Measures	Residual Impact	
							Impact	Significance
	Potential physical and economic displacement	Construction	Hanönü Central Hanönü Vakıf Hanönü Yılanlı Vakıfgeymene Dereköy Vakıfgeymene Sepetçioğlu Vakıfgeymene Geymene Bağdere Bağdere Çayağzı Bağdere Çaylı Gökçe ağaç Nefsigökçe ağaç Küreçayı Aşağıküreçayı Hanönü District	Neutral	Neutral		Neutral	Neutral
		Operation	Hanönü Central Hanönü Vakıf Hanönü Yılanlı Vakıfgeymene Dereköy Vakıfgeymene Sepetçioğlu Vakıfgeymene Geymene Bağdere Bağdere Çayağzı Bağdere Çaylı Gökçe ağaç Nefsigökçe ağaç Küreçayı Aşağıküreçayı Hanönü District	Neutral	Neutral		Neutral	Neutral
Social Conflicts and Tensions	The possibility of community based protests and tensions	Construction	Hanönü Central Hanönü Yılanlı Vakıfgeymene Dereköy Vakıfgeymene Sepetçioğlu Vakıfgeymene Geymene Bağdere Bağdere Çayağzı Bağdere Çaylı Hanönü District	Negative	High	<ul style="list-style-type: none"> <li>employing the Public Relations Unit as soon as possible,</li> <li>Preparing a Stakeholder Relations Management Plan,</li> <li>Establishing a monitoring &amp; evaluation system,</li> <li>Establishing internal and external grievance procedure,</li> </ul>	Negative	Low

Main Topics	Impacts	Project Phases	Affected Settlements	Potential Impact	Significance	Proposed Measures	Residual Impact	
							Impact	Significance
	The possibility of protests and tensions between employees	Operation	Hanönü Central Hanönü Vakıf Hanönü Yılanlı Vakıfgeymene Dereköy Vakıfgeymene Sepetçioğlu Vakıfgeymene Geymene Bağdere Bağdere Çayağzı Bağdere Çaylı Gökçe ağaç Nefsigökçe ağaç Küreçayı Aşağıküreçayı Hanönü District Taşköprü District	Negative	High	<ul style="list-style-type: none"> <li>Carrying out community based, corporate social responsibility projects intended for common interest,</li> <li>Establishing a Community Advisory Panel,</li> <li>Taking and effectively implementing the specified measures regarding public health and safety, and infrastructure and quality of life,</li> <li>Providing trainings to employees, subcontractors, drilling personnel and security personnel on the cultural structure of the region, gender sensitivity, and effective communication,</li> <li>Integrating the prevention of any sort of discrimination in human rights policy,</li> <li>Conducting human rights impact assessment studies regularly,</li> <li>Preparing annual work force mobilization plan by including the divisions related with work force and subcontractors,</li> <li>Leaving the local employees to last during dismissals,</li> <li>Creating scholarship programs for university students whose place of registry is Hanönü and who reside here,</li> <li>Building a video surveillance system within the project area, and improving the existing systems,</li> <li>.</li> </ul>	Negative	Low
		Construction	Hanönü Central Hanönü Vakıf Hanönü Yılanlı Vakıfgeymene Dereköy Vakıfgeymene Sepetçioğlu Vakıfgeymene Geymene Bağdere Bağdere Çayağzı Bağdere Çaylı Gökçe ağaç Nefsigökçe ağaç Küreçayı Aşağıküreçayı Hanönü District Taşköprü District	Negative	High		Negative	Low
		Operation	Hanönü Central Vakıfgeymene Dereköy Vakıfgeymene Sepetçioğlu Vakıfgeymene Geymene Bağdere Bağdere Çayağzı Bağdere Çaylı Hanönü District	Negative	High		Negative	Low

## Chapter 5. Monitoring & Evaluation

Impacts of the project during construction and operation phases should be monitored and evaluated, and to this end, a monitoring & evaluation system will be established.

In this respect, socioeconomic impacts of land acquisitions made within the scope of the project on the households, impacts related with public health and safety (dust, noise, water use, blasting etc.), infrastructure and quality of life, local economy, vulnerable groups, and social conflicts should be monitored & evaluated to determine whether specified measures are realized, and monitoring & evaluation studies should be conducted regarding the effectiveness of implemented measures, and measures which should be corrected and improved.

Monitoring & evaluation study will be conducted for the Social Management Plan, which will be finalized by Acacia Mining.

Monitoring & evaluation studies are recommended to be carried out at construction phase of the project, after the completion of the construction phase, at operation phase and the mine closure procedure during the operation phase.

The monitoring & evaluation system is recommended to be established as **performance monitoring, impact monitoring, completion of the construction phase** of the project, and **completion of the closure of the mine** during operation phase.

**Table 97. Monitoring & Evaluation Components**

Monitoring & Evaluation Component Activities	Project Phase	Duration	Source of Information/Data Collection Methods	Data Collection, Analysis and Reporting Responsibility	Reporting Frequency
Performance Monitoring	Construction	2 years	Every 6 months progress reports, Researches, Interviews conducted with stakeholders in the field	Acacia Mining officials, Internal and external consultants	by internal and external consultant, every 6 months
	Operation	13 years	Every 6 months progress reports, Researches, Interviews conducted with stakeholders in the field	Acacia Mining officials, Internal and external consultants	by internal and external consultant, every 6 months
Impact Monitoring	Construction	2 years	Performance monitoring reports, Impact monitoring report, every 6 months Researches,	Acacia Mining officials, Internal and external consultants	by internal and external consultant, every 6 months

			Interviews conducted with stakeholders in the field		
	Operation	13 years	Monthly progress reports, Performance monitoring reports, Impact monitoring report, every 6 months Researches, Interviews conducted with stakeholders in the field	Acacia Mining officials, Internal and external consultants	by internal and external consultant, every 6 months
Completion Auditing	Construction	1 year	Performance and impact monitoring reports, Interviews conducted with stakeholders in the field, External review closure report	Acacia Mining officials, Internal and external consultants	by internal and external consultant, every 6 months
	Mine Closure	2 year	Performance and impact monitoring reports, Interviews conducted with stakeholders in the field, External review closure report	Acacia Mining officials, Internal and external consultants	by internal and external consultant, every 6 months
Monitoring & Evaluation Component Activities	Project Phase	Duration	Source of Information/Data Collection Methods	Data Collection, Analysis and Reporting Responsibility	Reporting Frequency

Source: SRM, 2017

## Chapter 6. Social Management Plan

Acacia Mining Social Management Plan includes:

- **Stakeholder Engagement Plan** which is prepared according to EBRD PR 10. SEP identifies stakeholders, describes the frequency of engagement with each stakeholder, includes stakeholder mapping that illustrates the risks of lack of engagement visits. SEP outlines **grievance mechanism** for internal and external stakeholders and ensures that there is a working grievance mechanism in place for the Project.
- A **Community Advisory Panel** to monitor the impacts of stakeholders related with the project at local level, to evaluate these impacts, to ensure participation in corporate social responsibility issues etc., and integrating the system to be identified regarding the structure and functioning of this Panel into the corporate policies of the company,
- **Public Relations department** in place, which comprise of a two full time employees and will be expanded according to Project's needs.
- Establishes a mechanism for **monitoring & evaluation** of the performance of the project as well as its' impacts during construction and operation phases in Project's Aol on households, vulnerable groups, and PAPs livelihoods,
- **Community development plan** that specifies projects and activities in areas that will be supported in order to mitigate potential adverse social impacts and boost Project's community benefits,
- **Local procurement policy and management plan** that ensures that local companies will be preferred in procurement. Local procurement policies describes which goods and services will be procured locally, in order to ensure local economy benefits from the Project's procurement.
- **Local employment policy and management plan** that specifies KPIs for local employment; with emphasis on employment for Project affected settlements. Local employment policy also includes vocational training courses to be offered by relevant institutions, organization of on-the-job training programs for local employees, organizing miner training programs, etc.
- **Livelihood Restoration Plan** for the households that are affected from the project directly from Project's land acquisition. The aim of LRP is to identify PAPs impacted by land acquisition either through loss of private land and/or limited access to public land such as communal grazing grounds/forestry land etc. LRP ensures that a mechanism is in place to restore livelihoods of PAPs impacted from loss of land. LRP includes a **corporate land acquisition plan** that emphasizes willing buyer seller negotiations as opposed to urgent expropriation.
- **Emergency Response Plans on public health and safety, storage and transportation of hazardous substances**, adopting and implementing the international standards on these issues, collecting wastes regularly and establishing a waste discharge system, completing the EIA procedure and taking the relevant measures related with risks,

- In order to **mitigate any potential adverse impacts of the Project on water resources**, there is a hydrogeological modeling and impact assessment report as discussed in ESIA Vol I Chapter 7
- In order to prevent the adverse impacts of **Project related explosions**, SMP confirms that there will be no blastings on nights and Sundays. There will be landslide risk assessment prior to mine explosions to minimize impacts on houses in the vicinity. Vibrations will be measured and recorded during explosion, to ensure adverse impact to the surrounding residences are kept at a minimum.
- **Dust impact** will be contained via numerous mitigation methods depending on the cause and location of dust. In order to reduce negative impacts related with dust; there will be continuous measurement and monitoring of dust levels. Measuring points will be set inside and outside the project area. Some of the measures will include covering the truck beds of concentrate transporting vehicles with tarpaulin, cleaning the wheels of vehicles while entering and exiting the facilities (concentrate processing plant, cargo handling area), preventing dust generation by regularly watering with water trucks, to minimize dust. The dust collection units will be installed,
- **Noise Reduction**, establishing fixed and mobile noise measurement systems,
- **Against landslide and flood risk**, monitoring the mine with georadar, making construction surveys for houses around the mine has been completed by Paye Engineering,
- In order to manage the risks about **vehicle traffic**, training the employees of the company and the subcontractors on traffic, defensive driving techniques etc., checking whether speed limits are abided by, developing protocols on the haulage of mine concentrate and hazardous substances, placing traffic warning signs and speed traps within the facility and surrounding areas,

**Table 98. Social Management Plan**

Main Topics	Impacts	Proposed Measures	Time Interval	Responsibility	Monitoring	Implementation Plan
<b>Effective stakeholder engagement and protection of vulnerable groups</b>	<b>Preventing Community Based Tensions</b>	<ul style="list-style-type: none"> <li>• Employingplanned number of experts in the Public Relations Unit,</li> <li>• Preparing a SEP (stakeholder engagement plan)</li> <li>• Establishing a monitoring &amp; evaluation system,</li> <li>• Establishing internal and external grievance procedures,</li> <li>• Preparing and implementing a community development plan</li> <li>• Establishing a Community Advisory Panel,</li> <li>• Designing and effectively implementing the specified measures regarding public health and safety, and infrastructure and quality of life,</li> <li>• Providing trainings to employees, subcontractors, drilling personnel and security personnel on the cultural structure of the region, gender sensitivity, and effective communication,</li> <li>• Integrating the prevention of any sort of discrimination in human rights policy,</li> <li>• Conducting human rights impact assessment studies regularly,</li> <li>• Preparing annual work force mobilization plan by including the divisions related with work force and subcontractors,</li> <li>• Providing KPIs for local work force</li> <li>• Creating scholarship programs for university students whose place of registry is Hanönü and who reside here,</li> <li>•</li> </ul>	Construction and operation phase	<ul style="list-style-type: none"> <li>• Acacia Mining</li> <li>• External Expert/Consultant</li> </ul>	<ul style="list-style-type: none"> <li>• Monthly activity reports,</li> <li>• Impact monitoring &amp; evaluation reports,</li> <li>• Performance monitoring &amp; evaluation reports,</li> <li>• Grievance logs,</li> <li>• Recorded open and closed grievances,</li> <li>• Number and budget of social projects supported, and the number of beneficiaries,</li> <li>• News published in local, regional and national media,</li> <li>• Number of stakeholders consulted and visited, and frequency of visits,</li> <li>• Protests against the project,</li> <li>• Number of complaints received through internal grievance system,</li> <li>• Publicity and communication tools and materials,</li> <li>• Members taking part in Community Advisory Panel (CAP) and CAP activities,</li> <li>• Number of employees in the Public Relations Department,</li> <li>• Monthly activity reports of subcontractors,</li> </ul>	<ul style="list-style-type: none"> <li>• Definition of the Public Relations team and its organization chart,</li> <li>• Stakeholder Engagement Plan,</li> <li>• Grievance System</li> <li>• Monitoring &amp; evaluation system,</li> <li>• Community Development Plan,</li> <li>• Community Advisory Panel procedure,</li> <li>• Orientation and toolbox trainings,</li> <li>• Local Employment Policy,</li> <li>• Human Rights Policy,</li> <li>• Work Force Mobilization Plan</li> </ul>

Main Topics	Impacts	Proposed Measures	Time Interval	Responsibility	Monitoring	Implementation Plan
	<b>Mitigation measures against the affected households and vulnerable groups in the project influence area</b>	<ul style="list-style-type: none"> <li>Measures regarding risks related with public health and safety,</li> <li>Measures regarding risks related with infrastructure and quality of life,</li> <li>Conducting a household based impact assessment study for Livelihood Restoration Plan,</li> <li>Designing a Livelihood Restoration Plan,</li> <li>Preparing a community development program in the framework of this plan,</li> <li>Preparing a Stakeholder Engagement Plan,</li> <li>Establishing a monitoring &amp; evaluation system,</li> <li>Grievance system in place</li> </ul>	Construction and operation phase	<ul style="list-style-type: none"> <li>Acacia Mining</li> <li>External Expert/Consultant</li> </ul>	<ul style="list-style-type: none"> <li>Monthly activity reports,</li> <li>Impact monitoring &amp; evaluation reports,</li> <li>Performance monitoring &amp; evaluation reports,</li> <li>Grievance notifications,</li> <li>Recorded open and closed grievances,</li> <li>Number of vulnerable groups affected from the project and how they are affected,</li> <li>Number of vulnerable groups supported and how they are supported,</li> <li>Changes in the households' economic sources of income,</li> <li>Affected households and ways of exposure,</li> <li>Drills/training for Emergency preparedness plan for community health and safety</li> </ul>	<ul style="list-style-type: none"> <li>Stakeholder Engagement Plan,</li> <li>Grievance System,</li> <li>Monitoring &amp; evaluation system,</li> <li>Livelihood Restoration Plan,</li> <li>Community Development Program</li> <li>Emergency Preparedness Plan</li> </ul>

Main Topics	Impacts	Proposed Measures	Time Interval	Responsibility	Monitoring	Implementation Plan
Improving Local Economy and Livelihoods	Employing local work force and skills trainings	<ul style="list-style-type: none"> <li>Preparing an employment policy,</li> <li>Local employment policy binding also for subcontractors,</li> <li>Giving priority to Project affected areas and Hanönü district in employment,</li> <li>Supporting vocational training courses to be offered by relevant institutions,</li> <li>Organizing on-the-job training programs for local employees,</li> <li>Setting KPI targets for local employment</li> <li>Organizing mining training programs,</li> <li>A wage policy balanced between employees from other regions and local employees,</li> </ul>	Construction and operation phase	<ul style="list-style-type: none"> <li>Acacia Mining</li> <li>External Expert/Consultant</li> </ul>	<ul style="list-style-type: none"> <li>Monthly activity reports,</li> <li>Impact monitoring &amp; evaluation reports,</li> <li>Performance monitoring &amp; evaluation reports,</li> <li>Number of local employees,</li> <li>Vocational training courses organized and number of trainees,</li> <li>Number of recruitment among trainees who participated in vocational training courses,</li> <li>Number of trainees who were provided miner trainings,</li> <li>Number of institutions and persons informed,</li> <li>Number of university students awarded scholarship,</li> </ul>	<ul style="list-style-type: none"> <li>Stakeholder Engagement Plan,</li> <li>Grievance System</li> <li>Monitoring &amp; evaluation system,</li> <li>Local employment policy,</li> <li>On-the-job training programs,</li> <li>Miner training program,</li> <li>Scholarship program</li> </ul>

Main Topics	Impacts	Proposed Measures	Time Interval	Responsibility	Monitoring	Implementation Plan
	<b>Supporting the Local Economy and Local Procurement</b>	<ul style="list-style-type: none"> <li>• Setting a local procurement policy,</li> <li>• Providing advantages to local companies in procurements,</li> <li>• Specifying which goods and services (food, shuttle service etc.) will be locally procured,</li> <li>• Informing suppliers, their representatives and key stakeholders in the district on procurements and realizations,</li> <li>• Establishing a community development program,</li> <li>• Supporting social responsibility projects which will contribute to the development of local economy,</li> <li>• Organizing a workshop to create a Hanönü Residents Platform,</li> <li>• Creating a Community Advisory Panel (CAP) as a result of this workshop and electing its members,</li> <li>• Evaluating the requests received and informing the stakeholders through CAP,</li> <li>• Establishing a service cooperative for the workers transportation,</li> <li>• Supporting an/or promoting public house, guesthouse and other accommodation investments for company employees in the district</li> </ul>	Construction and operation phase	<ul style="list-style-type: none"> <li>• Acacia Mining</li> <li>• External Expert/Consultant</li> </ul>	<ul style="list-style-type: none"> <li>• Monthly activity reports,</li> <li>• Impact monitoring &amp; evaluation reports,</li> <li>• Performance monitoring &amp; evaluation reports,</li> <li>• Size of procurements made,</li> <li>• Number of companies from which local procurements were made,</li> <li>• Number of institutions and persons informed,</li> <li>• Members taking part in Community Advisory Panel (CAP) and CAP activities,</li> <li>• Number of members and vehicles of the service cooperative established/supported,</li> <li>• Hanönü workshop and Hanönü Platform established,</li> <li>• Number of beneficiaries of supported social responsibility projects,</li> <li>• Proportion of employees accommodating in public houses and guesthouses,</li> </ul>	<ul style="list-style-type: none"> <li>• Stakeholder Engagement Plan,</li> <li>• Grievance System</li> <li>• Monitoring &amp; evaluation system,</li> <li>• Setting a local procurement policy,</li> <li>• Corporate social responsibility policy,</li> <li>• Community Advisory Panel procedure,</li> <li>• Transportation services job definition,</li> <li>• Hanönü workshop outcomes,</li> <li>• Number of employees residing/living in the district</li> </ul>

Main Topics	Impacts	Proposed Measures	Time Interval	Responsibility	Monitoring	Implementation Plan
	<b>Improving Local Economy and livelihoods</b>	<ul style="list-style-type: none"> <li>• Conducting a household based impact assessment study for Livelihood Restoration Plan,</li> <li>• Designing a Livelihood Restoration Plan,</li> <li>• Preparing a community development program in the framework of this plan, <ul style="list-style-type: none"> <li>○ Supporting income generating forestry activities, agricultural activities intended for getting more efficiency from unit area,</li> <li>○ Preparing income generating programs targeted for women,</li> <li>○ Introducing trainings for youth on mine specific areas to ensure guaranteed long term employment</li> <li>○ Supporting the procurement of the agricultural products from Project affected settlement by establishing marketing channels</li> </ul> </li> <li>• Establishing a monitoring &amp; evaluation system,</li> <li>• Establishing a Grievance system,</li> <li>• Taking occupational health and safety, and environmental measures regarding public health and safety, and infrastructure and quality of life issues,</li> <li>• Cooperating with the District Directorate of Forestry to put out forest fires,</li> </ul>	Construction and operation phase	<ul style="list-style-type: none"> <li>• Acacia Mining</li> <li>• External Expert/Consultant</li> </ul>	<ul style="list-style-type: none"> <li>• Monthly activity reports,</li> <li>• Impact monitoring &amp; evaluation reports,</li> <li>• Performance monitoring &amp; evaluation reports,</li> <li>• Size of procurements made,</li> <li>• Number of companies from which local procurements were made,</li> <li>• Number of institutions and persons informed,</li> <li>• Number of beneficiaries of community development works</li> <li>• Number of drop-outs of the CDD programs</li> <li>• Income generated by CDD beneficiaries from newly introduced programs</li> <li>• Number of employees in the mining sector who were enrolled from training programs</li> </ul>	<ul style="list-style-type: none"> <li>• Stakeholder Engagement Plan,</li> <li>• Grievance System</li> <li>• Monitoring &amp; evaluation system,</li> <li>• Setting a local procurement policy,</li> <li>• Livelihood Restoration Plan,</li> <li>• Community Development Work Schedule</li> </ul>

Main Topics	Impacts	Proposed Measures	Time Interval	Responsibility	Monitoring	Implementation Plan
Effective Land Acquisition	Emphasizing importance of willing buyer seller agreements for land acquisition	<ul style="list-style-type: none"> <li>Preparing a land acquisition procedure,</li> <li>Giving priority to the acquisition of land via willing buyer seller agreements,</li> <li>Using full replacement cost model for calculating the land compensations,</li> <li>Preparing a livelihood restoration plan for households whose private lands are affected.</li> </ul>	Construction Phase	<ul style="list-style-type: none"> <li>Acacia Mining</li> <li>External Expert/Consultant</li> </ul>	<ul style="list-style-type: none"> <li>Monthly activity reports,</li> <li>Impact monitoring &amp; evaluation reports,</li> <li>Performance monitoring &amp; evaluation reports,</li> <li>Number of plots purchased consensually,</li> <li>Number of willing buyer seller agreements,</li> <li>Land compensation amounts</li> </ul>	<ul style="list-style-type: none"> <li>Stakeholder Engagement Plan,</li> <li>Land acquisition transactions,</li> <li>Monitoring &amp; evaluation system,</li> <li>Grievance system,</li> <li>Land acquisition procedure</li> </ul>
Sustainability of access to Education and Healthcare services	Ensuring the continuity of quality in education services	<ul style="list-style-type: none"> <li>Taking necessary health and safety measures at tailings storage facility area,</li> <li>Designing and implementing measures to prevent dust and noise emission during activities,</li> <li>Supporting community development projects related with the improvement of education services rendered in the district,</li> <li>Integrating students' and district education directorate in emergency preparedness plans of the tailings storage dam facility,</li> <li>Informing students and teachers on states of emergency and including them in drills and trainings</li> </ul>	Construction and operation phase	Acacia Mining	<ul style="list-style-type: none"> <li>Monthly activity reports,</li> <li>Impact monitoring &amp; evaluation reports,</li> <li>Number of notifications made,</li> <li>Number of students supported,</li> <li>Number of trainings given for health and safety, traffic and precautions near mine area</li> </ul>	<ul style="list-style-type: none"> <li>Monthly activity reports,</li> <li>Impact monitoring &amp; evaluation reports,</li> <li>Performance monitoring &amp; evaluation reports,</li> <li>Social Action Plan,</li> <li>Field security measures</li> </ul>
	Ensuring continuity of quality in healthcare services	<ul style="list-style-type: none"> <li>Providing health trainings to employees,</li> <li>Employing a workplace doctor and health personnel,</li> <li>Establishing an infirmary to be used during construction and operation phases,</li> <li>Keeping a patient transport vehicle available all the time on site</li> </ul>	Construction and operation phase	Acacia Mining	<ul style="list-style-type: none"> <li>Monthly activity reports,</li> <li>Impact monitoring &amp; evaluation reports,</li> <li>Performance monitoring &amp; evaluation reports,</li> <li>Healthcare personnel employed,</li> <li>Health records,</li> </ul>	<ul style="list-style-type: none"> <li>Monthly activity reports,</li> <li>Impact monitoring &amp; evaluation reports,</li> <li>Performance monitoring &amp; evaluation reports,</li> </ul>
Safeguarding public health and safety,	Protecting public health and safety, mitigating risks	<ul style="list-style-type: none"> <li>Preparing a Stakeholder Relations Management Plan,</li> </ul>	Construction and operation phase	<ul style="list-style-type: none"> <li>Acacia Mining</li> </ul>	<ul style="list-style-type: none"> <li>Monthly activity reports,</li> <li>Impact monitoring &amp; evaluation reports,</li> </ul>	<ul style="list-style-type: none"> <li>Stakeholder Engagement Plan,</li> <li>Grievance system</li> </ul>

Main Topics	Impacts	Proposed Measures	Time Interval	Responsibility	Monitoring	Implementation Plan
improving quality of life	for potential safety issues	<ul style="list-style-type: none"> <li>Establishing a monitoring &amp; evaluation system,</li> <li>Grievance/claims management procedure,</li> <li>Preparing a Contingency Plan,</li> <li>Adopting and implementing international standards on public health and safety issues,</li> <li>Avoiding the disposal of wastes and chemical substances to nature and showing zero tolerance to such act,</li> <li>Acquisition of houses near the mine on a consenting basis in the long-run,</li> <li>Measuring and recording noise and dust emissions, and blastings,</li> <li>Implementing the Environmental Management Plan noise and dust measures,</li> <li>Conducting field visits related with the measures taken,</li> <li>Enclosing all areas within the project site with wire fences</li> </ul>		<ul style="list-style-type: none"> <li>External Expert/Consultant</li> </ul>	<ul style="list-style-type: none"> <li>Performance monitoring &amp; evaluation reports,</li> <li>Grievance logs,</li> <li>Recorded open and closed grievances,</li> <li>Waste discharge system,</li> <li>Certified EIA Report,</li> <li>Number of institutions and persons informed,</li> <li>Accredited laboratory results,</li> <li>Ministry of Environment and Urbanization controls,</li> <li>Measurements and controls performed by third parties,</li> </ul>	<ul style="list-style-type: none"> <li>Monitoring &amp; evaluation system,</li> <li>Contingency Plans,</li> <li>EIA Report,</li> <li>Waste discharge system,</li> <li>Procedures drawn up in compliance with international standards</li> </ul>
	Mitigating negative impacts related with explosions	<ul style="list-style-type: none"> <li>Preparing explosion procedure and timeline,</li> <li>Keeping records of daily explosion noise level measurements</li> <li>Preparing a baseline for housing conditions near mine site</li> <li>Fulfilling the commitments in the EIA report,</li> <li>Informing the mukhtars, the municipality and households before potential explosions,</li> <li>No explosions at nights and on sundays,</li> <li>Abiding by international standards,</li> </ul>	Construction and operation phase	Acacia Mining	<ul style="list-style-type: none"> <li>Monthly activity reports,</li> <li>Impact monitoring &amp; evaluation reports,</li> <li>Performance monitoring &amp; evaluation reports,</li> <li>Grievance notifications,</li> <li>Recorded open and closed grievances,</li> <li>Number of institutions and persons informed,</li> </ul>	<ul style="list-style-type: none"> <li>Grievance system</li> <li>Monitoring &amp; evaluation system,</li> <li>Explosion procedure,</li> <li></li> </ul>

Main Topics	Impacts	Proposed Measures	Time Interval	Responsibility	Monitoring	Implementation Plan
	<b>Mitigating negative impacts related with dust</b>	<ul style="list-style-type: none"> <li>Performing dust emission measurements,</li> <li>Fulfilling the commitments in the EIA report,</li> <li>Carrying out dust emission measurements inside and outside of the project area,</li> <li>Implementing the Enviromental Management Plan dust measures,</li> <li>Conducting dust collection studies,</li> <li>Covering the concentrate trucks beds with tarpaulin,</li> <li>Cleaning the wheels of vehicles while entering and exiting the facilities (concentrate processing plant, cargo handling area),</li> <li>Preventing dust generation by regularly watering with water trucks,</li> <li>Crushing and Screening will be in closed buildings</li> <li>Establishing grievence mechanism</li> <li>Establishing dust collection units</li> </ul>	Construction and operation phase	Acacia Mining	<ul style="list-style-type: none"> <li>Monthly activity reports,</li> <li>Impact monitoring &amp; evaluation reports,</li> <li>Performance monitoring &amp; evaluation reports,</li> <li>Grievance logs,</li> <li>Recorded open and closed grievances,</li> <li>Dust measurements and controls,</li> <li>Reduction in the amount of dust after the dust measures,</li> <li>Sprinkled roads,</li> <li>Sprinkle systems,</li> <li>Indoor areas,</li> <li>Number of institutions and persons informed,</li> </ul>	<ul style="list-style-type: none"> <li>Grievance/claims management procedure,</li> <li>Monitoring &amp; evaluation system,</li> <li>The Enviromental Management Plan dust measures</li> </ul>
	<b>Mitigating negative impacts related with noise</b>	<ul style="list-style-type: none"> <li>Establishing noise measurement system and monitoring</li> <li>Implementing the Enviromental Management Plan noise measures</li> </ul>	Construction and operation phase	Acacia Mining	<ul style="list-style-type: none"> <li>Monthly activity reports,</li> <li>Impact monitoring &amp; evaluation reports,</li> <li>Performance monitoring &amp; evaluation reports,</li> <li>Grievance logs,</li> <li>Recorded open and closed grievances,</li> <li>Fixed and mobile noise measurements,</li> <li>Reduction in noise level after the action plan,</li> <li>Number of institutions and persons informed,</li> </ul>	<ul style="list-style-type: none"> <li>Grievance system,</li> <li>Monitoring &amp; evaluation system,</li> <li>Noise Measurements</li> </ul>

Main Topics	Impacts	Proposed Measures	Time Interval	Responsibility	Monitoring	Implementation Plan
	<b>Taking measures against landslide and flood risk</b>	<ul style="list-style-type: none"> <li>Monitoring the mine with georadar,</li> <li>Building the spillway on Gökırmak river according to Q10 thousand,</li> <li>Preparing construction survey reports for houses around the mine (Completed)</li> </ul>	Construction and operation phase	<ul style="list-style-type: none"> <li>Acacia Mining</li> <li>External Expert/Consultant</li> </ul>	<ul style="list-style-type: none"> <li>Monthly activity reports,</li> <li>Impact monitoring &amp; evaluation reports,</li> <li>Performance monitoring &amp; evaluation reports,</li> <li>Grievance logs,</li> <li>Recorded open and closed grievances,</li> <li>Georadar measurements,</li> <li>Construction survey reports</li> </ul>	<ul style="list-style-type: none"> <li>Grievance system,</li> <li>Monitoring &amp; evaluation system,</li> <li>Construction survey reports (Completed),</li> <li></li> </ul>
	<b>Management of traffic risks</b>	<ul style="list-style-type: none"> <li>Training Acacia Mining and subcontractor employees on traffic, defensive driving techniques etc.,</li> <li>Checking whether speed limits are abided by,</li> <li>Design protocols regarding the haulage of mine concentrate and hazardous substances, and</li> <li>Building escape ramps on the haul road between the open pit mine and mining facility,</li> <li>Placing traffic warning signs within the facility and surrounding areas,</li> <li>Building <b>two underpasses</b> on the entrance and exit of the same road and bringing them into service of local residents,</li> <li>Taking measures to prevent the entrance of pedestrians and animals to the haul road,</li> </ul>	Construction and operation phase	Acacia Mining	<ul style="list-style-type: none"> <li>Monthly activity reports,</li> <li>Impact monitoring &amp; evaluation reports,</li> <li>Performance monitoring &amp; evaluation reports,</li> <li>Grievance notifications,</li> <li>Recorded open and closed grievances,</li> <li>Number of companies and drivers trained,</li> <li>Traffic warning signs,</li> <li>Number of vehicles and drivers checked for speed limit and traffic rules</li> <li>Traffic tickets,</li> <li>Traffic accidents,</li> </ul>	<ul style="list-style-type: none"> <li>Grievance system</li> <li>Monitoring &amp; evaluation system,</li> <li>Training programs,</li> <li>Hazardous substances storage and transportation procedure</li> </ul>
	<b>Transportation and Storage of Chemical/Explosive Substances</b>	<ul style="list-style-type: none"> <li>Providing toolbox trainings to the personnel,</li> <li>Avoiding to keep explosives in the explosives storage for more than a day</li> <li>Designing protocols regarding the haulage of mine concentrate and hazardous substances, and</li> </ul>	Construction and operation phase	Acacia Mining	<ul style="list-style-type: none"> <li>Monthly activity reports,</li> <li>Impact monitoring &amp; evaluation reports,</li> <li>Performance monitoring &amp; evaluation reports,</li> <li>Number of employees who participated in the trainings, period of study</li> </ul>	<ul style="list-style-type: none"> <li>Grievance system,</li> <li>Monitoring &amp; evaluation system,</li> <li>Hazardous substances storage and transportation procedure,</li> <li>Training programs</li> </ul>

Main Topics	Impacts	Proposed Measures	Time Interval	Responsibility	Monitoring	Implementation Plan
	<b>Preventing the reduction of and/or damage to water resources</b>	<ul style="list-style-type: none"> <li>Completing hydrogeological surveys,</li> <li>Monitoring &amp; evaluation studies,</li> </ul>	Construction and operation phase	Acacia Mining	<ul style="list-style-type: none"> <li>Monthly activity reports,</li> <li>Impact monitoring &amp; evaluation reports,</li> <li>Performance monitoring &amp; evaluation reports,</li> <li>Grievance notifications,</li> <li>Recorded open and closed grievances,</li> <li>Water sample analyses,</li> <li>Reduction in the amount of water used in the company's operations,</li> <li>Monitoring the water resources of settlements,</li> <li>Number of institutions and persons informed,</li> </ul>	<ul style="list-style-type: none"> <li>Grievance system,</li> <li>Monitoring &amp; evaluation system,</li> <li>Hydrology reports</li> </ul>
	<b>Improving the roads that are damaged</b>	<ul style="list-style-type: none"> <li>If roads are damaged because of the project, they will be repaired by grievance mechanism,</li> <li>Building roads exclusively for the use of the facility if necessary,</li> </ul>	Construction and operation phase	Acacia Mining	<ul style="list-style-type: none"> <li>Monthly activity reports,</li> <li>Impact monitoring &amp; evaluation reports,</li> <li>Performance monitoring &amp; evaluation reports,</li> <li>Grievance notifications,</li> <li>Recorded open and closed grievances,</li> </ul>	<ul style="list-style-type: none"> <li>Grievance system,</li> <li>Monitoring &amp; evaluation system,</li> </ul>

## **Appendix 1. Questions and Opinions Received from Stakeholders Interviewed during Field Study**

Opinions and assessment received from stakeholders during the field study is given in the table below.

Questions asked during the field study conducted;

- Will gold be extracted?
- Will cyanide and similar hazardous substances be used?
- How much dust will be emitted? What will happen if it causes us harm?
- Will our village be moved? Will we be displaced?
- Do blastings damage our homes?
- Will they take our homes?
- What will be done about the noise? Are our homes too close?
- Will our water resources be damaged?
- How much will they pay for our homes?
- What will happen if the dust emitted damages our crops, animals and us?
- Will our drinking water and rivers be affected?
- Will our livestock activities be affected negatively?
- Will our roads, drinking and utility water infrastructure be damaged?
- How many people will work? What qualifications will be required in persons who will be employed?
- Will they provide support, carry out social responsibility works on infrastructure, education, agriculture and increasing the level of income?
- Will they hold meetings with us?
- Will there be acquisitions in Hanönü?
- When will the construction start and end?
- For how many years will the mine operate?

## Appendix 2. The Pasture Agreement Signed Between Acacia Mining and Vakıfgeymene Mukhtarship

### AGREEMENT

Following the meeting of Acacia Maden Mining Operations with the Head of the Vakıf Geymene Village and Village members it has been agreed that a new pasture range should be designated because derivation tunnels will occupy the Dere Neighborhood Pasture. In this regard, the Head of the Vakıf Geymene Village and Village members have given consent to the construction of the mentioned derivation tunnel and buildings. In return for this consent Acacia Maden Mining Operations will follow up on the necessary procedures within the framework of laws and regulations in order to carry out the following tasks.

- 1- The pasture range that will be designated will be +/-%20 of the present pasture range.
- 2- The pasture range what will be designated will be located in the Dere Neighborhood or in an area which is closest to the farms of the people of the Dere Neighborhood.
- 3- An area which has the adequate features will be utilized.
- 4- The land sale process will be finalized twelve months after the tunnel structures are completed and in operation.
- 5- If there are compelling reasons that an area cannot be obtained, a designated field will be leased. The rent fee that will be payed to the owner of the leased field will be covered by Acacia Maden Mining Operations.

Leasing Method:

Is equal to the economic value of the crop that will be planted to the leased field.

- 6- The costs and land arrangements with regards to making the leased field more suitable in terms of animal grazing will be covered by Acacia Maden Mining Operations. Within this framework parties have mutually made a goodwill agreement on 01/04/2015.

Acacia Maden Mining Operations

İlhan BULUT

Head of Vakıf Geymene Village

Hüseyin YÜCEL

Village Members

Hamdi ERKAN Yakup ÖZKAN

Residents

Yunus YÜCEL

Witness

### **Appendix 3. Public disclosure meeting questions and answers**

### **Appendix 4. Photos**

Will be submitted as a separate file after the final version of the report becomes definite.



Acacia  
Mining Operations

# ACACIA MINE OPERATION GOKIRMAK COPPER MINE Cumulative Impact Assessment 2017

Document Number

ACACIA-2017-E&S-SRM-CIA-200

Disclosure Date

29.09.2017

Prepared By

Environment & Social Department,  
SRM Consultant



Social  
Risk  
Management

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# Cumulative Impact Assessment (CIA)

## Introduction

Potential social impacts of Gökırmak Copper Mine Project have been identified in the Social Impact Assessment report. Settlements located in the domain of the project, are affected not only by the Gökırmak Copper Mine project but also other investments under construction or planned in the region. Interaction of all planned investment with each other leads to a cumulative effect in the local area.

This report evaluates Cumulative Impact Assessment of Gökırmak Copper Mine Project within the scope of its social impacts. The Cumulative Impact Assessment takes into account the projects which currently exist and planned to exist in the future near the Project, in an area larger than the project's domain. In cases where there is the potential negative impact, CIA work makes recommendations for relevant stakeholders so that they can better manage cumulative impacts, develop regional and local development programs.

Cumulative impacts in Performance Standards (PS) 1 issued by (PS) are defined as follows:

***“Impacts that result from the incremental impact, on areas or resources used or directly impacted by the project, from other existing, planned or reasonably defined developments at the time the risks and impacts identification process is conducted.”***

Therefore potential environmental and social interactions of the impacts of the Project should be evaluated together with potential impacts that may result from other future projects or activities planned, reasonably defined in a geographical area in a way to have more (or less) important cumulative impact.

## Cumulative Impact Assessment Methodology

*IFC PS1: Assessment and Management of Environmental and Social Risks and Impacts* indicates that project developers in some cases should take into account cumulative impacts in the identification and management processes of environmental and social impacts and risks. According to IPC PS1 the identification process of risks and impacts will take into account:

***“... the findings and conclusions of related and applicable plans, studies, or assessments prepared by relevant government authorities or other parties that are directly related to the project and its area of influence.” These include “master economic development plans, country or regional plans, feasibility studies, alternatives analyses, and cumulative, regional, sectoral, or strategic environmental assessments where relevant.***

Furthermore, the guidance continues with the following statement:

***“The client can take these into account by focusing on the project’s incremental contribution to selected impacts generally recognised as important on the basis of scientific concern or concerns from the Affected Communities within the area addressed by these larger scope regional studies or cumulative assessments.”***

In this Cumulative Impact Assessment, potential cumulative social impacts associated with the project and other existing and planned projects are assessed.

In order to assess the cumulative effects, all official stakeholders in Hanönü district and Kastamonu province were interviewed with, economic master plans of the region were examined, in particular, information and data related to the existing and planned projects were collected from Hanönü Municipality and the District Governorate so that all existing/ planned projects (at pre-feasibility/feasibility/project planning stage as of the 2015) could be identified.

In addition, in order to determine the possible effects of the project, the accessible owners of the identified projects (particularly the existing ones) were interviewed and the size and scope of social impact were investigated. In the CIA study area, possible social impacts were assessed in order to identify (i) the impacts of Gökırmak Copper Mine project in the construction phase, (ii) long-term effects of activities/operations during a period of 20 years.

Actions to reduce the potential negative cumulative impacts have been identified. The fact that reducing the cumulative effects is not only Acacia Mine Operation’s mission alone should be taken into consideration. Each one of the different parties, including various authorities, should take responsibility for different responsibilities.

## Existing Projects

Current projects are defined as projects under construction or in operation as of 2015. The selection of current projects is based on distance from Asia Mining domain and interaction with stakeholders of Gökırmak Copper Project.

- Regional Directorate of Highways, Taşköprü-Hanönü State Highway (Construction Phase)
- Hanönü Municipality's 30-house Construction Project (Construction Phase)
- Hanönü Municipality-Kuzka Healthy Living Park Project (Construction Phase)
- Hanönü District Directorate of Food, Agriculture and Livestock Walnut Farming Development and Dissemination Project (Implementation Phase)
- Türkerler Enerji, Demirci HPP (in operation)
- Boyabat Dam

## Projected / Planned Projects

Foreseeable future projects are defined as projects at pre-feasibility/feasibility/design phase as of 2015.

In the selection of projects planned to be realised in the foreseeable future importance has been given to major hydro electric and construction projects that may have potential to cause cumulative impacts.

- Regional Directorate of State Hydraulic Works (DSİ )Taşköprü Dam (Feasibility Phase)
- DSİ Regional Directorate Gökçe ağaç Pond (was not taken into the investment program)
- DSİ Regional Directorate Sirke Pond (was not taken into the investment program)

### Projects within the scope of the Cumulative Impact Assessment and their possible impacts

Project Title	Completion Date	Affected Villages	Impact Size	Impact-type Project Construction Period	Impact Project Operational Period
<b>Regional Directorate of Highways, Taşköprü-Hanönü State Highway</b>	Work began in 2015 and the estimated completion time is estimated as the end of 2017.	<ul style="list-style-type: none"> <li>• Bölükyazı</li> <li>• Akçasu</li> <li>• Sirke</li> <li>• Küreçayı</li> <li>• Hanönü Cental</li> <li>• Bağdere</li> </ul>	In the settlements of expropriation 91, 150, 3326, 445, 1109 and 367 parcels were affected in Bölükyazı, Akçasu, Sirke, Küreçayı, Hanönü Central and Bağdere respectively. Major	<ul style="list-style-type: none"> <li>• Land loss</li> <li>• Dust</li> <li>• Noise</li> <li>• Damage to crops</li> <li>• Traffic growth</li> <li>• Increased risk of accidents</li> </ul>	<ul style="list-style-type: none"> <li>• Traffic growth</li> <li>• Decrease in traffic accidents resulting from the improvement of roads</li> </ul>
<b>Governorate of Kastamonu 12-class secondary school construction</b>	Information was shared that the project work was completed and that it is at the phase of tendering	<ul style="list-style-type: none"> <li>• Hanönü Cental</li> <li>• Yılanlı Quarter</li> </ul>	36-class secondary school to be constructed next to the regional primary boarding school in Hanönü Central will be constructed on an area of 2400 m <sup>2</sup> average	<ul style="list-style-type: none"> <li>• Land loss</li> <li>• Dust</li> <li>• Noise</li> </ul>	Health of students
<b>DSİ Regional Directorate Taşköprü Dam</b>	Soil study in progress	<ul style="list-style-type: none"> <li>• Sirke</li> <li>• Akçasu</li> <li>• Kuyluş</li> </ul>	Major if realised	No impact is expected as it will be at planning phase	<ul style="list-style-type: none"> <li>• Land loss</li> <li>• Dust</li> <li>• Noise</li> <li>• Damage to crops</li> <li>• In the long run, increased agricultural income thanks to irrigation</li> </ul>

<b>Hanönü Municipality 36-house Construction</b>	The project planned to be carried out on an area of 2400m <sup>2</sup> has been delivered to the Provincial Directorate of Environment and Urban Planning. It will be tendered after the preparation of the estimated costs. The duration of the competition of the project is not yet clear.	<ul style="list-style-type: none"> <li>On Ali Sakallı street in the center of Hanönü</li> <li>Hanönü Central</li> </ul>	Approximately 130 people are expected to benefit from the project.	No impact is expected as it will be at planning phase	<p><b>During construction</b></p> <ul style="list-style-type: none"> <li>Employment</li> </ul> <p><b>Upon completion of Construction</b></p> <ul style="list-style-type: none"> <li>Population growth as a result of increase in the number of housing</li> </ul>
<b>Hanönü Municipality - Kuzka Wellness Park</b>	The first monitoring visit report was made on 11.12.2015. The project is worth a total 600,00TL. Completion time is not yet clear.	<ul style="list-style-type: none"> <li>Around the Yılanlı creek along Ayancık Avenue in Hanönü Central</li> </ul>	4000 people, including 2000 women and 500 disabled, 600 thousand children, 900 men will benefit from the Project.	No impact is expected as it will be at planning phase	The park that will be near ADT are at risk of ADT in the long-term Human health Animal health Drinking water
<b>Hanönü District Directorate of Food, Agriculture and Livestock - Walnut project</b>	Implementation began in 2014 and is continuing in 2015. It is a joint project carried out by Special Provincial Administration and the Provincial	<ul style="list-style-type: none"> <li>Aşağıçakırçay</li> <li>Bölük yazı</li> <li>Demircimüezzin</li> <li>Halkabük</li> <li>Hocavakıf</li> <li>Gökçe ağaç</li> <li>Kavak</li> <li>Küreçayı</li> </ul>	In 2014 1800 walnut plant were to 60 farmers with at least 1 decare of land on condition that they make an enclosed walnut orchard. In 2015, 2100 plants were distributed to	Positive afforestation  Vakıf Geymene may be affected adversely by the project and the negative impact of dust from the road work.	No negative impact is expected

	Directorate of Agriculture. The project will continue as long as the special provincial administration allocates allowances.	<ul style="list-style-type: none"> <li>• Sirke</li> <li>• Sarıalan</li> <li>• Vakıfgeymene</li> <li>• Yenice</li> <li>• Yeniköy</li> <li>• Yeniboyundurcak</li> <li>• Hanönü Cental</li> <li>• Yılanlı</li> <li>• Yukarıçakırçay</li> </ul>	45 farmers during the fall planting period.		
<b>Türkerler Enerji, Demirci HPP</b>	Project is in operation.	<ul style="list-style-type: none"> <li>• Bağdere</li> <li>• Gelinbükü</li> <li>• Halkabük</li> <li>• Sarıalan</li> <li>• Vakıfgeymene</li> <li>• Yenice</li> </ul>	For Demirci HPP, 50 people at the construction phase and 8 people at the operation phase are targeted to be employed. 1390, 766, 325, 27748, 435 and 2814 parcels were affected from Bağdere, Gelinbükü, Sarıalan, Halkabük, Vakıfgeymene and Yenice, respectively.	<ul style="list-style-type: none"> <li>• Reduction of water resources</li> <li>• Land acquisition</li> <li>• Dust</li> <li>• Noise</li> <li>• Human health</li> <li>• Animal health</li> <li>• Reduction of agriculture-based livelihoods</li> </ul>	<ul style="list-style-type: none"> <li>• Reduction of water resources</li> <li>• Dust</li> <li>• Noise</li> <li>• Human health</li> <li>• Animal health</li> <li>• Reduction of agriculture-based livelihoods</li> </ul>

## Social Issues Within the CIA Scope

Key social elements that are likely to create cumulative effects and social issues of the projects expected to lead to potential cumulative impacts together with Gökırmak Copper Mine Project are as follows:

- Economy (agriculture, service sector and employment)
- Land and other immovable assets
- Life quality
- Community health and safety

## Cumulative Impacts - Construction Phase

Main Impacts	The cumulative impact - Construction Phase
<b>Land and Other Assets</b>	<p>Hydro/dam projects will have a cumulative impact on temporary and permanent acquisition of land and houses and on land and other assets. However, it may have limited effect on land ownership as the persons affected by the project (PAP) at the first stage of construction will be able to use their land and property until the mine extraction area enters into their land.</p> <p>The more land is received for various projects, the more critical will become the possibility of finding suitable land for agricultural use. Possible pressure on local people should be managed carefully.</p> <p>The degree of cumulative impact is important.</p>
<b>Economy: Agriculture</b>	<p>Construction phase may have a negative cumulative effect on the agricultural and livestock production. Animal health and safety may also pose a problem and damaging the livestock will cause adverse effects on PAP, the main source of income of whom is livestock production.</p> <p>There is also the possibility of impact on access to grazing land. Also, adverse effects are expected due to the use of pasture areas by construction activity.</p> <p>The cumulative impact is negative and the degree of impact is significant.</p>
<b>Economy: Manufacturing and Service Sector</b>	<p>A part of equipment and tools to be used during Construction activity will be provided from the region and this may have a positive effect on the region's economy.</p> <p>The local economy will also benefit from restaurants, hotels and catering services. However, there may be</p>

	<p>inflation of the prices which may be helpful for some people, but negative impact for the others.</p> <p>The impact is positive but such benefits may cause inflation in time and may cause adverse effects on a particular segment of people.</p>
<b>Economy: Employment</b>	<p>Hydro/dams and transport projects are expected to create job opportunities in the affected villages, and the entire district. The project in question will increase employment in the regions cumulatively.</p> <p>The impact is likely to be helpful. If the local people's skills profile is considered, specific training programs may be necessary to implement to ensure the local people benefit from the jobs created.</p>
<b>Life Quality</b> <ul style="list-style-type: none"> <li>• <b>Access to services (health, education, business services)</b></li> <li>• <b>Social cohesion</b></li> </ul>	<p>As external workers arrive at the region for the construction activities, issues such as infectious diseases and social cohesion must be managed carefully.</p> <p>The cumulative impact is positive and the degree of impact is also important. Possible negative effects can be managed with effective training of workers and health awareness campaigns. Careful management of resettlement is required so that community ties and network could be protected and dissolution of the local community could be prevented as much as possible.</p>
<b>Public Health and Safety</b>	<p>Regional Hydro/dams and transportation projects are expected to have negative impact in terms of community health and safety of the affected villages and across the district. Livestock and agriculture, in particular animals and crops are vulnerable to damage during the construction phase.</p> <p>At the same time, drinking water in the region and the town is likely to be affected by the project.</p>

## Cumulative Impacts - Operational Phase

Main Impacts	Cumulative Impact - Operational Phase
<b>Land and Other Assets</b>	<p>Hydro/dams and transportation projects may cause cumulative impacts on land and other assets due to temporary or permanent acquisition of land and houses in large work areas. Because the region is mainly dependent on agriculture and livestock production, the degree of impact on the livelihoods of the local population that are exposed to higher land acquisition will be high.</p> <p>With water retention in the hydro project, land acquisition in large areas will be more intense. This impact will negatively affect the possibility of replacement land for many PAPs to be affected by the physical and economic resettlement due to other projects. The loss of more land will be triggered by transportation projects.</p> <p>PAPs who lost their land and immovable assets due to Hydro/dam projects and transportation projects will either acquire other land or move to another area and they will lose their temporary and permanent livelihoods under both conditions.</p> <p>Negative cumulative impact. Good management of availability of alternative pasture land is important. Programs on more productive agriculture on the remaining agricultural land may be offered. The proposed additional economic activities in addition to the agricultural and livestock activities may also reduce the cumulative impact.</p>
<b>Economy: Agriculture</b>	<p>In the short term (5-year forecasts), there will be a negative impact on agricultural income because irrigation from the hydro/dam projects will not be possible. Also transport services which will increase due to transportation projects will positively affect the business in the district.</p> <p>In addition, new roads and bridges to be built under the project will facilitate the transport of residents of villages to the marketplace and thus contribute to the marketing activities of their products, in this way they</p>

will have a positive impact on the income generating activities of the farmers already busy with farming activities in the area. Hydro / dam projects and transportation projects will also provide all the necessary food and building materials from local sources, which would increase the local production and trade capacity of SMEs. Thus, the direct impact and multiplier effects can be significant.

In the long-term (20-year projections), the planned irrigation projects are expected to provide a significant increase in the amount of arable land and to contribute to the improvement of existing agricultural land. In this way, various hydro / dam due to transportation projects and it will be possible to compensate the lost agricultural land and livelihoods.

Positive cumulative impact.

**Economy: Agriculture**

In the short term (5-year projections), agricultural income is expected to increase along with the provision of regular water from the hydro/dam projects. Transport services that will increase due to transportation projects will also positively affect the business in the district.

In addition, new roads and bridges to be built under the project will facilitate the transport of residents of villages to the marketplace and thus contribute to the marketing activities of their products, in this way they will have a positive impact on the income generating activities of the farmers already busy with farming activities in the area. Hydro / dam projects and transportation projects will also provide all the necessary food and building materials from local sources, which would increase the local production and trade capacity of SMEs. Thus, the direct impact and multiplier effects can be significant.

In the long-term (20-year projections), the planned irrigation projects are expected to provide a significant increase in the amount of arable land and to contribute to the improvement of existing agricultural land. In this way, various hydro / dam due to transportation projects and it will be possible to compensate the lost agricultural land and livelihoods.

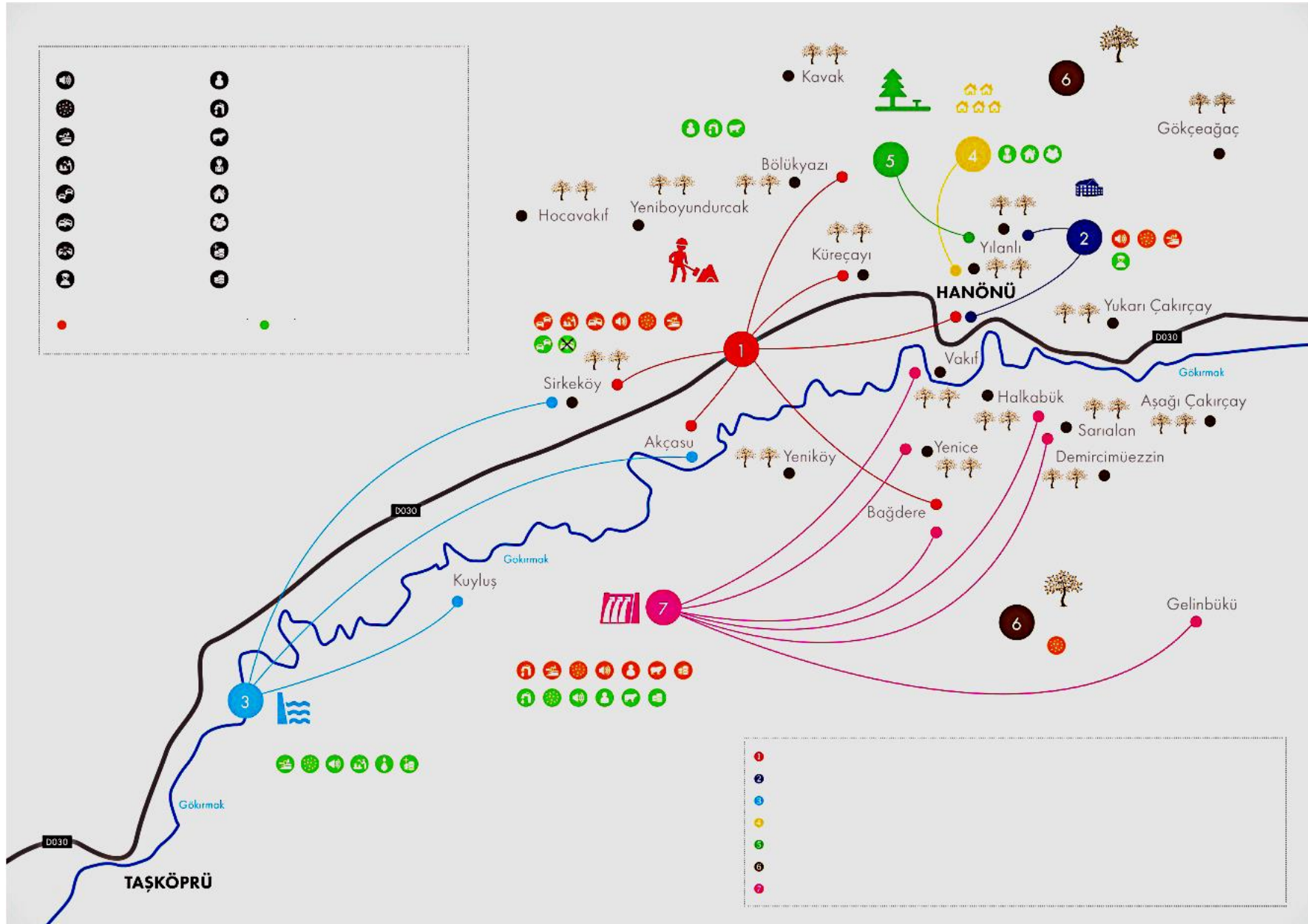
	Positive cumulative impact.
<b>Employment</b>	Business opportunities that will arise in relation with the Hydro/dam, transportation and construction projects will be limited in the operational phase but a small number of jobs will be created and skilled workers will move to the area and apply to jobs.
<b>Life Quality</b> <ul style="list-style-type: none"> <li>• <b>Access to services (health, education, business services)</b></li> <li>• <b>Social cohesion</b></li> </ul>	<p>In addition, the transportation projects are important for regional development in not only Hanönü but also Kastamonu and Sinop. According to interviews conducted in the field, some villagers in the areas affected by the project stated that they will be restricted to a smaller land due to the cumulative impacts resulting from the dam reservoirs. Those concerns are related to lack of adequate grazing for livestock and constraints on land use that the projects will bring.</p> <p>All infrastructure investment projects in the area are expected to develop infrastructure in villages and on the roads reaching villages. Given construction and investment activities, an infrastructural development is projected in Hanönü district.</p> <p>There will be both positive and negative cumulative impacts.</p>
<b>Public Health and Safety</b>	<p>Transportation projects during the operational phase are expected to produce positive cumulative impact in terms of public safety and ease of transportation.</p> <p>The cumulative negative effect of hydro and mining projects continues during the operation phase. There are risks in terms of security of livestock and the stakeholders in the project villages. In addition, drinking water quality and safety are at risk.</p>



**Figure 2 Cumulative Impacts**



Taşköprü - Hanönü Road (Project commenced. Estimated time of completion is 2017)  
Hanönü 12-class Secondary School Construction (Project work has been completed and is at tender phase.)  
Taşköprü Dam (Soil study in progress.)  
36-house construction (to be tendered)  
Kuzka Healthy Living Park (Monitoring visit report prepared)  
Walnut Project (Project commenced. And in progress.)



## Summary of proposed mitigation measures

Cumulative Impact.	Mitigating Measure	Time Slot	Responsible Person
<b>Land and Immovable Assets</b>	<p>For this project:</p> <ul style="list-style-type: none"> <li>• In cases where cumulative projects cause land acquisition, losses of affected people will be compensated within the scope of Livelihood Restoration Plan and/or Community Development Plan.</li> <li>• Loss of land owners who suffered a temporary loss of income will be compensated within the scope of Livelihood Restoration Plan.</li> <li>• Temporarily affected land and pastures will be brought to the pre-construction condition through replacement/improvement. With regards to additional temporary land purchases, appropriate mitigation measures will be determined and implemented.</li> <li>• For other projects affecting land and immovable assets, the adoption of similar mitigation measures and ensuring compliance with relevant Turkish regulations are proposed.</li> </ul>	From the commencement of construction until the beginning of the use of the mine site	Acacia Mine Operation, other project owners and public bodies

<b>Economy</b>	<p>Regarding the possible impact on economic activity in the area, foreseen timing of these impacts and existing facilities, people should be informed in a timely manner so that they could make plans and preparations.</p> <p>Transparent methods should be employed in local procurement, allowing the participation of the local workforce.</p> <p>Specific programs should be implemented to ensure local businesses take advantage of supply and other opportunities.</p>	From the commencement of construction to the end of life of the mine site	Acacia Mine Operation, other project owners
<b>Employment</b>	<p>Employment plans should be prepared according to the projects and the construction phases and employees must be informed before the changes in the seasonal employment needs and redundancies. Priority should be given to local employment, particularly in communities losing land and assets.</p> <p>There should be training programs for local communities to benefit from the creation of employment.</p>	From the commencement of construction to the end of life of the mine site	Acacia Mine Operation, other project owners

<b>Life Quality</b>	Environmental and social impact assessment of the project describes various measures so that people's quality of life is not affected. Among these are noise and vibration control mechanisms, awareness raising, livelihood regeneration and implementation of the Resettlement Action Plan. These measures and careful planning of regional development will prevent or restrict any possible cumulative effect on people's quality of life.	From the commencement of construction to the end of life of the mine site	Acacia Mine Operation, other project owners
<b>Public Health and Safety</b>	The project's environmental and social impact assessment and public health and safety procedures describe various measures to prevent the impact on public health and safety. Compatibility of these measures with Hydro projects and transportation projects (marking new roads and taking the necessary measures etc to prevent people/animals from falling in dams and surrounding water channels and waterways.) and developing new measures will prevent or restrict any possible cumulative effects on community health and safety.	From the commencement of construction to the end of life of the mine site	Acacia Mine Operation, other project owners

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